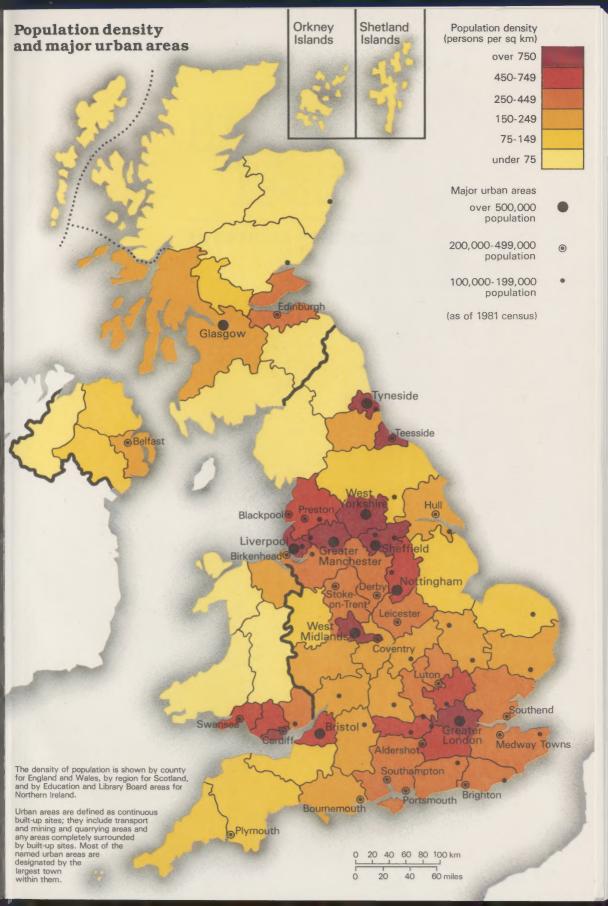


AN OFFICIAL HANDBOOK





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BRITAIN 1988

AN OFFICIAL HANDBOOK

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Contents

	Page
Introduction	viii
1 Land and People	1
Introduction	î
The Four Lands	5
The Social Framework	19
2 Government	31
The Monarchy	31
Parliament	35
The Privy Council	46
Her Majesty's Government	47
Government Departments	51
The Civil Service	58
Local Government	61
Fire Services	68
3 Overseas Relations	71
Membership of the European Community	73
The Commonwealth	80
International Peace and Security	84
Britain and the United Nations	88
Other International Organisations	90
Development Co-operation	91
4 Defence	97
Defence Procurement	103
Civil Defence	104
F vondte en date v	100
5 Justice and the Law	107
The Law Criminal Justice	107
Civil Justice	107
Administration of the Law	127
Administration of the Law	130
6 Social Welfare	135
National Health Service	135
Personal Social Services	148
Voluntary Social Services	153
Social Security	155
	100
7 Education	163
The Youth Service	180
	100
8 The Environment	183
Planning	183
Housing	188
Conservation	194
Control of Pollution	200
9 Religion	205

10 National Economy	211
11 Framework of Industry	221
12 Manufacturing and Service Industries	243
Manufacturing	243
Construction	262
Service Industries	263
13 Energy and Natural Resources	271
Energy	271
Non-fuel Minerals	287
Water	289
14 Agriculture, Fisheries and Forestry	293
Agriculture	293
Fisheries	304
Forestry	305
1010000	
15 Transport and Communications	307
Inland Transport	307
Ports	317
Shipping	319
Civil Aviation	321
Communications	325
Communications	020
16 Employment	331
16 Employment	331
17 Public Finance	349
17 Public Finance	343
18 Banking and Financial Institutions	361
18 Danking and Financial institutions	301
19 Overseas Trade	375
19 Overseas frade	373
00 B - 41	385
20 Promotion of Science and Technology	360
04 P 44 44	007
21 Promotion of the Arts	397
00 51 7	410
22 The Press	413
CO. T. L.	400
23 Television and Radio	423
	401
24 Sport and Recreation	431
	4.45
Appendix 1	447
Currency	447
Metric Conversions for British Weights and Measures	447
Thermometrical Table	448
Bank and Public Holidays in Britain, 1988	448
Appendix 2	449
Guide to Sources	449
Index	451

Availability of Certain Durable Goods	26
The Royal Family	32
Planned Receipts and Expenditure for the Public Sector 1987–88	357
Geographical Distribution of Trade 1986	377

Maps	
Physical features)
Population density and major urban areas Major conservation and recreation areas Motorways and major trunk roads	endpapers
Britain	6
The European Community	73
New Towns	186
Enterprise Zones	189
The Assisted Areas	235
Oil	274
Gas	277
Coal	280
Electricity	282
Some Minerals Produced in Britain	288
Main Railway Passenger Routes	314

Art Galleries	- 1
Britain's Coastline	between pp 40 and 41
Civic Trust Awards	
Post Office	
British Design Awards '87	between pp 136 and 137
Transport	
Astronomy	
Scientific Research }	between pp 296 and 297
Advances in Medicine	0
Exports	
Sport }	between pp 392 and 393
Britons Overseas	* *

Acknowledgments for use of photographs appear on p 469.

Photographs

Introduction

Britain 1988 is the thirty-ninth official handbook in the series; it has been prepared by the Central Office of Information on behalf of the Foreign and Commonwealth Office. The handbook is widely known as an established work of reference and is the mainstay of the reference facilities provided by British information services in many countries. It is sold by Her Majesty's Stationery Office throughout the world.

Britain 1988 describes many features in the life of the country, including the workings of the Government and other major institutions. It does not attempt an analytical approach to current events.

Care should be taken when studying British statistics to note whether they refer to England, to England and Wales (considered together for many administrative and other purposes), to Great Britain, which comprises England, Wales and Scotland, or to the United Kingdom (which is the same as Britain, that is, Great Britain and Northern Ireland) as a whole.

The factual and statistical information in *Britain 1988* is compiled with the co-operation of other government departments and agencies, and of many other organisations. Sources of more detailed and more topical information (including statistics) are mentioned in the text and a guide to official sources is given in Appendix 2.

The text, generally, is based on information available up to August 1987.

Reference Services Overseas Publications and Foreign Languages Central Office of Information, London.

1 Land and People

Introduction

Britain comprises Great Britain (England, Wales and Scotland) and Northern Ireland, and is one of the 12 member states of the European Community. Its full name is the United Kingdom of Great Britain and Northern Ireland.

Physical Features

Britain constitutes the greater part of the British Isles, a geographical term for a group of islands lying off the north-west coast of mainland Europe. The largest of the islands is Great Britain (the mainlands of England, Wales and Scotland). The next largest comprises Northern Ireland and the Irish Republic. Off the southern coast of England is the Isle of Wight and off the extreme south west are the Isles of Scilly; off north Wales is Anglesey. Western Scotland is fringed by the large archipelago known as the Hebrides and to the north east of the Scottish mainland are Orkney and Shetland. All these have administrative ties with the mainland, but the Isle of Man in the Irish Sea and the Channel Islands between Great Britain and France are largely self-governing, and are not part of the United Kingdom.

With an area of some 244,100 sq km (94,250 sq miles), Britain is about the same size as the Federal Republic of Germany, New Zealand or Uganda, and half the size of France. It is just under 1,000 km (some 600 miles) from the south coast to the extreme north of Scotland and just under 500 km (some 300 miles) across in the widest part. No place in Britain is as much as 120 km (75 miles) from tidal water. The prime meridian of 0° passes through the old observatory at Greenwich (London).

The seas surrounding the British Isles are shallow, usually less than 90 m (50 fathoms or 300 ft), because the islands lie on the continental shelf. To the north west along the edge of the shelf the sea floor plunges abruptly from 180 m (some 600 ft) to 900 m (about 3,000 ft). The shallow waters are important because they provide breeding grounds for fish. The warming effect on the air of the North Atlantic current is magnified as its water spreads across the shelf.

The climate is generally mild and temperate. The prevailing winds are south-westerly and the weather from day to day is mainly influenced by depressions moving eastwards across the Atlantic. It is subject to frequent changes but to few extremes of temperature. It is rarely above 32°C (90°F) or below -10°C (14°F). Near sea-level in the west the mean annual temperature ranges from 8°C (46°F) in the Hebrides to 11°C (52°F) in the extreme south west of England; latitude for latitude it is slightly lower in the east. The mean monthly temperature in the extreme north, at Lerwick (Shetland), ranges from 3°C (37°F) during the winter (December, January and February) to 11°C (52°F) during the summer (June, July and August); the corresponding figures for the Isle of Wight, in the extreme south, are 5°C (41°F) and 16°C (61°F). The average annual rainfall is more than 1,600 mm (over 60 inches) in the mountainous areas of the west and north but less than 800 mm (30 inches) over central and eastern parts. Rain is fairly well distributed throughout the year, but, on average, March to June are the driest months and September to January the wettest. The

distribution of sunshine shows a general decrease from south to north, a decrease from the coast inland, and a decrease with altitude. During May, June and July (the months of longest daylight) the mean daily duration of sunshine varies from five hours in northern Scotland to eight hours in the Isle of Wight; during the months of shortest daylight (November, December and January) sunshine is at a minimum, with an average of an hour a day in northern Scotland and two hours a day on the south coast of England.

Historical Outline

The word Britain derives from Greek and Latin names probably stemming from a Celtic original, which is also reflected in the name of the region of north-western France ('Brittany' in English) settled by migrants from Britain in the fifth and sixth centuries AD. Although, in the prehistoric time-scale, the Celts were relatively late arrivals in the British Isles (following cultures which had produced such notable monuments as the stone circles of Avebury and Stonehenge) it is only with them that Britain emerges into recorded history, and the term Celtic is often used rather generally to distinguish the early inhabitants of the British Isles from the later Anglo-Saxon invaders.

Following sorties by Julius Caesar in 55 and 54 BC, Britain was occupied by the Romans in the first century AD and an ordered civilisation was established under their rule for two or three hundred years except in the territory north of Hadrian's Wall (the wall across northern England planned by Hadrian, Roman Emperor from AD 117 to 138) and in some western areas. Christian missionaries arrived not only in Roman Britain but also in Scotland and Ireland.

England and Wales

The final Roman withdrawal in the fifth century, however, followed a long period of increasing disorder during which there began raids on the island from northern Europe-mainly by peoples traditionally described as Angles (from Schleswig), Saxons and Jutes. It is from the Angles that the name England derives. In the following two centuries the raids turned into settlement and the establishment of a number of small kingdoms (with the Britons, or Celts, maintaining an independent existence in the areas now known as Wales and Cornwall). Among these kingdoms, more powerful ones which claimed overlordship over the whole country were established, first in the north (Northumbria), then in the central area (Mercia) and finally in the south (Wessex). However, further raids and settlement by the Vikings from Scandinavia occurred, although in the tenth century the Wessex dynasty defeated the invading Danes and established a wide-ranging authority in England. A second wave of Danish invasions, however, led to the establishment of a Danish dynasty in England between 1017 and 1042, when the Wessex line was restored.

The last successful invasion of England took place following a disputed succession when Duke William of Normandy (a duchy established by the Vikings and owing only nominal allegiance to the French king) enforced his claims by defeating the English at the Battle of Hastings in 1066. There was considerable settlement by Normans and others from France, French became the language of the nobility for the next three centuries and the legal and, to some extent, social structure was influenced by that which prevailed across the Channel. The monarchy established by William and his successors was, in general, more effective than its predecessors and it began to establish its authority over increasingly wide areas of the British Isles.

Wales had remained a Celtic stronghold, although often within the English sphere of influence. Conflict was frequent within Wales between the various princes and unity was achieved only temporarily. However, with the death in battle in 1282 of Prince Llywelyn, Edward I launched a successful campaign to bring Wales under English rule, with Wales being placed under the same laws as England for the most part, and Edward's heir being created Prince of Wales in

1301, a title which has subsequently been bestowed upon the eldest son of the Sovereign. Continued strong Welsh national feeling was indicated by the rising led by Owain Glyndŵr at the beginning of the fifteenth century, but a new dimension to the situation was provided by the accession to the English throne in 1485 of Henry VII of the Welsh House of Tudor. The Acts of Union of 1536 and 1542 united England and Wales administratively, politically and legally.

Scotland Hadrian's Wall had proved no insurmountable barrier between the Romans and their northern neighbours, and far-reaching expeditions both by the Romans into Scotland and by the Scottish people known as Picts into England took place. In the sixth century the Scots from Ireland or 'Scotia' settled in the area of Scotland now known as Argyll. Lothian was English in population, and Welsh Britons moved north from the invading English into Strathclyde. A united kingdom emerged in the ninth century while Scotland, like England, was endeavouring to defend itself against the Vikings. The establishment of a powerful monarchy in England, however, especially after the Norman Conquest in the eleventh century, was to pose an intermittent but considerable threat to Scottish independence throughout the Middle Ages and well into the sixteenth century.

The eventual unification of the crowns reflected the fact that, as a result of the Reformation (a process which occupied most of the sixteenth century), old national antagonisms had become less important than religious differences. Following the death of the childless Elizabeth 1 in 1603, the Protestant James Stuart, James VI of Scotland (son of Mary, Queen of Scots, whose grandmother was a sister of Henry VIII), ascended the English throne as James I. England, Wales and Scotland were henceforth known as Great Britain. Apart from the union of the monarchies, however, England and Scotland remained separate during the seventeenth century, except for an enforced unification by Oliver Cromwell early in the period of the Commonwealth (1649–60) after he had defeated royalist forces in Scotland. By the beginning of the following century political and economic arguments for a closer union were apparent in both countries. Eventually, in 1707, both sides agreed on the formation of a single parliament for Great Britain although Scotland retained its own system of law and church settlement. The Union was put under strain when Queen Anne died in 1714 and George, Elector of Hanover (descended from a daughter of James I), succeeded the Stuarts on the British throne. 'Jacobite' rebellions, aiming to restore the Stuarts to the British throne, took place in 1715 and 1745 but were unsuccessful.

Ireland In Ireland, out of a patchwork of Celtic and pre-Celtic peoples similar to that in Britain, a number of kingdoms had emerged before the Christian era; any supremacy established by one over the others in the following 1,000 years was of a temporary nature. Ireland, however, did not escape the incursions of the Vikings, who dominated the country during the tenth century.

ln 1169 Henry ll of England launched an invasion of Ireland, the overlordship of which he had been granted by the Pope, who was anxious to bring the Irish church into full obedience to Rome. Although a large part of the country came under the control of Anglo-Norman magnates, little direct authority was exercised from England during the Middle Ages.

The Tudor monarchs showed a much greater tendency to intervene in Ireland. Henry VIII's assumption of the title of King of Ireland in 1541 arose from his desire to apply the Reformation settlement and thereafter the religious issue was to produce far-reaching consequences. The determination to establish royal authority in Ireland was strengthened during the reign of Elizabeth I by the fear that the country might be used by Philip of Spain in his efforts to subjugate England, and a series of campaigns was waged against Irish insurgents. The main focus of the resistance was the northern province of Ulster and, with its collapse in 1607, Ulster became an area of settlement by immigrants from Scotland and England. (There was settlement by immigrants elsewhere in Ireland, though on a lesser scale.)

The English civil war of 1642 to 1652 led to further risings in Ireland which were crushed by Cromwell. The restoration of the monarchy in 1660 was followed by the accession of the Roman Catholic James II to the throne in 1685, and there was more fighting after his deposition three years later in favour of his nephew and son-in-law, the Protestant William of Orange and his wife Mary.

During most of the eighteenth century there was an uneasy peace and towards its end various efforts were made by British governments to achieve stability. In 1782 the Irish Parliament (dating from medieval times) was given legislative independence; the only constitutional tie with Great Britain was the Crown. The Parliament represented, however, only the privileged Anglo-Irish minority, who had obtained possession of most of the agricultural land, and Catholics were excluded from it. Against the background of an abortive rebellion in 1798 and the prospect of intervention by France (with which Great Britain was at war between 1793 and 1815) the Irish Parliament was induced to vote for union with what, from 1801, was to be the Parliament of the United Kingdom of Great Britain and Ireland.

The 'Irish question' continued as one of the major problems of British politics during the nineteenth century. In 1886 the Liberal Government introduced a Home Rule Bill which would have given an Irish Parliament authority over most internal matters while reserving to Britain control over external affairs. This led to a split in the Liberal Party and the failure of the Bill. It was not until 1914 that Home Rule was enacted by the Government of Ireland Act. Its implementation was, however, prevented both by the threat of armed resistance on the part of the Protestant majority in Ulster and by the outbreak of the first world war.

A nationalist uprising in Dublin in 1916 was suppressed, but with the end of the first world war a guerrilla force known as the Irish Republican Army (IRA) began operations against the British administration. In 1921 a settlement was reached under which six of the nine counties of the province of Ulster received their own Parliament, but remained represented in and subject to the supreme authority of the British Parliament, while the remainder of Ireland as the Irish Free State (later to become the Irish Republic) became a self-governing state outside the United Kingdom of Great Britain and Northern Ireland.

Channel Islands and Isle of Man

Although the Channel Islands and the Isle of Man are not part of the United Kingdom, they have a special relationship with it because of the antiquity of their connection with the Crown. The Channel Islands were integrated into the Duchy of Normandy in the tenth and eleventh centuries and have been dependent territories of the Crown since the Norman Conquest. The Isle of Man was under the nominal sovereignty of Norway until 1266 when it was ceded to Scotland, subsequently passing to the Earls of Derby for a period but eventually coming under the direct administration of the Crown in 1765. Today the territories have their own legislative assemblies and systems of local administration and of law, and their own courts. The British Government is responsible for their defence, their international relations and, ultimately, their good government.

The position of the Channel Islands and the Isle of Man in the European Community is broadly that the islands remain outside the Community except for customs purposes and for certain aspects of the Common Agricultural Policy. The residents benefit from Community provisions relating to the free movement of people or services only if they have close ties with Britain.

The Four Lands

In the following pages there are brief descriptions of a number of aspects of social, economic and political life for each of the four countries, England, Wales, Scotland and Northern Ireland, with some additional material on the political situation in Northern Ireland. (Statistics on the four lands are contained in Table 1.)

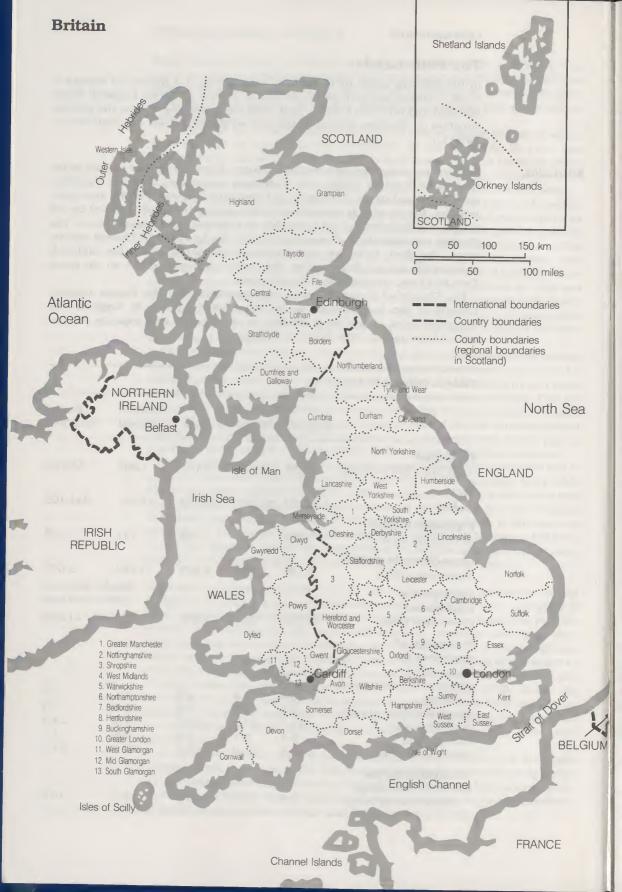
ENGLAND

England is predominantly a lowland country. There are upland regions in the north (the Pennine Chain, the Cumbrian mountains and the Yorkshire moorlands) and in the south west in Devon and Cornwall. For the most part, however, the country is undulating or flat and, in the south, crossed by low ranges of hills including the Cotswolds and the Kent and Sussex Downs. The greatest concentrations of population are in the London and Thames estuary areas, the West Yorkshire and north-west industrial cities, the midlands conurbation around Birmingham, the north-east conurbations on the rivers Tyne and Tees, and along the Channel coast.

The Church of England, which was separated from the Roman Catholic Church at the Reformation, is the Established Church in England; the Sovereign must always be a member of the Church and appoints its two archbishops and 42 other diocesan bishops.

Table 1: General Statistics

	England	Wales	Scotland	Northern Ireland	United Kingdom
Population					4
('000, mid-1986 estimate)	47,254	2,821	5,121	1,567	56,763
Area (sq km)	130,439	20,768	78,772	14,121	244,100
Population density (persons per sq km)	362	136	65	111	233
Gross domestic product (£ per head, 1985)	5,170	4,509	4,942	3,799	5,079
Employees in employment ('000, June 1986)	18,350	861	1,892	489	21,593
Percentage of employees in: (June 1986) agriculture, forestry and	10,000	301	1,032	100	21,330
fishing	1.4	2.4	1.6	2.1	1.5
energy and water supply	2.4	4.8	2.7	2.0	2.5
manufacturing	24.7	23.9	22.0	21.3	24.3
construction	4.4	5.1	7.4	4.5	4.7
service industries	67.0	63.9	66.3	70.3	67.0
Unemployment rate (per cent, seasonally					
adjusted, June 1987)	9.9	12.8	13.5	18.3	10.5



The English language is descended from the German tongue spoken by the Anglo-Saxons in the fifth and sixth centuries, subsequently being influenced by Latin and Norse vocabulary, and then transformed with the settlement by the Normans from France. English is spoken throughout Britain and in many other countries. A recent study suggests that it is used as an official language in over 60 countries, more than any other international language.

Government

England has no government minister or department exclusively responsible for its central administration of domestic affairs, in contrast to Wales, Scotland and Northern Ireland. Instead, responsibility is shared among a number of government departments, whose responsibilities in some cases also cover aspects of affairs in Wales and Scotland. There are 523 Members of Parliament for England in the House of Commons, and arrangements are made for the discussion of regional affairs. Of the two major political parties, the Conservatives find their support chiefly in suburban and rural areas and have a large majority of the parliamentary seats in the southern half of England and in East Anglia, while the Labour Party derives its main support from urban industrialised areas. In the 1987 election England returned 357 Conservative Members of Parliament, 155 Labour, 7 Liberal, 3 Social Democrat and the Speaker of the House of Commons.

Local government is administered through a two-tier system of counties subdivided into districts, except in London, where local government is the responsibility of 32 borough councils and the Corporation of the City of London. A major reorganisation of local government was implemented in 1986 when the Greater London Council and the metropolitan county councils of Greater Manchester, Merseyside, South Yorkshire, Tyne and Wear, West Midlands and West Yorkshire were abolished and most of their functions transferred to London borough and metropolitan district councils.

Eight 'standard' regions in England are delimited principally for statistical purposes: South East, East Anglia, South West, West Midlands, East Midlands, Yorkshire and Humberside, North West and North. They play no part in local government and frequently do not coincide with the regional units adopted by central government departments.

The legal system of England comprises on the one hand a historic body of conventions, known as 'common law' and 'equity', and on the other, parliamentary and European Community legislation. Common law stems from the work of the king's judges after the Norman Conquest of 1066 who sought to bring together into a single body of legal principles the various local customs of the Anglo-Saxons. Great reliance was placed on precedent, and the practice of reporting on cases began in the thirteenth century. Equity law derives from the practice of petitioning the king's Chancellor in cases not covered by common law. The English legal system is therefore distinct from many of those of Western Europe which have codes deriving from Roman law. The Habeas Corpus Act 1679 is a fundamental statute forbidding imprisonment without trial.

The Economy

Up to the eighteenth century the English economy was mainly agrarian and the chief manufacture was wool cloth. London as the capital city, and a major port and mercantile centre, and the textile areas (East Anglia, south-western England and West Yorkshire) were the most populous and prosperous regions. In the late eighteenth and nineteenth centuries, however, rapid growth took place in the midlands, the north west, west Yorkshire and the north east, where the coalfields and iron ore deposits permitted Britain to become the first industrialised nation, basing its wealth on coalmining, on the manufacture of iron and steel, heavy machinery and textiles, on shipbuilding and on trade. London enhanced its position with the growing strength of the economy but

East Anglia and the West Country, remote from areas of industrial development, were affected by agricultural depression, and entered a period of relative decline.

In the twentieth century, the second period of industrialisation, based on new sources of energy, new manufacturing industries and new forms of transport, has continued to change the broad pattern of regional and industrial development in England. In the 1920s and 1930s the northern industrial centres saw their traditional industries weakened owing to fluctuations in world trade and competition from other industrialising countries and, in some cases, from substitute products. London, its surrounding counties and the West Midlands generally benefited from the newer, more mobile, industries. These included chemicals (such as pharmaceuticals, dyes, plastics and artificial fibres), electrical and electronic engineering, vehicle manufacture, aircraft building, instrument engineering, aluminium and rubber manufacture and a wide range of consumer goods, including processed food, drink and tobacco products as well as durables.

In the second half of the century economic trends and population growth have tended to favour smaller towns and rural areas, particularly those in parts of southern England and East Anglia. A number of industrial areas (in the North, the North West, Yorkshire and Humberside and the West Midlands) have suffered over the last decade as a result of the decline in manufacturing employment. Through its regional industrial policy the Government aims to reduce regional disparities in employment opportunities by making investment incentives available in the areas of greatest need, especially those which have been dependent on declining industries. Significant steps are also being taken to revive economic activity in inner urban areas.

East Anglia has been the fastest-growing English region in both population and employment since the 1960s. Although largely agricultural, in recent years high-technology industry has developed throughout the region. One significant example is the Cambridge Science Park containing a number of science-based companies and research organisations with close collaborative links with the University. Food processing, diesel engines, electronics and instrument engineering are the strongest industries. Other particular growth points have been Peterborough and the east coast ports, which benefit from their relative proximity to the northern European Community countries. The service sector has been growing in Cambridge, Ipswich and Norwich.

Greater London and the industrial cities of the West Midlands, the North West, Yorkshire and Humberside and the North continue to represent the largest concentrations of manufacturing industry. London is an important area for products of all kinds including food and drink (especially brewing), instrument engineering, electrical and electronic engineering, clothing, furniture and printing. Of importance in the surrounding south-eastern counties are oil refining (along the Thames and near Southampton), pharmaceuticals, pumps, valves and compressors, instrument engineering, electronics (particularly in Berkshire and Hertfordshire, and around Chelmsford), motor vehicles, aerospace, building materials, timber, paper and plastics products. There is diversity, too, in the North West, with significant activity in food processing (especially grain milling, bread, flour confectionery and biscuits), chemicals, textile machinery, insulated wires and cables, computers (Manchester being one of the largest centres in the country), motor vehicles, aerospace, clothing, glass making (with the world's largest flat glass maker, Pilkington, in St Helens), paper and rubber products. Lancashire is the centre of the cotton and allied textile industries.

The characteristic manufactures of the West Midlands are metals (steel tubes, iron castings and non-ferrous metals), machine tools, electrical engineering, motor vehicles, carpets, pottery (with about 70 per cent of Britain's ceramics

industry located in Staffordshire) and rubber production. Of the other regions, Yorkshire and Humberside has important shares of cocoa, chocolate and confectionery production, iron and steel, machine tools, textile machinery, woollen and worsted goods (producing about two-thirds of Britain's wool textiles), carpets, clothing and glass containers. The North has general chemicals, iron and steel, process plant, marine engineering, and clothing; the East Midlands has steel tubes, iron castings, about two-thirds of Britain's hosiery and knitted goods industry, and footwear; and the South West has food and drink processing, aerospace, a range of engineering industries and paper products.

In agriculture, the number of mixed holdings has been falling, as part of a general tendency towards greater specialisation. Dairying is most common in the west of England, where the wetter climate encourages the growth of good grass; sheep and cattle are reared in the hilly and moorland areas of northern and south-western England; and arable farming, pig and poultry farming and horticulture are concentrated in the east and south. Horticulture is also important in the West Midlands. Forestry is mainly found in the North, South East and South West regions. The principal fishing ports are on the east coast and in the South West.

England has plentiful energy resources in its coalfields and has access to offshore oil and gas reserves. About 65 per cent of Britain's deep-mined coal is produced in the Midlands and Yorkshire coalfields, the latter being the most productive in the country. The electricity grid of England and Wales is one of the largest interconnected power networks under unified control in the Western world. The world's first large-scale nuclear power station was established at Calder Hall in Cumbria in 1956, while substantial investment in reprocessing capacity is being undertaken nearby. Other nuclear power stations are on coastal sites, including eight around the coasts of southern England. Important mineral deposits in England include aggregates for the construction industry (sand, gravel and crushed rock), industrial minerals (including clay, salt from the North West and china clay from Cornwall), tin ore, also from Cornwall, and iron ore from the East Midlands and Humberside. Water resources include the Kielder Reservoir (Northumberland), one of Europe's largest man-made lakes.

A motorway network has been constructed in England since the 1950s and comprises four long-distance arterial routes linking London and the cities of the midlands, the North and North West and the South West, the London orbital route (completed in 1986), and over 30 shorter motorways. Inter-city travel has been improved by the introduction of high-speed rail services which are among the best in the world in speed, frequency and comfort. Many ports have been equipped to deal with new developments in shipping (such as container ships) and to take account of changes in the nature of trade brought about by the increase in oil traffic through North Sea ports and the growing proportion of trade with the continent of Europe. In 1986 the British and French governments jointly announced their decision to facilitate the construction of a fixed link across the Channel in the form of twin single-track rail tunnels to carry through rail services, linking Britain directly with the European rail system, and a drive-on, drive-off vehicle shuttle service using specially designed shuttle trains. Construction is expected to begin later in 1987 and the tunnel could be in operation in 1993. The major airports are Heathrow (the busiest international airport in the world) and Gatwick, both serving London, and Manchester, Luton and Birmingham. Construction has begun of a new passenger terminal in connection with the first phase of the development of Stansted as London's third airport.

Employment in service industries has accounted for an increasing share of total employment in recent years, expansion being particularly marked in

financial and business services. London is one of the world's leading centres of banking, insurance and other financial services. Decentralisation of some office services from the capital has led to a growth of office employment in surrounding regions such as East Anglia. London and the neighbouring counties also account for much of advertising and market research activity, half of central government services and a significant proportion of non-food wholesale distribution in England. After London and the South East (where nearly 75 per cent of employees are engaged in the service sector), the South West has the next most important concentration of service industries. Tourism, catering and the leisure industries have also expanded. Over half of expenditure by overseas visitors in Britain takes place in London, although areas outside London are becoming increasingly popular with overseas tourists, while the South West is the most popular region for domestic tourism. Each region has its own particular attraction for tourists. For example, a number of areas including Northumberland and Cumbria (whose peaks include Scafell, England's highest point, at 978 m, 3,210 ft) have hills and lakes which attract walkers, climbers and riders.

Cultural and Social Life

Cultural life in England takes so many forms that a brief summary can only attempt to suggest its variety. London alone has over 100 theatres, including some 50 in the 'West End', together with fringe and suburban theatres, about a dozen major centres for music concerts, ballet and opera, four major art galleries, a dozen major museums (with over 80 smaller galleries and museums), and over 140 West End, local and independent cinemas, and other leisure facilities include discotheques, bingo halls, amusement arcades, ice and roller skating rinks, and sports or leisure centres. With its ceremonial occasions, palaces, other historic buildings and shops, London is also one of the world's leading tourist centres. About 15 attractions (Westminster Abbey, the Tower of London, St Paul's Cathedral, Madame Tussaud's—an exhibition of waxworks of famous people—the London Zoo, Kew Gardens and the major museums and art galleries) each receive more than a million visitors a year.

Because of its size and its position as the capital city, London is not representative of the rest of England, but much the same broad range of cultural interests is reflected in many other cities and towns. The English Tourist Board lists some 1,230 art galleries, museums and similar institutions in the rest of England. Social clubs and working men's clubs, non-profit-making clubs which attract well-known entertainers, are found in most cities and towns. In addition, many rural or outdoor recreations are strongly supported and there is active interest in numerous games and sports, many of which were devised in Britain.

The English love of gardens and landscapes is associated with a tradition of sightseeing visits to the many country houses, gardens and unspoilt rural and coastal areas. There are seven national parks, two forest parks, 32 designated 'areas of outstanding natural beauty', 11 environmentally sensitive areas, about 150 country parks approved by the Countryside Commission, 550 'outstanding conservation areas', 676 km (420 miles) of designated heritage coastline and 2,075 historic buildings and gardens listed by the English Tourist Board. Newer developments include the opening of safari and wildlife parks and of 'theme' parks devoted, for example, to maritime history, which offer a diversity of entertainments as well. Many regions and towns have associations with the great English writers and artists, such as William Shakespeare, William Wordsworth, Arnold Bennett, Charles Dickens, the Brontë sisters, Thomas Hardy, Thomas Gainsborough and John Constable.

WALES

Wales is a country of hills and mountains with extensive tracts of high plateau and shorter stretches of mountain ranges deeply dissected by river valleys. The

highest mountains are in Snowdonia in the north west; the highest peak is Snowdon (1,085 m, 3,560 ft). The lower-lying ground is largely confined to the relatively narrow coastal belt and the lower parts of the river valleys. The main areas of settlement are in the southern valleys and coastal areas, where two-thirds of the population live. The chief urban centres are Cardiff, Swansea, Newport and Wrexham. Wales is a principality; Prince Charles, the heir to the throne, was invested by the Queen with the title of Prince of Wales at Caernarfon Castle in 1969 when he was 20.

11

The country has its own Welsh language, spoken (according to the 1981 census) by 19 per cent of the population, chiefly in the rural north and west. The Welsh name of the country is Cymru. Measures adopted since the 1960s have helped to revive the use of the language, which is of Celtic origin and closely resembles Breton, spoken in Brittany in France. They include recognising the equal validity of Welsh with English in law courts, the encouragement of bilingual education in schools, and the extended use of Welsh for official purposes and in broadcasting. Welsh-language television programmes are transmitted in Wales by Sianel 4 Cymru (Channel 4 Wales).

> There is no established church in Wales, the Anglican church having been disestablished in 1920 following decades of pressure from adherents of the more evangelical Methodist and Baptist persuasions. Methodism in particular had spread rapidly in Wales in the eighteenth century, assuming the nature of a popular movement among Welsh speakers and finding strong support later in industrial communities.

Government The country returns 38 Members of Parliament and there are special arrangements for the discussion of Welsh affairs. For the last 60 years the industrial communities of Wales have tended to support the Labour Party in elections, ensuring a Labour majority in Wales. In the 1987 election 24 Labour, 8 Conservative, 3 Plaid Cymru (Welsh Nationalist) and 3 Liberal members were returned. Substantial administrative autonomy is centred on the Secretary of State for Wales, who is a member of the Cabinet, and has wide-ranging responsibilities relating to the economy, welfare services and the provision of amenities. The headquarters of the administration is the Welsh Office in Cardiff, which also has an office in London. In 1979 proposals for the establishment of an elected Welsh assembly in Cardiff to take over policymaking and executive powers from central government were rejected in a referendum held in Wales. Local government is exercised through a system of elected authorities similar to that in England, and the legal system is identical with the English one.

The Economy The south Wales coalfield was developed during the latter part of the industrial revolution in the middle of the nineteenth century, creating populous urban centres which drew labour from the rural areas and from England and Ireland. However, the economy was narrowly based, mainly on coal, iron, steel and tinplate, and contracted sharply during the 1920s and 1930s, resulting in severe employment problems and substantial emigration.

Notable features of the past three decades have been the continuing contraction of coalmining and iron and steel production (although Wales still accounts for about one-third of Britain's steel production), the advent of a more diverse range of manufacturing industries and the growth of service industries. Wales is developing as an important centre for electronics in Britain and several new high-technology businesses in electronics and related industries have been established. Inward investment by overseas companies (especially Japanese and United States high-technology concerns) has been considerable, and there are over 200 overseas-owned or associated firms in Wales, employing about 45,000 people and accounting for around one in five jobs in the manufacturing sector. South Wales remains the principal industrial area but new industries and firms have also been introduced on the smaller coalfield in north-east Wales, around Wrexham and Deeside, again to offset the decline in the older, basic industries which previously dominated the area. Light industry has also been attracted to the towns in the rural areas in mid- and north Wales and an important refinery complex has developed around Milford Haven, one of Britain's major oil ports. A development corporation was set up in April 1987 to stimulate the regeneration of the Cardiff Bay area.

Agriculture occupies about 80 per cent of the land area, the main activities being sheep and cattle rearing in the hill regions and dairy farming in the lowlands. Wales accounts for about 11 per cent of forest area in Britain and over 20 per cent of Forestry Commission timber production.

Wales produces about 8 per cent of Britain's deep-mined coal and 12 per cent of opencast production, including all of its anthracite. The biggest pumped-storage power station in Europe is at Dinorwig, while there are nuclear power stations at Wylfa and Trawsfynydd. Wales exports about half of its water supply to England.

Good communications exist in the south with motorway links across the Severn Bridge to southern England and the midlands, and high-speed rail services to a number of destinations in England. The main road along the north Wales coast is being upgraded and a second crossing of the Severn is planned.

There has been expansion in financial and business services, in the tourist and catering trades and in some areas of public administration. With its coastal resorts (which include Tenby, Saundersfoot, Rhyl, Llandudno, Colwyn Bay, Porthcawl and Barry), and the attractions of three national parks (Snowdonia, the Brecon Beacons and the Pembrokeshire Coast), as well as other areas of picturesque hill, lake and mountain country, Wales attracts many tourists, especially for outdoor holidays.

Cultural and Social Life

There is much literary, musical and dramatic activity in Wales and there is a National Library and National Museum. Welsh literature is one of the oldest in Europe. The country is well known for its choral singing and the Welsh National Opera has an international reputation. The special festivals of Wales, known as eisteddfodau, encourage Welsh literature and music. The largest is the Royal National Eisteddfod of Wales, held annually, entirely in Welsh, and consisting of competitions in music, singing, prose and poetry. The town of Llangollen has extended its eisteddfod to include artists from all over the world in the annual International Musical Eisteddfod. Famous modern Welsh artists have included the opera singers Sir Geraint Evans and Dame Gwyneth Jones and the poet Dylan Thomas. An active local press includes a number of Welsh language publications. Great interest is aroused by the annual rugby football competition in which sides from Wales, England, Scotland, Ireland and France take part.

Health services are provided mainly under the National Health Service, administered by the Welsh Office, while personal social services and education (except at university level) are provided mainly through the local authorities. Educational provision is similar to that in England except for the use of Welsh in some schools, particularly in the Welsh-speaking, largely rural, areas. The collegiate University of Wales, founded in 1893, comprises six member institutions.

SCOTLAND

Scotland may be divided broadly into three areas: the sparsely populated highlands and islands in the north, accounting for just over half the total area of the country; the central lowlands, containing three-quarters of the population and most of the industrial centres and cultivated farmland; and the Southern

Uplands, containing a number of hill ranges, which border on England. The highest mountains are the Grampians in the central highlands, with Ben Nevis (1,343 m, 4,406 ft) the highest peak. The chief cities are the capital Edinburgh, the main industrial centre Glasgow, and the two regional centres Aberdeen and Dundee.

The period from 1750 onwards has seen considerable and continuous emigration of Scots to England and overseas. However, the rate slowed markedly in the 1970s as the offshore oil and gas industries developed and there was inward migration to the north east of Scotland, although the large outflow of people from Strathclyde has continued, but at a lower level. In the midnineteenth century, as Scotland industrialised rapidly, there was large-scale immigration from Ireland.

The period from 1750 until the beginning of the twentieth century was also one of stability and economic progress and of achievements in many fields. Among the famous men to emerge were David Hume, Robert Burns, Sir Walter Scott, Adam Smith, Robert Adam, James Watt, John MacAdam, Lord Kelvin, Alexander Graham Bell and James Clerk Maxwell.

The Church of Scotland, which became the established church in 1690, has complete freedom in all matters of doctrine, order and discipline. It is a Protestant church which is Presbyterian in form, being governed by a hierarchy of church courts, each of which includes lay people.

Government There are special arrangements for the conduct of Scottish affairs within the British system of government and separate Acts of Parliament are passed for Scotland where appropriate. In the 1987 general election the 72 Scottish seats in the House of Commons were apportioned as follows: 50 Labour, 10 Conservative, 7 Liberal, 3 Scottish National and 2 Social Democrat. Since 1959 Scotland, like Wales, has had a majority of Labour Members of Parliament. Administrative tasks relating to a wide range of economic and social functions are the responsibility of the Secretary of State for Scotland, a member of the Cabinet, working through the Scottish Office, with its administrative headquarters in Edinburgh and an office in London. A proposal for an elected assembly for Scotland, on which a referendum was held in 1979, failed to gain the support of the required 40 per cent of the electorate, even though a majority of those voting gave it their approval.

Local government generally operates on a two-tier basis broadly similar to that in England and Wales but established by separate legislation. The three islands councils (for Orkney, Shetland and the Western Isles) are single-tier authorities.

The principles and procedures of the Scottish legal system (particularly in civil law) differ in many respects from those of England and Wales, stemming, in part, from the adoption of elements of other European legal systems, based on Roman law, during the sixteenth century.

The Economy

Scotland has experienced the same pressure on its traditional industries as the north of England and Wales. The regional policies of successive governments and investment by overseas companies have both made significant contributions to the growth of modern, technologically based industries, and Scotland's economic structure is now broadly similar to that of Britain as a whole.

Engineering remains a major industry, accounting for over a quarter of the manufacturing workforce, but there has been a significant trend towards lighter engineering products and rapid expansion in electronics (including microelectronics). By mid-1986 over 250 plants were employing some 43,000 workers, one of the biggest concentrations of the electronics industry in Western Europe. Scotland accounts for over 50 per cent of Britain's output of integrated circuits and for 15 per cent of European output.

Since the early 1970s the Scottish economy has also benefited from the growth of offshore-related industries following the discovery of oil and gas under the northern North Sea, although the industries have been adversely affected by the recent decline in world oil prices. In the 1980s up to about 100,000 jobs have arisen directly or indirectly as a result of North Sea activities. Many of these jobs reflect overseas investment solely related to the exploration and development of North Sea resources, but oil and gas developments have stimulated other industries including engineering and petrochemicals; a major new ethylene plant at Mossmorran (Fife) came onstream in 1985, reinforcing Scotland's position in the chemicals industry. Traditional industries, such as coal, steel and shipbuilding, have experienced a long-term decline in employment, but are still important contributors to the Scottish economy. Other traditional manufactures, such as high-quality tweeds and other textiles, and food and drink products, remain important. There are about 90 whisky distilleries in Scotland and the industry is a major export earner.

Northern and north-east Scotland (particularly Aberdeen) have benefited most from offshore developments. However, Strathclyde, by far the most populous region, has experienced serious industrial decline and population loss, particularly in Glasgow. In the remainder of the central belt and in the five new towns (East Kilbride, Glenrothes, Livingston, Irvine and Cumbernauld) trends have been generally more favourable. In Lothian the large concentration of financial and other service industries centred on Edinburgh has been a helpful influence.

Scotland has about one-third of Britain's total agricultural land, but 68 per cent of it consists of hill grazing for cattle and sheep. About 13 per cent of the agricultural area is used for crops, and 63 per cent of this is under barley. Scotland accounts for nearly half of Britain's forest area and for 40 per cent of public sector timber production; the bulk of new planting in Britain takes place in Scotland, most of it in the upland and mountain areas. Fishing remains an important activity; more than 65 per cent of total landings of fish in Britain are made by vessels based in Scotland.

Despite the advent of cheaper natural gas, Scotland still depends heavily on electricity; nuclear and hydro-electric generation supply a higher proportion of energy than in any other part of Britain. Large supplies of unpolluted water form a major resource.

Communications, both domestic and international, have improved in many areas, particularly in the north and north east, owing to the stimulus of the offshore oil industry and to road- and bridge-building programmes. The offshore oil industry has also encouraged expansion in financial and business services which have been traditionally strong in Scotland.

Tourism, which makes a significant contribution to the economy and to employment in Scotland as a whole, is estimated to generate, both directly and indirectly, nearly 100,000 jobs. Scotland's cultural and historic associations, its varied scenic beauty, and the opportunities for sport and recreation are particular attractions. Golf originated in Scotland, and courses at St Andrews, Gleneagles, Turnberry and Prestwick are internationally renowned. Skiing is growing in importance, with centres at Aviemore, Glenshee, Glencoe and the Lecht, and further developments are planned.

Cultural and Social Life

A vigorous cultural life in Scotland has as its highlight the annual Edinburgh International Festival, one of the world's leading cultural events. Notable performing arts bodies are the Scottish National Orchestra, Scottish Opera, Scottish Ballet, Scottish Chamber Orchestra, Scottish Baroque Ensemble and the BBC Scottish Symphony Orchestra. Scotland possesses excellent collections of the fine and applied arts, notably in the National Galleries of Scotland, the Royal Museums of Scotland and the City of Glasgow Museum and Art Galleries

(including the Burrell collection, opened in 1983). Glasgow has been designated as European City of Culture for 1990.

A language of ancient Celtic origin, Scots Gaelic is spoken by some 80,000 people mainly in the islands and north west of Scotland. It is the indigenous language, with its own literary background. Scottish people in the lowlands have for centuries spoken Scots (or Lallans), a derivative of the Northumbrian dialect of Old English, which has its own recognised literary tradition and has seen a revival in poetry in recent times.

An active press includes six national daily morning newspapers, six local evening newspapers and three national Sunday newspapers. There are also some 110 local weekly newspapers published in Scotland. Articles in some papers are printed in Gaelic. Television programmes are produced by BBC (Scotland) and by three independent companies, covering the highland, lowland and border regions. BBC Radio Scotland covers most of the population and there are five 'community' services in the highlands and islands, two of them mainly in Gaelic, and two in the borders, together with a number of independent radio stations.

Local authorities are responsible for the provision of most education, except at university level. Secondary education in Scotland is almost completely organised on comprehensive lines: colleges of further education are administered by education authorities while independent bodies administer higher education institutions and colleges of education. There are eight universities, of which four (St Andrews, Glasgow, Aberdeen and Edinburgh) were established in the fifteenth and sixteenth centuries, while the other four have been established since 1964. The educational tradition has been particularly strong in Scotland, helping many Scots to positions of eminence in the arts and sciences.

Over 50 per cent of Scotland's housing has been built since 1945, only Northern Ireland having a larger percentage. Scotland has a high proportion of housing rented from public authorities (almost 50 per cent compared with a national average of less than 30 per cent), although in recent years there has been a noticeable growth in owner-occupied housing as in the rest of Britain.

NORTHERN IRELAND Northern Ireland is at its nearest point only 21 km (13 miles) from Scotland. It has a 488-km (303-mile) border in the south and west with the Irish Republic. At its centre lies Lough Neagh, Britain's largest freshwater lake (381 sq km, 147 sq miles). Many of the principal towns lie in valleys leading from the Lough, including the capital, Belfast, which stands at the mouth of the river Lagan. The Mourne Mountains, rising sharply in the south east, include Slieve Donard, Northern Ireland's highest peak (852 m, 2,796 ft).

Just under two-thirds of Northern Ireland's population are descendants of Scots or English settlers who crossed to north-eastern Ireland mainly in the seventeenth century; most belong to the Protestant faith, and have a traditional loyalty to the maintenance of the union with Great Britain. The remainder, over a third, are Irish in origin and mainly Roman Catholic; many of them are nationalist in political opinion, favouring union with the Irish Republic.

Government
Background to
Civil
Disturbances

Northern Ireland is part of the United Kingdom, but for 50 years from 1921 it had its own devolved Parliament in which the mainly Protestant Unionists consistently formed the majority and therefore constituted the Government after successive elections. Nationalists, who are predominantly Roman Catholic, resented this domination and their effective exclusion from political office. Although substantial advances for the whole population were achieved in social welfare and economic development, during the late 1960s an active and articulate civil rights movement emerged. Reforms were made but sectarian disturbances developed, which required the introduction of the Army in 1969 to

support the police in keeping the peace. Subsequently, sectarian divisions were exploited by the actions of terrorists from both sides, but most notably by the Provisional Irish Republican Army who claimed to be protecting the Roman Catholic minority.

Direct Rule and Political Initiatives Despite the Northern Ireland Government's substantial reform programme, the inter-communal violence continued and the United Kingdom Government concluded that the best hope of ending terrorism and achieving political progress would be for the United Kingdom Parliament and Government to take over responsibility for law and order in Northern Ireland. The Northern Ireland Government felt unable to accept this and resigned, and in 1972 direct rule began, with a United Kingdom Cabinet minister responsible for the functions previously exercised by the Northern Ireland Government.

Several attempts have been made to secure a stable and effective devolved government supported by both sides of the community. A new constitution which devolved powers to an elected legislative assembly, and a 'power-sharing' executive representing all sections of the community, encountered Protestant 'loyalist' opposition culminating in a general strike in 1974; in 1976 an elected constitutional convention failed to agree on a system of government that would command widespread acceptance; in 1978 a planned framework for a form of devolution to consolidate common ground among the political parties was rejected; and in 1980 there was a political conference and extensive discussions. In 1981 the appointment of a Northern Ireland Council to advise the Secretary of State was proposed but rejected by the political parties in Northern Ireland.

In October 1982 elections took place to a new 78-member Assembly. The Assembly was given responsibility for making proposals for devolving powers on a basis which would command widespread acceptance throughout the community. In the mean time, it performed scrutinising and consultative functions, commenting upon draft legislation and initiating reports on such matters as industry and education. Some members refused to take their seats on election. The unionist parties, who had a majority in the Assembly, decided not to fulfil the Assembly's statutory functions in March 1986 in protest at the Anglo-Irish Agreement (see below), and in June the Government decided that the Assembly should be dissolved but at the same time expressed the hope that a future Assembly would play a responsible part in Northern Ireland.

The Government's policy continues to be based on two fundamental principles. First, that there will be no change in Northern Ireland's constitutional status as part of the United Kingdom without the consent of a majority of people in Northern Ireland. This is in accordance with internationally accepted principles of democracy; it is also reflected in the Anglo-Irish Agreement. A 'border poll' in 1973 showed that a clear majority wished Northern Ireland to remain part of the United Kingdom, and in subsequent elections parties which support that position have continued to receive the majority of votes. Secondly, the Government continues to believe that a devolved form of administration would best meet Northern Ireland's needs; but it will establish new structures of devolved government only if they are acceptable to both parts of the community.

Northern Ireland returns 17 members to the United Kingdom Parliament. In the last general election in 1987 the seats were distributed as follows: Ulster Unionist 9, Democratic Unionist 3, Ulster Popular Unionist 1, Social Democratic and Labour 3, and Sinn Fein 1 (although the last-mentioned member has not taken his seat).

The Anglo-Irish Agreement In November 1985, the United Kingdom and the Irish Republic concluded an Agreement aimed at promoting peace and stability in Northern Ireland. The Agreement has three main features. First, it affirms that no change in the status

of Northern Ireland would come about except by the consent of a majority of its people—which is recognised not to exist at present; but that if at some time a majority formally consented to a united Ireland, both parties would support legislation to that effect. Secondly, it establishes an Intergovernmental Conference, through which the Irish Government can put forward views and proposals on specified matters affecting Northern Ireland affairs (so far as they are not the responsibility of a devolved administration). Matters discussed include avoidance of discrimination; relations between the security forces and the minority community; the administration of justice; economic and social matters; human rights; electoral arrangements; and the use of flags and emblems and of the Irish language. Thirdly, the Conference is a forum for promoting cross-border co-operation, in particular on security. The Conference has no executive role or decision-making powers, and the Agreement makes clear that there is no derogation from the sovereignty of either the United Kingdom Government or the Irish Government; each retains full responsibility for the decisions about administration of government within its own jurisdiction.

Human Rights and Security Policy The Government is committed to the protection of human rights in Northern Ireland. The United Kingdom is a signatory to the European Convention on Human Rights and allows the right of individual petition. Legislation passed in 1973 outlaws discrimination by public bodies, including the Government, on the grounds of religious belief or political opinion. Discrimination in employment by both public and private employers is also illegal and the Fair Employment Agency has been established to investigate complaints and enforce fair practices. The independent Standing Advisory Commission on Human Rights advises the Government on the effectiveness of these measures and on other human rights issues.

While terrorism continues, certain emergency powers are in force. Under legislation first introduced in 1973, these include special powers of arrest in respect of certain serious crimes; non-jury courts to try those offences; and the proscription of organisations involved in terrorism. There has been much concern to reconcile these powers as far as possible with respect for individual liberties: the measures are temporary, need annual renewal by Parliament and have been subject to independent review. Following the most recent review, completed in 1984, a number of amendments to the legislation have been made by Parliament. Most traditional rights, including freedom from persecution, freedom of speech and the right to prosecute the security forces if they exceed their authority, remain in force. There is also an independent police complaints board. Northern Ireland's legal system, and the safeguards it enshrines, is broadly similar to that in England and Wales.

The use of violence as a means of overcoming political differences has been condemned by the overwhelming majority of people living in Northern Ireland and, although terrorism continues, the overall level of violence is much lower than in the early 1970s. The police take the primary role in maintaining order; the Army's task is one of assisting the civil authorities, and the number of soldiers on service has been considerably reduced. Security policy rests on the principle of fair and effective enforcement of the law by bringing terrorists to justice through the courts. They are tried for criminal offences and not for political beliefs. At the heart of the policy is a determination to develop the effectiveness of the police to the point where military involvement in the maintenance of law and order is no longer needed.

The Economy

The geography of Northern Ireland has played an important part in shaping its economic development. A situation on the western edge of Europe, with few indigenous mineral resources and only a small local market, has tended to

favour the concentration of industry and population on the eastern seaboard close to trading links with the rest of the United Kingdom. Most of Northern Ireland's trade is with, or through, Great Britain. With certain exceptions, the parts of the region beyond the immediate influence of the industrialised area around Belfast have stayed predominantly rural, with generally small and often scattered communities relying mainly on farming.

Since the end of the second world war two dominant trends have been apparent in the economy. First, employment in the traditionally important industries (shipbuilding, linen and agriculture) has declined. Secondly, there has been growth in the numbers seeking work, reflecting the relatively high rate of natural increase of the population, which is only partly offset by migration. In an effort to counterbalance these factors and to promote growth, programmes within the broad framework of United Kingdom regional policy have been carried out to develop infrastructure and attract investment from within the country and from abroad. Despite the impact of the world-wide recession in the 1970s and continuing high rates of unemployment, there have been encouraging developments in the economy and, as part of the Government's industrial development policy, the promotion of small firms to create new jobs in manufacturing, crafts and services is meeting with success. The discovery of large deposits of lignite around Lough Neagh, which offer the prospect of cheaper electricity in the longer term, should also benefit industry.

Belfast has Britain's largest shipyard, and aerospace engineering is now one of Northern Ireland's biggest manufacturing industries. Other well-established industrial activities include the manufacture of textile machinery and a wide range of engineering products, tobacco and clothing. There has also been extensive development in vehicle components, oil-well equipment, electronics, telecommunications equipment, carpets and synthetic rubber. The linen industry is enjoying a revival (farms are experimenting with growing flax) and food processing and packaging is seen as a source of new employment.

Agriculture (predominantly livestock and products) is still an important industry, accounting for almost a tenth of civil employment (including the self-employed), over three times the proportion in Britain as a whole.

To meet the special problem of unemployment rates that are persistently higher than in any of the other standard regions of Britain, successive governments have offered more generous incentives than are available in the rest of the country to encourage new investment both from within Britain and from overseas, and assistance to mitigate high energy costs. The establishment of 'enterprise zones' in Belfast and Londonderry and the designation of Aldergrove airport as a 'freeport' serve as additional incentives to investment. Northern Ireland's productivity and industrial relations records compare favourably with those in the country as a whole. Altogether around 400 manufacturing projects which have been assisted are still in production, including some 100 from outside Northern Ireland.

The modern diversification of the economy has helped to stimulate output, productivity and incomes, and has assisted in narrowing the gap between living standards in Northern Ireland and those in the rest of the United Kingdom. Gross domestic product per person, which tends to be depressed in Northern Ireland relative to the country as a whole, has nonetheless risen from just under two-thirds of the British average in 1963 to almost three-quarters. Average earnings are more than nine-tenths of the national average.

The principle underlying Northern Ireland's financial relations with the rest of the country is that it has parity, both of taxation and services, with England, Scotland and Wales. To maintain social services at the level of those in Great Britain, to meet the cost of security measures, and to compensate for the natural disadvantages of geography and lack of resources, the United Kingdom

Government's subvention to Northern Ireland in 1986–87 was nearly £1,700 million.

Cultural and Social Life

In day-to-day social life Northern Ireland is in many ways similar to the rest of the United Kingdom. For thousands of visitors (823,500 in 1986), as well as for local people, Northern Ireland's landscape and natural features, its cultural traditions and festivals continue to offer special attractions. For many North Americans the land from which their forebears emigrated (a number of United States presidents have been descended from Northern Ireland families) has a unique interest. The story of this contribution to American life, the history of Northern Ireland, and aspects of its culture—from the dialects and strong literary tradition (poets like Louis MacNeice and Seamus Heaney have international reputations) to the songs and dances and folk art—are recorded in the Ulster–American Folk Park, the Ulster Museum and the Ulster Folk and Transport Museum.

The Arts Council of Northern Ireland is a major contributor to cultural life, which encompasses classical and traditional music, opera, literature and poetry, drama, ballet and the visual arts. The annual Belfast Festival at Queen's University is the second largest international festival in Britain. Among musicians who have achieved international distinction are the flautist James Galway, the soprano Heather Harper and the pianist Barry Douglas, winner of the International Tchaikovsky Competition in Moscow in 1986.

The National Health Service provides both hospital and practitioner services, and health and personal social services correspond fairly closely to those in the rest of the United Kingdom, although the administrative framework is different. While publicly maintained schools are open to children of all religions, in practice, Protestants and Roman Catholics are for the most part educated in separate schools, although there is one publicly maintained integrated school and a small number of independent integrated schools. Contrary to developments in the rest of the United Kingdom, emphasis on the comprehensive principle in secondary schools has been very small. Links between the two universities and industry are well developed. Considerable progress has been made in improving housing and the urban environment, notably in Belfast, and home ownership is increasing significantly. Major new town centre developments are taking place in Belfast, Londonderry and other towns which provide greatly improved shopping facilities. Planning and conservation arrangements are much like those in the rest of the country.

Distinctive local programmes are broadcast and there is a local press; national radio and television networks are received, however, and the national press is sold widely. Sport has an important role in the community, and many world-class sportsmen and sportswomen have come from Northern Ireland, including the boxer Barry McGuigan and the snooker player Dennis Taylor.

The Social Framework

The way of life of the people of Britain has been changing rapidly in the second half of the twentieth century. As in many other countries underlying causes include a lower birth rate, longer expectation of life, a higher divorce rate, widening educational opportunities, technical progress and a higher standard of living.

POPULATION

With 56.8 million people in 1986, Britain ranks about fifteenth in the world in terms of population. This compares with 38.2 million in 1901, about 9 million at the end of the seventeenth century and some 2 million at the end of the eleventh century. Early figures are based on contemporary estimates, but from the

beginning of the nineteenth century relatively plentiful and reliable information is available. Most of it comes from two main sources: the regular flow since 1837 of statistical information based on compulsory registration of births, marriages and deaths, and the censuses taken regularly every ten years since 1801 (because of war there was no census in 1941). The most recent was in 1981. After 1975 the population fell slightly for about three years, for the first time (other than in war) since records began, reflecting a temporary decline in the birth rate. Since then the upward trend has been resumed, except for a slight decline in 1982. Projections suggest that population growth will continue at a low rate. Britain's total population is expected, on mid-1985 projections, to be 57.5 million in 1991, 59 million in 2001 and 59.4 million in 2011.

Birth Rates

In 1986 there were 755,000 live births in Britain, 4,300 more than in 1985, which outnumbered deaths (660,700) by 94,300. The total period fertility rate (an indication of the average size of family) remains below the level of $2\cdot 1$ required for the replacement of the population, although it is projected to increase from $1\cdot 8$ in 1986 to $2\cdot 0$ in the early twenty-first century.

Several factors may have contributed to the relatively low birth rate (13·3 live births per 1,000 population in 1986). Contraception has become more widespread and effective, making it easier to plan families, and voluntary sterilisation of men and women has also become more common. An appreciable proportion of pregnancies (in 1985 about 37 per cent of those conceived outside marriage and 7 per cent of those conceived within marriage) are ended by legal abortion.

The postponement of conception within marriage coupled with a trend towards later marriage has led to an increase, to 26, in the average age at which women have their first child in marriage. Another feature is the current preference for smaller families than in the past, especially two-children families, which has led to a significant decline in the proportion of families with four or more children.

Mortality

At birth the expectation of life for a man is about 71 years and for a woman 77 years compared with 49 years for men and 52 years for women in 1901. The improving health of the population has mainly had the effect of increasing young people's chances of reaching the older age groups. Life expectancy in the older age groups has increased relatively little.

The general death rate has remained about the same for the past 40 years, at about 12 per 1,000 population. However, there has been a considerable decline in mortality at most ages, particularly among children and young adults. The infant mortality rate (deaths of infants under one year old per 1,000 live births) was 9.5 in 1986; neonatal mortality (deaths of infants under four weeks old per 1,000 live births) was 5.3 in 1986; and maternal mortality is about 0.1 per 1,000 live births.

The causes of the decline in mortality include better nutrition, rising standards of living, the advance of medical science, the growth of medical facilities, improved health measures, better working conditions, education in personal hygiene, and the smaller size of families. Deaths resulting from infectious diseases (notably tuberculosis) have virtually disappeared, although as in other countries the spread of the disease AIDS (Acquired Immune Deficiency Syndrome) is causing concern; by the end of June 1987, 870 cases of AIDS had been reported, of which 490 had resulted in the patient's death. Deaths caused by circulatory diseases (including heart attacks and strokes) now account for nearly half of all deaths, the next largest cause of death being cancer (responsible for nearly one-quarter of deaths). Cigarette smoking is the greatest preventable cause of illness and death in Britain, accounting for some 100,000

premature deaths a year, but there has been a significant decline in the incidence of smoking, with 36 per cent of adult males and 32 per cent of adult females smoking cigarettes in 1984, as against 52 and 41 per cent respectively in 1972.

Marriage and Divorce

During the last 20 years there has been a marked change in the pattern of marriage. In 1972 there were 480,300 marriages in Britain, but by 1982 the number had declined to 387,000, with a subsequent increase to 394,000 in 1986. Of the population aged 16 or over in England and Wales in 1986, 60 per cent were married, 26 per cent single, 9 per cent widowed and 5 per cent divorced. The trend of the 1960s towards earlier marriage was reversed at the beginning of the 1970s, since when there has been a slow increase in the average age for first marriages, which in England and Wales is now 26 for men and 24 for women. In 1986 remarriages (of one or both parties) accounted for about 35 per cent of all marriages in Britain, compared with about 20 per cent in 1971 and 14 per cent in 1961. Some 12 per cent of all marriages in 1986 were remarriages where both partners had been divorced.

The divorce rate has been increasing steadily and in 1986 about 13 decrees of divorce were made absolute for every 1,000 married couples in England and Wales, compared with two per 1,000 in 1961. The rates are lower in Scotland and Northern Ireland. In 1986 about 154,000 divorces were granted in England and Wales; the proportion granted to wives was about 71 per cent. The average age of people at the time of divorce in England and Wales is now about 38 for men and 35 for women.

Another feature, common to many other Western European countries, has been a considerable increase in cohabitation. Over one-quarter of women in Great Britain marrying during the period 1980 to 1983 where the marriage was the first for both parties had lived with their husbands before marriage (compared with 7 per cent for those married in the early 1970s) and about 13 per cent of non-married women aged 18 to 49 were cohabiting during 1983–84. Cohabitation occurs more frequently for separated or divorced women than for single women. There is some evidence of a growing number of stable non-married relationships in that half of illegitimate births (which now account for 21 per cent of live births in Britain compared with 6 per cent in 1961) are registered by both parents.

Age and Sex Structure

Although the total population has remained relatively stable in the last decade, there have been noticeable changes in the age and sex structure, including a decline in the proportion of young people under 16 and an increase in the proportion of elderly people, especially those aged 85 and over. The estimated age distribution of the British population in mid-1986 was roughly as follows: under 16 years, nearly 21 per cent; 16–64, 64 per cent; and 65 and over, 15 per cent. Some 18 per cent of the population were over the normal retirement ages (65 for men and 60 for women), compared with 15 per cent in 1961.

In mid-1986 there were an estimated $29\cdot1$ million females and $27\cdot6$ million males in Britain, representing a ratio of over 105 females to every 100 males. There are about 5 per cent more male than female births every year. Because of the higher mortality of men at all ages, however, there is a turning point, at about 50 years of age, at which the number of women exceeds the number of men. This imbalance increases with age so that there is a preponderance of women among the elderly.

Distribution of Population

The population density is about 233 per sq km, which is relatively high in comparison with most other countries. England is the most densely populated with 362 people per sq km (with Greater London having a density of 4,288

people per sq km), and Scotland the least densely populated with 65 people per sq km, while Wales and Northern Ireland have 136 and 111 people per sq km respectively.

Table 2 gives figures for some of Britain's largest urban areas. About half of the population lives in a belt across England, with south Lancashire and West Yorkshire at one end, the London area at the other, and the industrialised midlands at its centre. Other areas with large populations are: the central lowlands of Scotland; north-east England from north of the river Tyne down to the river Tees; south-east Wales; the Bristol area; and the English Channel coast from Poole, in Dorset, eastwards. Less densely populated areas are the eastern fringes of England between the Wash and the Thames estuary, and the far south west. Most of the mountainous parts, including much of Scotland, Wales and Northern Ireland and the central Pennines, are very sparsely populated.

Since the nineteenth century there has been a general trend, especially in London, for people to move away from the congested urban centres into the suburbs. The 1981 census recorded that only in the remoter rural areas had the rate of population growth been higher in the 1970s than in the 1960s. There has also been a geographical redistribution of the population from Scotland and the northern regions of England to East Anglia, the South West and the East Midlands. Another feature has been an increase in the rate of retirement migration, the main recipient areas (where in some towns the elderly can form over one-third of the population) being the south coast of England and East Anglia.

Table 2: Size and Population of the Main Urban Areas, Mid-1986

	F		
	sq km	sq miles	Population (thousands)
Greater London	1,580	609.7	6,775
Birmingham	264	102.0	1,004
Glasgow	198	76.3	725
Leeds	562	217.0	711
Sheffield	368	141.9	534
Liverpool	113	43.6	483
Bradford	370	142.9	463
Manchester	116	44.9	451
Edinburgh	261	100.6	438
Bristol	110	42.3	392
Coventry	97	37.3	310
Belfast	140	54.0	304
Cardiff	120	46.3	280

Migration

Traditionally, there is a net population loss from Britain due to migration to the rest of the world, but in 1986 there was a net gain of 37,000. Between 1981 and 1986 some 1·23 million people left Britain to live abroad and about 1·24 million came from overseas to live in Britain, so that net immigration increased the population by about 13,000. Of the 213,000 departing residents in 1986, 24 per cent left for Australia, Canada or New Zealand, 12 per cent for other Commonwealth countries, 27 per cent for other European Community

¹ International migration statistics used here exclude movements to and from the Irish Republic.

countries, 16 per cent for the United States and 7 per cent for the Middle East. Of the 250,000 new residents, 12 per cent came from Australia, Canada or New Zealand, 20 per cent from other Commonwealth countries and 28 per cent from other European Community countries. Many of those coming into Britain, as well as those going abroad, are British citizens.

Nationality

Nationality legislation is embodied in the British Nationality Act 1981, which came into force on 1 January 1983. Under this Act, citizenship of the United Kingdom and Colonies was replaced by three citizenships: British citizenship for people closely connected with Britain, the Channel Islands, and the Isle of Man; British Dependent Territories citizenship for people connected with the dependencies; and British Overseas citizenship for those citizens of the United Kingdom and Colonies who did not acquire either of the other citizenships. With one small exception, citizens of the United Kingdom and Colonies who had the right of abode in Britain when the Act came into force acquired British citizenship.

British citizenship is acquired automatically at birth by a child born in Britain if his or her father or mother is a British citizen or is settled in Britain. A child adopted in Britain by a British citizen is a British citizen. A child born abroad to a British citizen born, adopted, naturalised or registered in Britain is a British citizen by descent. The Act safeguards the citizenship of a child born abroad to a British citizen in Crown service, certain related services, or in service under a European Community institution. British citizenship may also be acquired by registration by certain children born in Britain who do not automatically acquire such citizenship at birth or born abroad to a parent who is a citizen by descent; by British Dependent Territories citizens, British Overseas citizens, British subjects under the Act (three very limited categories) and British protected persons after five years' residence in Britain (except for people from Gibraltar, who may be registered without residence); and by naturalisation for Commonwealth citizens, citizens of the Irish Republic, and foreign nationals. The British Nationality (Falkland Islands) Act 1983 conferred British citizenship (with effect from 1 January 1983) on those Falkland Islanders who did not acquire it under the 1981 Act. For naturalisation, which is at the Home Secretary's discretion, five years' residence, good character and sufficient knowledge of English, Welsh or Scottish Gaelic are required except for the spouse of a British citizen, who needs only three years' residence and no language qualification. Most existing entitlements to registration (including those for Commonwealth citizens and Irish citizens settled in Britain since before 1973, and in certain circumstances that for women married to citizens of the United Kingdom and Colonies before 1983) were preserved for five years from 1 January 1983.

Special arrangements covering the status of British Dependent Territories citizens connected with Hong Kong when the territory returns to the People's Republic of China in 1997 are made by the Hong Kong (British Nationality) Order 1986.

In 1986, 38,000 people acquired citizenship by naturalisation or registration in the United Kingdom.

Immigration

Immigration into the United Kingdom is controlled by the Immigration Act 1971 (as amended by the British Nationality Act 1981) and the Immigration Rules made in accordance with the Act. British citizens under the British Nationality Act 1981 and those Commonwealth citizens who had the right of abode before 1 January 1983 (when the 1981 Act came into force) have the right of abode and are not subject to immigration control. Those who do not have this right require permission to enter and remain in the United Kingdom, which is given in

accordance with the rules. These, which are approved by Parliament and which may be changed from time to time, set out the requirements to be met by those seeking entry whether in a temporary capacity, for example as students or visitors, or with the intention of taking employment or setting up in business or for settlement as the dependants of a person already settled in the United Kingdom. Nationals from certain countries require a visa before they can enter the United Kingdom. Other nationals subject to immigration control require entry clearance when coming to settle in the United Kingdom and in certain other circumstances. Visas and other entry clearances are normally obtained from the nearest British diplomatic post in a person's home country.

In accordance with the United Kingdom's obligations under the Treaty of Rome, European Community nationals do not require entry clearances nor are they subject to restrictions on their freedom to take or seek work. The United Kingdom similarly respects its obligations under the United Nations Convention and Protocol relating to the Status of Refugees.

In 1986, 46,800 people were accepted for settlement, some 8,500 fewer than in 1985. A third of these were from the South Asian sub-continent and half were the wives and children of men settled in the United Kingdom.

THE ECONOMIC AND SOCIAL PATTERN This section deals (to some extent in broad and informal terms) with social developments affecting many sections of the population.

The majority of people (some 97 per cent) live in private households (in families or on their own). The remainder include residents in hotels, and people in the armed services and in educational or other institutions. In 1985 just under four-fifths of people living in private households lived in a unit headed by a married couple.

Among many changes in household and family structure is the continuing fall in the average size of households in Great Britain from over four people in 1911 to 3-09 in 1961 and 2-56 in 1985. The fall reflects a greater proportion of people living on their own (10 per cent) or in one-parent families, the increasing number of elderly people (more of whom are living alone), and the preferences of parents for smaller families. The trend towards smaller households (24 per cent of households consist of one person) is expected to continue and the number of one-person households is forecast to increase substantially in the next few years.

Housing and the Environment A growing proportion of households, over 60 per cent, own or are buying their own homes, owner-occupation being higher among married couples than for single, divorced or widowed household heads. The number of owner-occupied dwellings rose from over 4 million in 1951 to nearly 14 million in 1985. Four British households out of five live in houses rather than flats.

Nearly half of Britain's housing has been built since 1945. Recent housing developments have been concentrated in suburban areas. Many families now live in houses grouped in small terraces, or semi-detached or detached, usually of two storeys with gardens, and providing two main ground-floor living rooms, a kitchen, from two to four bedrooms, a bathroom, and one or two lavatories. Originally, many houses were located in 'ribbon development' along main roads, but in recent years housing estates have nearly always been sited away from main roads. In inner urban areas slum clearance and redevelopment have been major features of post-1945 public housing programmes. While high-rise flats were popular in the 1960s and 1970s, the emphasis in new building is now on low-rise, high-density designs, often incorporating gardens or patios.

Housing standards are continually improving; some 97 per cent of households in Great Britain have exclusive use of a bath or shower, and a similar proportion

sole use of an inside lavatory (high percentages by international standards) while 69 per cent have central heating.

An important influence on the planning of housing and services has been the growth of car ownership; about 62 per cent of households have the use of at least one car (or van), including 17 per cent with the use of two or more. Greater access to motorised transport and the construction of a network of modern trunk roads and motorways have resulted in a considerable increase in personal mobility and changed leisure patterns, and have influenced the design of housing estates and shopping areas. Most detached or semi-detached houses in new suburban estates have garages, and out-of-town shopping centres, which normally include large supermarkets, are usually planned for the motorist.

The growth in car ownership has brought very great benefits but also a number of problems, notably, in many towns and cities, increased congestion, noise and air pollution arising from motor vehicle emissions. Public transport has been affected, and many services have been reduced or withdrawn, especially in rural areas. However, greater competition in express coach services has resulted in more long-distance and commuter coach services being provided, and deregulation of local bus services in 1986 is beginning to have an impact, the most important effect being the introduction of minibuses in many areas.

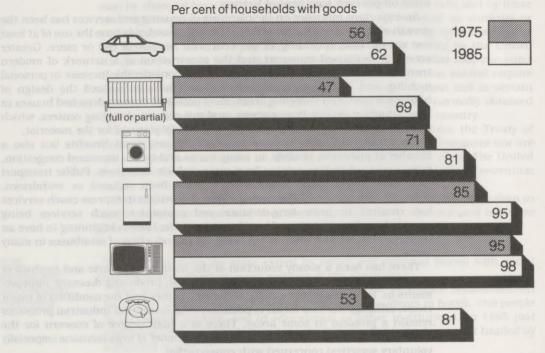
There has been a steady reduction of the main atmospheric and freshwater pollutants that have been of concern in the past, producing dramatic improvements in, for example, the quality of the air in cities and the condition of major rivers, although various forms of pollution from traffic and industrial processes remain a problem in some areas. There is a high degree of concern for the environment, as shown by the growth in the number of organisations (especially voluntary societies) concerned with conservation.

Living Standards Marked improvements in the standard of living have taken place during the twentieth century, but generally at a slower rate than in some other major industrialised countries. Although gross domestic product (GDP) per head fell in the early 1980s, Britain has experienced an economic recovery and is now into its seventh successive year of growth, with growth since 1980 being higher than in the other major European Community countries. In the year to the first quarter of 1987 GDP grew by over 4 per cent in real terms, with growth occurring throughout the economy, both in manufacturing and services. Inflation is at a much lower level than in the early 1980s; in July 1987 the index of retail prices was $4\cdot4$ per cent higher than in July 1986.

Long-term trends in the pattern of expenditure show a substantial rise in expenditure on housing, televisions, video recorders, telephones, electrical and some other durable goods, motor vehicles and a range of services. Some durable goods, such as televisions and refrigerators, are available in more than 90 per cent of households. Of durable goods shown in the diagram on p 26, ownership of telephones, freezers and central heating systems is growing most rapidly; other durable goods which have grown in popularity include music centres and other audio equipment, video recorders and home computers.

The general level of nutrition remains high. Over the last 25 years there have been substantial rises in the consumption of poultry, instant coffee and processed (including frozen) vegetables and fruit, while home consumption per person of mutton and lamb, beef and veal, bread, potatoes, eggs, milk, butter, sugar, tea and some other foods has fallen. However, another feature has been an increase in the number of meals eaten away from home, either at work or in restaurants, and a growth in the consumption of food from 'take-away' and 'fast-food' shops. In addition, in the 1960s and 1970s the proportion of convenience foods eaten grew as women increasingly went out to work and had

Availability of Certain Durable Goods



less time to prepare meals, and as the variety of prepared foods rose in line with the growth in ownership of refrigerators and freezers. There is some evidence of consumption of food being influenced by health factors, for example, the growth in the consumption of skimmed milk and the move from consumption of standard white bread towards wholemeal and other breads.

Alcohol consumption has risen substantially since the 1950s and alcohol abuse has become a problem although the level is well below that in some other European Community countries. Beer remains much the most popular alcoholic drink. A high proportion of beer is drunk in public houses ('pubs'), which are a traditional social centre for many people, and in clubs. A notable development has been the increase in consumption of lager, now estimated to account for over half of beer sales. Consumption of light (table) wine has increased considerably in recent years, although there has been little change in the consumption of higher strength wines such as sherry and port. The pattern of spirits consumption has also been changing, with a decline in the consumption of whisky and gin, and higher consumption of some other spirits.

Employment has been increasing since 1983, representing the longest period of continuous employment growth for nearly 30 years. However, the pattern of employment has altered considerably, with a substantial decline in employment in manufacturing industry being accompanied by a long-term increase in the numbers employed in service industries. Another feature has been an increase in the number of self-employed, now accounting for nearly 10 per cent of the working population. Earnings from employment are the main source of income for most people; in 1985 wages and salaries accounted for 60 per cent of household income. The distribution of pre-tax income has remained relatively stable over a long period, the lower 50 per cent of income earners accounting for some 22 to 24 per cent of pre-tax income since 1949. Income before tax of the

self-employed is less evenly distributed than total income, mostly because of the very large incomes of a small number of people, mainly professionals such as lawyers, accountants and doctors. The combined effect of the tax system and the receipt of benefits is to redistribute incomes on a more equal basis.

Wealth is much less evenly distributed, with the top 1 per cent of the population aged 18 or over owning about 21 per cent of marketable wealth, and the top 10 per cent having 52 per cent. The inclusion of 'non-marketable' rights in occupational and state pension schemes reduces these shares substantially to around 12 and 35 per cent respectively. Since the mid-1970s there has been little change in the distribution of marketable wealth or in that of marketable wealth plus occupational and state pension rights. The proportion of net wealth held in shares has been declining, but the Government's privatisation programme has had a major effect on the pattern of share ownership, with a survey early in 1987 indicating that nearly 20 per cent of the adult population in Great Britain were shareholders, as against 7 per cent in 1979.

Women

Considerable changes have occurred in the twentieth century in the economic and domestic lives of women, due, in part, to the removal of almost all sex discrimination in political and legal rights. At the heart of women's changed role has been the rise in the number of women, particularly married women, at work. With later marriages and the availability of effective methods of family planning there has been a decline in family size. Women as a result are involved in child-bearing for a much shorter time and this, together with a variety of other factors which have made housework less burdensome, has made it possible for women with even young children to combine raising a family with employment. Childminding arrangements are now more generally available and the growth of part-time work, job-sharing and flexible working hours, together with training and retraining schemes, allow women to take advantage of more employment opportunities.

> Women comprise 42 per cent of the British labour force and the proportion of married women who work outside the home has grown to over 60 per cent of those between the ages of 16 and 60. There is still a significant difference between women's and men's earnings but the equal pay legislation which came into force at the end of 1975 has narrowed the gap. Women's average hourly earnings, exclusive of overtime (for full-time employees), increased from just under two-thirds of those of men in 1970, to nearly three-quarters in 1986. Nevertheless, women's wages remain relatively low because women tend to work in lowly paid sectors of the economy and they work less overtime than men.

Equal **Opportunities** The Sex Discrimination Acts 1975 and 1986 make discrimination between men and women unlawful in employment, education, training and the provision of housing, goods, facilities and services. Discriminatory advertisements which breach the Act are also unlawful. In most cases complaints of discrimination are dealt with by industrial tribunals since they concern employment; others may be taken before county courts in England and Wales or the sheriff court in Scotland. Under the Equal Pay Act 1970, as amended in 1984, women in Great Britain are entitled to equal pay with men when doing work that is the same or broadly similar, or work which is of equal value. There is similar legislation on sex discrimination and equal pay in Northern Ireland. The Equal Opportunities Commission was set up in 1975 (1976 in Northern Ireland under separate legislation) to enforce the Sex Discrimination Act and the Equal Pay Act. Its statutory duties are to work towards the elimination of discrimination and to promote equality of opportunity. The Commission advises people of their rights under both Acts and may give financial or other assistance to help individuals to conduct a case before a court or tribunal. It also has power to conduct investigations and to issue notices requiring discriminatory practices to stop. In addition, it keeps legislation under review and may submit proposals for amending it to the ministers concerned. The Commission seeks to make women more aware of the opportunities available to them and its information centre is a national source of material on all aspects of equality.

Ethnic and National Minorities People have been coming to settle in Britain for centuries from many parts of the world. Some came to avoid political or religious persecution, others to find a better way of life or an escape from poverty.

The Irish have long made homes in Britain. Many Jewish refugees started a new life in the country towards the end of the nineteenth century and in the 1930s, and after 1945 large numbers of other European refugees settled in Britain. The large communities from the West Indies and South Asian sub-continent date principally from the 1950s and 1960s. There are also sizeable groups of Americans, Australians, Chinese and various European communities such as Greek and Turkish Cypriots, Italians and Spaniards. More recently Ugandan Asians and people from Latin America, Indo-China and Sri Lanka have sought refuge in Britain.

In 1983–85, according to the results of a sample survey, the non-white population of Great Britain was nearly 2·4 million (some 4 per cent of the total population) of whom about 40 per cent were born in Britain. Although they are disproportionately concentrated in areas of greatest deprivation in the inner cities where the disadvantages they share with the poorer sections of the indigenous community are compounded by racial discrimination, progress has undoubtedly been made over the last 20 years in several areas of life. Many individuals have achieved distinction in their careers and in public life and the proportion of ethnic minority workers in professional and managerial jobs has increased. The growth of commercial enterprise has been significant, particularly among Asians, and there are numerous examples of self-help in ethnic minority communities.

The principal means of combating disadvantage is through the economic, environmental, educational and health programmes of central government and local authorities, as well as through special programmes which channel extra resources into projects to benefit ethnic minorities specifically. The latter provide, for example, such staff as specialist teachers for those groups of children who need English language tuition, business support services and measures to revive local economies and improve the environment in inner city areas. Cultural and recreational schemes are funded, including community and social centres for different ethnic minorities, and the health and personal social services make special provision for certain groups.

The welfare of ethnic minorities and good relations between minorities and the local community are promoted by community relations councils and other voluntary bodies. In recognition of the tensions that can arise between the police and ethnic minorities, consultation between the police and the community has been made a statutory requirement, liaison work is undertaken in the schools and police training in race relations has received particular attention.

Race Relations Act Policies for promoting equality of opportunity in a multiracial society in which all citizens receive equal respect are pursued against a background of legislation against discrimination. The Race Relations Act 1976 makes discrimination unlawful on grounds of colour, race, nationality or ethnic or national origin in the provision of goods, facilities and services, in employment, training and related matters, in education, in housing and in advertising. It strengthened legislation passed in 1968 which, in turn, widened the scope of the first race relations legislation enacted in 1965. It also strengthened the criminal law on

LAND AND PEOPLE

incitement to racial hatred which was further reinforced by the Public Order Act 1986.

29

The 1976 Act brought the law against racial discrimination into line with that against sex discrimination (see p 27), and gave complainants direct access to civil courts and, in the case of employment complaints, to industrial tribunals.

Commission for Racial Equality The Commission for Racial Equality was established by the Race Relations Act 1976 with statutory duties to work towards the elimination of discrimination and to promote equality of opportunity and good relations between people of different racial groups. It has power to investigate unlawful discriminatory practices and to issue non-discrimination notices, requiring that such practices should cease. It has an important educational role and has issued a code of practice in employment. It is also the principal source of advice for the general public about the Race Relations Act and has discretion to assist individuals with their complaints.

The Commission supports the work of the 100 or so community relations councils, which are autonomous, voluntary bodies set up in most areas with a significant ethnic minority population to promote equality of opportunity and good relations at the local level. It makes grants towards the salaries of the community relations officers employed by the councils, most of whom also receive funds from their local authorities, and gives grants to ethnic minority self-help groups and to other projects run by or for the benefit of the minority communities.

Leisure Trends Most people have considerably more free time, more ways in which to spend it and higher real incomes than had previous generations. Agreed hours of full-time work are usually from 35 to 40 hours a week, although many people actually work somewhat longer because of voluntary overtime. A large majority of employees work a five-day week.

The most common leisure activities are home based, or social, such as visiting or entertaining relatives or friends. Television viewing is by far the most popular leisure pastime, and nearly all households have a television set, with 86 per cent in 1985 having a colour set. Over 50 per cent of households have two or more television sets and average viewing time for the population aged four and over is about 27 hours a week. Growing numbers are using video recorders to watch programmes at times other than their transmission; the proportion of households with a video recorder rose from 24 per cent in 1984 to 31 per cent in 1985. Other popular pursuits include: listening to the radio, records or cassettes; reading; do-it-yourself home improvements such as house painting and decorating; going out for a meal or for a drink or to the cinema or to watch a sporting event; gardening; outings (such as visits to the countryside, seaside or to museums); photography; visits to social clubs and leisure centres; and social and voluntary work. About half the households in Britain have a pet, the most common being dogs (of which there are thought to be over 6 million in Britain) and cats, the number of which has gradually risen to about 6 million.

Sports and other pastimes have grown in popularity, reflected by increasing membership of the main organisations concerned with outdoor activities, although for some sports, such as greyhound racing, the number of spectators has been declining. Walking and swimming are the two most popular sporting activities, being almost equally undertaken by men and women. Snooker/billiards/pool and darts are the next most popular sports among men. Aerobics (keep-fit exercises) and yoga, squash and cycling are among the sports where participation has been increasing in recent years.

Holiday entitlements have increased for most full-time employees, and by the end of 1986, 99 per cent of manual workers had a basic holiday entitlement of

four weeks or more and nearly one-quarter five weeks or more. In 1986 some 60 per cent of the population took at least one long holiday of four or more nights away from home, the main holiday period being from May to September. The number of long holidays taken by British residents was 49 million in 1986 (compared with 45 million in 1976), of which 31.5 million were taken in Britain. The most popular destinations for summer holidays are the West Country and southern England. In addition, some 32 million shorter holidays were taken in 1986. British residents also took over 17 million holidays overseas in 1986, of which nearly two-thirds involved 'package' arrangements. The most popular destinations were Spain, France and Greece.

2 Government

The United Kingdom constitution, unlike that of most other countries, is not contained in any single document. Formed partly by statute, partly by common law and partly by convention, it can be altered by Act of Parliament, or by general agreement to create, vary or abolish a convention. The constitution thus adapts readily to changing political conditions and ideas.

The organs of government are clearly distinguishable although their functions often intermingle and overlap. The legislature, Parliament, is the supreme authority. The executive consists of: (1) the Government—Cabinet and other ministers who are responsible for initiating and directing national policy; (2) government departments, which are responsible for national administration; (3) local authorities, which administer and manage many local services; and (4) public corporations responsible for operating particular nationalised industries or, for example, a social or cultural service, subject to ministerial control in varying degrees. The judiciary determines common law and interprets statutes, and is independent of both legislature and executive.

The Monarchy

The British people look to the Queen not only as their head of State, but also as the symbol of their nation's unity. The monarchy is the most ancient secular institution in the United Kingdom. During the last thousand years its continuity has only once been broken (by the establishment of a republic which lasted from 1649 to 1660) and, despite interruptions in the direct line of succession, the hereditary principle upon which it was founded has always been preserved. The royal title in the United Kingdom is: 'Elizabeth the Second, by the Grace of God of the United Kingdom of Great Britain and Northern Ireland and of Her other Realms and Territories Queen, Head of the Commonwealth, Defender of the Faith'. The form of the royal title is varied for those other member states of the Commonwealth of which the Queen is head of State, ¹ to suit the particular circumstances of each. Other member states are republics or have their own monarchies.

The seat of the monarchy is in the United Kingdom. In the Channel Islands and the Isle of Man the Queen is represented by a Lieutenant-Governor. In the other member nations of the Commonwealth of which the Queen is head of State, her representative is the Governor-General appointed by her on the advice of the ministers of the country concerned and completely independent of the United Kingdom Government.

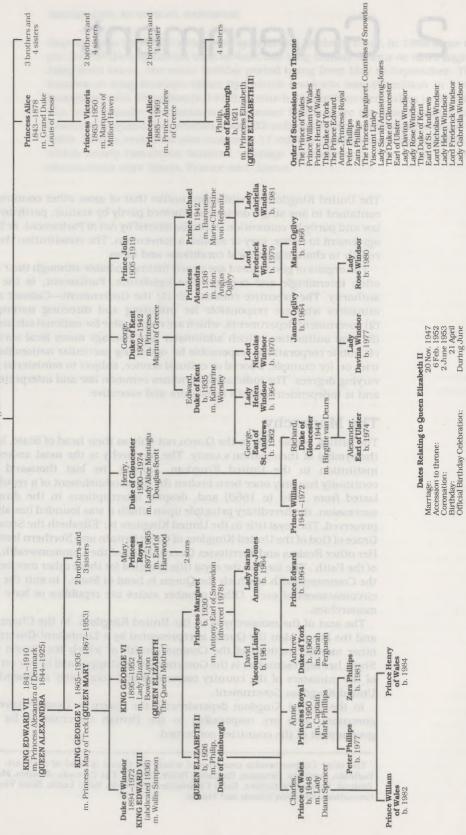
In the United Kingdom dependencies the Queen is usually represented by governors, who are responsible to the British Government for the good government of the countries concerned.

¹ The other Commonwealth countries of which the Queen is head of State are: Antigua and Barbuda, Australia, Bahamas, Barbados, Belize, Canada, Fiji, Grenada, Jamaica, Mauritius, New Zealand, Papua New Guinea, Saint Christopher and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Solomon Islands and Tuvalu.

The Royal Family

From the reign of gueen Victoria to September 1987 **GUEEN VICTORIA** 1819–1901

m. Prince Albert of Saxe-Coburg and Gotha (Prince Consort)



Succession, Accession and Coronation

The title to the Crown derives partly from statute and partly from common law rules of descent. Lineal Protestant descendants of a granddaughter of James I of England and VI of Scotland (Princess Sophia, the Electress of Hanover) are alone eligible to succeed, and although succession is not bound to continue in its present line, it can be altered only by common consent of the member nations of the Commonwealth of which the Queen is Sovereign.

The sons of the Sovereign have precedence over the daughters in succeeding to the throne. When a daughter succeeds, she becomes Queen-Regnant, and the powers of the Crown are vested in her as though she were a king. While the consort of a king takes her husband's rank and style, the constitution does not give any special rank or privileges to the husband of a Queen-Regnant although in practice he fills an important role in the life of the nation, as does the Duke of Edinburgh.

The Sovereign succeeds to the throne as soon as his or her predecessor dies and there is no interregnum. He or she is at once proclaimed at an Accession Council to which all members of the Privy Council are summoned. The Lords Spiritual and Temporal (see p 36), the Lord Mayor and Aldermen and other leading citizens of the City of London are also invited.

The Sovereign's coronation follows the accession after a convenient interval. It is a ceremony which has remained essentially the same for over a thousand years, even if details have often been modified to conform to the customs of the time. It takes place at Westminster Abbey in London in the presence of representatives of the Houses of Parliament and of all the great public interests of the United Kingdom, of the Prime Ministers and leading members of the other Commonwealth nations, and of representatives of other countries.

Acts of Government

The Queen personifies the State. In law, she is head of the executive, an integral part of the legislature, head of the judiciary, the commander-in-chief of all armed forces of the Crown and the 'supreme governor' of the established Church of England. As a result of a long process of evolution, during which the monarchy's absolute power has been progressively reduced, the Queen acts on the advice of her ministers, which she cannot ignore. The United Kingdom is governed by Her Majesty's Government in the name of the Queen.

Within this framework, and in spite of a trend during the past hundred years towards assigning powers directly to ministers, there are still important acts of government which require the participation of the Queen. These include summoning, proroguing (discontinuing until the next session without dissolution) and dissolving Parliament; giving royal assent to Bills passed by Parliament; appointing many important office holders, including government ministers, judges, officers in the armed forces, governors, diplomats and bishops and some other senior clergy of the Church of England; conferring peerages, knighthoods and other honours¹; and remitting all or part of the penalty imposed on a person convicted of a crime. An important function is appointing the Prime Minister and by convention the Queen invites the leader of the political party which commands a majority in the House of Commons to form a government. In international affairs, the Queen as head of State has the power to declare war and make peace, to recognise foreign states and governments, to conclude treaties and to annexe or cede territory.

With rare exceptions (as when appointing the Prime Minister), those acts involving the use of 'royal prerogative' powers are nowadays performed by government ministers who are responsible to Parliament and can be questioned about a particular policy. It is not necessary to have Parliament's authority to

¹ Although most honours are conferred by the Queen on the advice of the Prime Minister, a few are conferred on her personal selection—the Order of the Garter, the Order of the Thistle, the Order of Merit and the Royal Victorian Order.

exercise these powers, although Parliament has the power to restrict or abolish a prerogative right.

Ministerial responsibility in no way detracts from the importance of the Queen's role in the smooth working of government. She holds meetings of the Privy Council, gives audiences to her ministers and other officials in Britain and overseas, receives accounts of Cabinet decisions, reads dispatches and signs numerous state papers; she must be informed and consulted on every aspect of national life; and she must show complete impartiality.

Such is the significance attached to these royal functions that provision has been made for a regent to be appointed to perform them should the Queen be totally incapacitated. The regent would be the Queen's eldest son, the Prince of Wales, then those in succession to the throne who are of age. In the event of the Queen's partial incapacity or absence abroad, there is provision for appointing Counsellors of State (the Duke of Edinburgh, the four adults next in line of succession, and the Queen Mother) to whom the Queen may delegate certain royal functions. However, Counsellors of State may not, for instance, dissolve Parliament (except on the Queen's express instructions), or create peers.

Ceremonial and Royal Visits

Ceremonial has always been associated with British kings and queens, and, in spite of the change in the outlook of both the Sovereign and the people, many traditional customs and ceremonies are retained. Royal marriages and royal funerals are marked by public ceremony, and the Sovereign's birthday is officially celebrated in June by Trooping the Colour on Horse Guards Parade. State banquets take place when a foreign monarch or head of State visits Britain; investitures are held at Buckingham Palace and the Palace of Holyroodhouse in Scotland to bestow honours; and royal processions add significance to such occasions as a State opening of Parliament, when the Queen drives from Buckingham Palace to Westminster. Each year the Queen and other members of the royal family visit many parts of the United Kingdom. Their presence at scientific, artistic, industrial and charitable events of national and local importance encourages nationwide interest and publicity. The Queen pays state visits to foreign governments, accompanied by the Duke of Edinburgh. She also undertakes lengthy tours in the other countries of the Commonwealth. Other members of the royal family pay official visits overseas, occasionally representing the Queen, and often in connection with an organisation or a cause with which they are associated.

Royal Income and Expenditure

About 85 per cent of all expenditure arising from the royal family's official duties is met by public departments. This includes the costs of the royal yacht, the Queen's Flight, travel by train and the upkeep of the royal palaces. The Queen's public expenditure on staff and expenses incurred in carrying out official duties as head of State is financed from the Civil List, approved by Parliament. (In 1987 this was £4·3 million.) Her private expenditure as Sovereign is met from the Privy Purse, which is supplied mainly from the revenues of the Duchy of Lancaster¹; and her personal expenditure as a private individual from her own personal resources. There are annual allowances approved by Parliament to other members of the royal family, though not to the Prince of Wales, who as Duke of Cornwall is entitled to the net revenue of the estate of the Duchy of Cornwall (he voluntarily surrenders a quarter of the revenue to the Exchequer). The Queen pays into the Exchequer a sum equivalent to that provided by Parliament in respect of certain members of the royal family.

¹ The Duchy of Lancaster is an inheritance which, since 1399, has always been enjoyed by the reigning Sovereign; it is kept quite apart from his or her other possessions and is separately administered by the Chancellor of the Duchy.

Parliament

Parliament is the supreme legislative authority. Its three elements, the Queen, the House of Lords and the elected House of Commons, are outwardly separate, are constituted on different principles, and meet together only on occasions of symbolic significance such as the State opening of Parliament when the Commons are summoned by the Queen to the House of Lords. As a law-making body, however, Parliament usually requires the concurrence of all its parts.

Parliament can legislate for the United Kingdom as a whole, for any of the constituent parts of the country separately, or for any combination of them. It can also legislate for the Channel Islands and the Isle of Man, which are Crown dependencies and not part of the United Kingdom, having subordinate legislatures which make laws on island affairs. ¹

Free from any legal restraints imposed by a written constitution, Parliament is able to legislate as it pleases: generally to make, unmake, or alter any law; to legalise past illegalities and make void and punishable what was lawful when done and thus reverse the decisions of the ordinary courts; and to destroy established conventions or turn a convention into binding law. It can prolong its own life beyond the normal period without consulting the electorate.

In practice, however, Parliament does not assert its supremacy in this way. Its members bear in mind the common law and have tended to act in accordance with precedent and tradition. The validity of an Act of Parliament which has been duly passed, promulgated and published cannot be disputed in the law courts, but no Parliament would be likely to pass an Act which it knew would receive no public support. The system of party government helps to ensure that Parliament legislates with its responsibility to the electorate in mind.

As a member of the European Community, the United Kingdom recognises the various types of Community legislation, and sends 81 elected members to the European Parliament.

The Functions of Parliament

The main functions of Parliament are (1) to pass laws, (2) to provide, by voting taxation, the means of carrying on the work of government, (3) to scrutinise government policy and administration, particularly proposals for expenditure, and (4) to debate the great political issues of the day. In discharging these functions Parliament helps to bring the relevant facts and issues before the electorate. By custom, Parliament is also consulted before the ratification of all important international treaties and agreements, the making of treaties being, in theory at least, a royal prerogative exercised on the advice of the Government and not subject to parliamentary approval.

The Meeting of Parliament

A Parliament has a maximum duration of five years, but is often dissolved and a general election held before the end of this term. The maximum life has been prolonged by legislation in such rare circumstances as the two world wars. Dissolution and writs for a general election are ordered by the Queen on the advice of the Prime Minister.

The life of a Parliament is divided into sessions. Each usually lasts for one year—beginning and ending most often in October or November and interspersed with 'adjournments' at night, at weekends, at Christmas, Easter and the late (English) Spring Bank Holiday and during a long summer recess starting in late July or early August. The average number of 'sitting' days in a session is about 175 in the House of Commons and about 150 in the House of

¹ The legislatures of the Channel Islands (the States of Jersey and the States of Guernsey) and the Isle of Man (the Tynwald Court) consist of the Queen, the Privy Council and the local assemblies. It is the duty of the Home Secretary, as the Privy Council member primarily concerned with island affairs, to scrutinise each legislative measure before it is submitted to the Queen in Council.

Lords. At the start of each session the Queen's speech to Parliament outlines the Government's broad policies and proposed legislative programme. Each session is terminated by prorogation. Parliament then 'stands prorogued' until the new session opens (on occasions Parliament has been dissolved without prorogation). A short speech is made on behalf of the Queen summarising Parliament's work during the past session. An adjournment does not affect uncompleted business, but prorogation terminates nearly all parliamentary business, so that all public Bills not completed lapse, and must be reintroduced in the next session unless they are to be abandoned.

The House of Lords

The House of Lords consists of the Lords Spiritual and the Lords Temporal. The Lords Spiritual are the Archbishops of Canterbury and York, the Bishops of London, Durham and Winchester, and the 21 senior diocesan bishops of the Church of England. The Lords Temporal consist of (1) all hereditary peers and peeresses of England, Scotland, Great Britain and the United Kingdom, (2) all life peers and peeresses, and (3) those Lords of Appeal ('law lords') created life peers to assist the House in its judicial duties. Hereditary peerages carry a right to sit in the House (subject to certain disqualifications), provided the holder establishes his or her claim and is 21 years of age or over, but anyone succeeding to a peerage may, within 12 months of succession, disclaim that peerage for his or her lifetime. Disclaimants lose their right to sit in the House but gain the right to vote at parliamentary elections and to offer themselves for election to the House of Commons.

Peerages, both hereditary and life, are conferred by the Sovereign on the advice of the Prime Minister. They are usually granted in recognition of service in politics or other walks of life. Some peers are created because the Government of the day wishes to have the recipient in the House of Lords. The House also provides a place in Parliament for men and women whose advice is useful to the State, but who do not wish to be involved in party politics.

In mid-1987 there were 1,187 members of the House of Lords, including the two archbishops and 24 bishops. The Lords Temporal consisted of 763 hereditary peers who had succeeded to their titles, 29 hereditary peers who have had their titles conferred on them (including the Prince of Wales), and 369 life peers, of whom 21 were 'law lords'. Of the total, 89 peers were not in receipt of a writ of summons and some 150 peers were on leave of absence from the House (see below). Of the 117 Irish peers 47 were entitled to sit in the House of Lords because they were holders of an English, Scottish or United Kingdom peerage. Other Irish peerages do not entitle their holders to membership of the House of Lords.

Not all peers with a right to sit in the House of Lords attend the sittings. Peers who frequently attend the House (the average daily attendance is some 300) include elder statesmen and others who have spent their lives in public service. They receive no salary for their parliamentary work, but can recover expenses incurred in attending the House and certain travelling expenses (for which there are maximum daily rates).

The House is presided over by the Lord Chancellor, who takes his place on the woolsack² as ex-officio Speaker of the House. In his absence his place may be taken by a deputy speaker, a deputy chairman or, if neither is present, by a speaker chosen by the Lords present. The first of the deputy speakers is the Lord

¹ Some hereditary peers do not establish their claim to succeed and so do not receive a writ of summons entitling them to sit in the House. Lords may apply for leave of absence for the duration, or for the remainder, of a Parliament.

² The woolsack is a seat in the form of a large cushion stuffed with wool from several Commonwealth countries; it is a relic from the medieval period when wool was the greatest source of the country's wealth.

Chairman of Committees, who is appointed at the beginning of each session and takes the chair in all committees, unless the House decides otherwise. The Lord Chairman and the Principal Deputy Chairman of Committees are salaried officers of the House.

The permanent officers include the Clerk of the Parliaments who is responsible for the records of proceedings, including judgments, and for the promulgation of Acts of Parliament, and who is also the accounting officer for money voted to the House; the other Clerks at the Table who, with the Clerk of the Parliaments and the other officers and officials of the House, are collectively known as the Parliament Office; the Gentleman Usher of the Black Rod, who is also Serjeant at Arms in attendance upon the Lord Chancellor and is responsible for security, accommodation and services in the House of Lords' part of the Palace of Westminster; and the Yeoman Usher who is Deputy Serjeant at Arms and assists Black Rod in his duties.

The House of Commons

The House of Commons is elected by universal adult suffrage and consists of 650 Members of Parliament (MPs). At present 41 are women. Of the 650 seats, 523 are for England, 38 for Wales, 72 for Scotland, and 17 for Northern Ireland.

General elections are held after a Parliament has been dissolved and a new one summoned by the Queen. When an MP dies or resigns¹ or is given a peerage, a by-election takes place. Members are paid an annual salary of £22,548 (from January 1988) and an office costs allowance of £20,140. They also have a number of other allowances, including travel allowances, a supplement for London members and, for provincial members, subsistence allowances and allowances for second homes. (For ministers' salaries, see p 49.)

The chief officer of the House of Commons is the Speaker, elected by MPs to preside over the House. Other officers are the Chairman of Ways and Means, and two deputy chairmen who act as Deputy Speakers, elected by the House on the nomination of the Government. They, like the Speaker, neither speak nor vote other than in their official capacity. The House is administered by a Commission chaired by the Speaker.

Permanent officers (who are not MPs) include the Clerk of the House of Commons, who is the principal adviser to the Speaker of the House on its privileges and procedures; his department has responsibilities relating to the conduct of the business of the House and its many committees. The Clerk is also accounting officer for the House. The Serjeant at Arms, who waits upon the Speaker, carries out certain orders of the House, is the official housekeeper of the Commons part of the building, and is responsible for its security. Other officers serve the House in the Library, the Department of the Official Report (Hansard), the Administration Department and the Refreshment Department.

Parliamentary Electoral System

For electoral purposes the United Kingdom is divided into constituencies, each of which returns one member to the House of Commons. To ensure equitable representation four permanent Boundary Commissions, one each for England, Wales, Scotland and Northern Ireland, make periodic reviews of constituencies and recommend any redistribution of seats that may seem necessary in the light of population movements or other changes.

Elections are by secret ballot. British citizens, together with citizens of other Commonwealth countries and citizens of the Irish Republic resident in the United Kingdom, may vote provided they are aged 18 or over, registered in the annual register of electors for the constituency and not subject to any

¹ An MP who wishes to resign from the House can do so only by using the technical device of applying for an office under the Crown (Bailiff of the Chiltern Hundreds or Steward of the Manor of Northstead), ancient offices which disqualify the holder from membership of the House but which carry no salary and have no responsibilities.

disqualification. People not entitled to vote include members of the House of Lords, patients detained under mental health legislation, sentenced prisoners and people convicted within the previous five years of corrupt or illegal election practices. Service voters (members of the armed forces and their spouses, Crown servants and staff of the British Council employed overseas, together with their wives or husbands if accompanying them) may be registered for an address in a constituency where they would live but for their service. In February 1987, the franchise was extended when the right to vote was granted to overseas electors, that is, British citizens who had been resident in the United Kingdom and registered as electors within the previous five years.

Each elector may cast one vote, normally in person at a polling station. Anyone who is entitled to an absent vote may vote by post or by proxy, but postal ballot papers cannot be sent to addresses outside the United Kingdom. Service voters, overseas electors, electors who are physically incapacitated or unable to vote in person because of the nature of their work may vote by post or by proxy for an indefinite period. In February 1987, the right to apply for an absent vote at a particular election was extended to any elector whose circumstances on polling day are such that he or she cannot reasonably be expected to vote in person at his or her allotted polling station, for example, an elector away on holiday.

Voting is not compulsory; nearly 75·4 per cent of a total electorate of some 43·6 million people voted in the general election in June 1987. The candidate who polls the most votes in a constituency is elected.

British citizens and citizens of other Commonwealth countries, together with citizens of the Irish Republic, may stand and be elected as MPs provided they are aged 21 or over and are not subject to any disqualification. Those disqualified include undischarged bankrupts; people sentenced to more than one year's imprisonment; clergy of the Church of England, Church of Scotland, Church of Ireland and Roman Catholic Church; peers; and holders of certain offices listed in the House of Commons Disqualification Act 1975. The latter include holders of judicial office, civil servants, some local government officers, members of the regular armed forces, or the police service, some members of public corporations and government commissions, and in addition British members of the legislature of any country or territory outside the Commonwealth. A candidate's nomination for election must be signed by two electors as proposer and seconder, and by eight other electors registered in the constituency. He or she does not require any party backing. A candidate must also deposit £500, which is forfeited if his or her votes do not exceed 5 per cent of those validly cast.

The maximum sum a candidate may spend on an election campaign is £3,370 plus 2.9 pence for each elector in a borough constituency or 3.8 pence for each elector in a county constituency. A candidate may post an election address to each elector in the constituency, free of charge. All election expenses, apart from the candidate's personal expenses, are subject to the statutory limit.

The Political
Party System

The party system, existing in one form or another since the eighteenth century, is an essential element in the working of the constitution.

The present system relies heavily upon the existence of organised political parties, each laying policies before the electorate for approval. The parties are not registered or formally recognised in law, but in practice most candidates in elections, and almost all winning candidates, belong to one of the main parties.

For the last 150 years a predominantly two-party system has operated, and since 1945 either the Conservative Party, which can trace its origins to the eighteenth century, or the Labour Party, which emerged in the last decade of the nineteenth century, has held power. The Liberal Party, which last formed a government on its own in 1906–16, can also trace its origins to the eighteenth century, while the Social Democratic Party was formed in 1981 and made an

alliance with the Liberal Party in the same year. (Discussions are in progress for a formal union of the two parties.) Other parties include two nationalist parties, Plaid Cymru (founded in Wales in 1925) and the Scottish National Party (founded in 1934). In Northern Ireland there are a number of parties; the largest of those represented in the House of Commons are the Ulster Unionist Party, which was formed in the early part of this century, and the Democratic Unionist Party, founded in 1971 by a group which broke away from the Ulster Unionists.

Since 1945 there have been seven Conservative and six Labour Governments and the great majority of members of the House of Commons have represented either the Conservative or the Labour Party. The percentages of votes cast for the main political parties in the last general election of June 1987 and the resulting distribution of seats in the House of Commons are given in Table 3.

Table 3: Percentages of Votes Cast, and Members Elected, in the 1987 General Election

Party	% of votes cast		embers elected
Conservative	42.3	Conservative (including the Speake	r) 376
Labour	30.8	Labour	229
Liberal-Social		Liberal	17
Democratic Al	liance 22.6	Social Democratic	5
Others	4.3	Scottish National Plaid Cymru	3
		(Welsh Nationalist) Ulster Unionist	3
		(Northern Ireland)	9
		Democratic Unionist	
		(Northern Ireland)	3
		Ulster Popular Unionist	
		(Northern Ireland)	1
		Social Democratic and	
		Labour (Northern Ireland)	3
		Sinn Fein (Northern Ireland) ^a	1
		Total	650

^a The member of Sinn Fein (the political wing of the Provisional IRA) has not taken his seat.

The party which wins most seats (although not necessarily the most votes) at a general election, or which has the support of a majority of members in the House of Commons, usually forms the Government. By tradition, the leader of the majority party is asked by the Sovereign to form a government; and about 100 of its members in the House of Commons and the House of Lords receive ministerial appointments (including appointment to the Cabinet—see p 49) on the advice of the Prime Minister. The largest minority party becomes the official Opposition with its own leader and 'shadow cabinet'.

Leaders of the Government and Opposition sit on the front benches of the Commons with their supporters (the back-benchers) sitting behind them. Similar arrangements for the parties also apply to the House of Lords; however, Lords who do not wish to be associated with either the Government or the Opposition may sit on the 'cross-benches'. The effectiveness of the party system

in Parliament rests largely on the relationship between the Government and the opposition parties. Depending on the relative voting strengths of the parties in the House of Commons, the Opposition might seek to overthrow the Government by securing its defeat on a 'matter of confidence'. In general, however, its aims are to contribute to the formulation of policy and legislation by constructive criticism; to oppose government proposals that it considers objectionable; to secure concessions on government Bills; and to increase public support and enhance its chances of electoral success.

The detailed arrangements of government business are settled, under the direction of the Prime Minister and the Leaders of the two Houses, by the Chief Government Whips in consultation with the Chief Opposition Whips. The Chief Whips together constitute the 'usual channels' often referred to when the question of finding time for debating some particular issue is discussed. The Leaders of the two Houses are primarily responsible for the direction of business and for providing facilities for the Houses to debate matters about which they are concerned.

Outside Parliament, party control is exercised by the national and local organisations. Inside Parliament, it is exercised by the Chief Whips and their assistants (chosen within the party) whose duties include keeping members informed of forthcoming parliamentary business, maintaining the party's voting strength by ensuring that members attend important debates, and conveying to the party leadership the opinions of back-bench members. The importance a party attaches to a vote on a particular issue is indicated to the MPs by the underlining (once, twice or three times) on the notice sent to them; failure to comply with a 'three-line whip' is usually seen as rebellion against the party's policy. Party discipline tends to be less strong in the Lords than in the Commons.

The Chief Government Whip in the Commons is Parliamentary Secretary to the Treasury; of the other Government Whips, three (one of whom is Deputy Chief Whip) are officers of the Royal Household, five hold titular posts as Lords Commissioners of the Treasury and five are Assistant Whips. Salaries are also paid to the Chief Opposition Whips in both Houses and to two of the Opposition Assistant Whips in the Commons. The Government Whips in the Lords hold offices in the Royal Household and act as government spokesmen.

Annual assistance from public funds helps opposition parties to carry out their parliamentary work at Westminster. It is limited to parties which had at least two members elected at the previous general election or one member elected and a minimum of 150,000 votes cast. The amount is £1,500 for every seat won plus £3 for every 200 votes, up to a maximum of £450,000.

Parliamentary Procedure

Parliamentary procedure is based on custom and precedent, partly formulated in standing orders governing details of practice in each House. The system of debate is much the same in the two Houses: the subject originates in the form of a motion (a proposal made by a member in order to elicit a decision from the House). When a motion has been moved, the Speaker proposes the question as the subject of debate. At the end of each debate the question may be agreed to without voting, or else is decided by a vote on a simple majority. The main difference between the two Houses is that in the Lords the office of Speaker carries with it no authority to check or curtail debate, such matters being decided by the general sense of the House, whereas in the Commons the Speaker has full authority to give effect, promptly and decisively, to the rules and orders of the House. The Speaker of the Commons must guard against abuse of procedure or infringement of minority rights; has discretion to allow or disallow a closure motion (to end discussion so that the matter may be put to the vote); and has powers to check irrelevance and repetition in debate, and to save time in

ART GALLERIES



BRITAIN'S COASTLINE

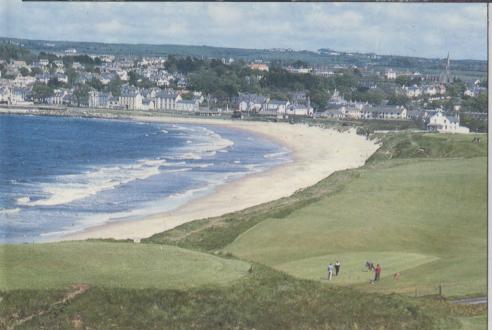
Three Cliffs Bay, Gower Peninsula.



Ornsay, Skye.





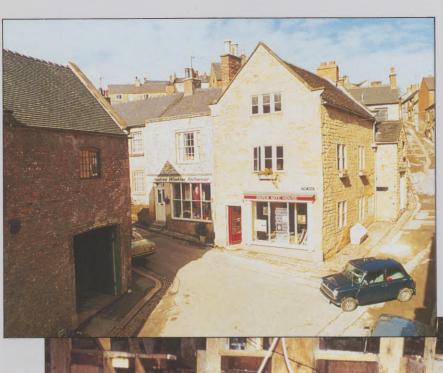


Lundy, in the Bristol Channel, Britain's first marine nature reserve.

Ballycastle, County Antrim.

CIVIC TRUST AWARDS

The Civic Trust, which encourages high standards of urban design, had a record number of entries (1,123) for its awards scheme in 1987, when it focused on non-metropolitan areas.



Restoration of Greenhill and The Dale, Wirksworth, Derbyshire.

Annalong Cornmill restoration, County Down.



other respects. In cases of grave disorder the House can be adjourned or the sitting suspended by the Speaker. Voting in the Commons is under the direction of the Speaker, whose duty it is to pronounce the final result. In the event of a tied vote the Speaker gives the casting vote, but only in accordance with established conventions which preclude an expression of opinion on the merits of the question.

The voting procedure in the House of Lords is similar to that in the Commons, except that the Speaker or chairman has an original, but no casting, vote. Bills and subordinate legislation are in general allowed to proceed in the form before the House unless a majority votes to reject or amend them; on other motions the question is decided in the negative unless there is a majority in favour. When the House is sitting judicially (the Lords is the final court of appeal for civil cases in Britain and for criminal cases in England, Wales and Northern Ireland) the judgment under appeal is not changed if the votes are equal.

The Commons has a public register of MPs' financial interests. Members with a relevant pecuniary interest in a matter before the House, direct or indirect, must declare it when taking part in a debate, though to act as a disqualification from voting the interest must be direct, immediate and personal. In any other proceedings of the House or in transactions with other members or with ministers or civil servants, MPs must also disclose any relevant financial interest or benefit. There is no register of financial interests in the Lords, but peers speaking in a debate in which they have a direct interest are expected to declare

Proceedings of both Houses are public, except on extremely rare occasions; the minutes (in the Commons called Votes and Proceedings and in the Lords, Minutes of Proceedings) and the speeches (The Official Report of Parliamentary Debates, Hansard) are published daily. The records of the Lords from 1497 and of the Commons from 1547, together with the parliamentary and political papers of certain past members of both Houses, are available to the public on application to the House of Lords Record Office. The Commons is not televised, but proceedings are recorded and sound transmissions of some are made on television and radio, either live or recorded. A Parliamentary Sound Archive has been established. Debates on televising proceedings have taken place on several occasions and, most recently, in 1985 the House of Commons voted against televising its proceedings. The proceedings of the House of Lords have been televised since 1985.

Legislative The law undergoes constant reform in the courts as established principles are Proceedings interpreted, clarified or reapplied to meet new circumstances, but substantial changes are the responsibility of Parliament and the Government through the normal legislative process.

A draft law takes the form of a parliamentary Bill. Most Bills are public Bills involving measures relating to public policy, but there are also private Bills which deal solely with matters of individual, corporate or local interest. Hybrid Bills are public Bills which may in certain respects affect private rights, and their passage through Parliament is governed by a special procedure which allows those affected to make representations. Public Bills can be introduced, in either House, by a government minister or by a 'private' member. Most public Bills that become law are in practice sponsored by the Government.

Before a government Bill is finally drafted, there is normally considerable consultation with professional bodies, voluntary organisations and other agencies interested in the subject matter, such as major interest and pressure groups which aim to promote a specific cause. Proposals for legislative changes are sometimes set out in government 'White Papers' which may be debated in Parliament before a Bill is introduced. From time to time consultative documents, sometimes called 'Green Papers', set out for public discussion government proposals which are still at a formative stage.

Bills must be passed by each House. As a rule government Bills likely to raise political controversy go through the Commons before the Lords, while those of an intricate but uncontroversial nature often pass through the Lords first. (Consolidation Bills are always introduced in the House of Lords.) A Bill with a mainly financial purpose is nearly always introduced in the Commons, and a Bill involving taxation must be based on resolutions agreed by that House, often after debate, before it can be introduced. If the main object of a Bill is to create a public charge, it can only be introduced by a minister or, if brought from the Lords, be proceeded with in the Commons if taken up by a minister, an arrangement which gives the Government considerable control over legislation.

At the beginning of each session private members of the Commons ballot for precedence in introducing a Bill on one of the Fridays specially allocated; the first 20 are successful. After the ballot a private member may also present a Bill after question time (see p 45), or seek to introduce a Bill under the 'ten minute rule' which allows two speeches, one in favour of and one against the measure, after which the House decides whether to allow the Bill to be brought in. Private members' Bills do not often proceed very far, but a few become law each session. If one secures a second reading, the Government usually introduces any necessary money resolution. Private members' Bills may be introduced in the House of Lords at any time, but the time that can be given to them in the Commons is strictly limited.

The process of passing a public Bill is similar in both Houses. The Bill receives a formal first reading on introduction, is printed, and after a while (between one day and several weeks depending on the nature of the Bill) is given a second reading after a debate on its general principles and merits. In the Commons a non-controversial Bill may be referred to a second reading committee to decide whether it should be read a second time. After a second reading in the Commons, a Bill is usually referred for detailed examination to a standing committee (see p 43). If the House so decides, the Bill may be referred to the whole House sitting in committee. The committee stage is followed by the report stage, during which further amendments may be considered. At the third reading a Bill is reviewed in its final form and may again be debated. The House may vote to limit the time devoted to examining a Bill by passing a government timetable motion, commonly referred to as a 'guillotine'. After the third reading a Commons Bill is sent to the Lords where it goes through broadly the same stages. In the Lords, after the second reading, a Bill is considered by a committee of the whole House unless the House takes the rare decision to refer it to a Public Bill Committee. It is then considered on report and read a third time; at all these stages amendments may be made. A Bill which starts in the Lords and is passed by that House is then sent to the Commons for all the stages there. Amendments made by the second House generally must be agreed by the first, or a compromise reached, before a Bill can become law.

Most government Bills introduced and passed in the Lords pass through the Commons without difficulty because of their non-controversial nature. However, if a non-governmental Lords Bill were unacceptable to the Commons it would generally not become law since no debating time would be allotted to it. The Lords, on the other hand, do not in general prevent a Bill insisted upon by the Commons from finally becoming law. Normally they either accept the Bill without changes, or amend and return it for consideration by the Commons, who frequently agree to the amendments made. In practice, the Lords pass without amendment Bills authorising taxation or national expenditure. A Bill that deals only with taxation or expenditure must become law within one month of being sent to the Lords, whether or not they agree to it, unless the Commons

directs otherwise. If no agreement is reached between the two Houses on a non-financial Commons Bill (or an amendment to it) the Lords can in practice delay the Bill (with certain exceptions) for about 13 months. At the end of this time it may, in accordance with the Parliament Acts, be submitted to the Queen for royal assent, provided it has again been passed by the Commons. A Bill to lengthen the life of a Parliament would require the full assent of both Houses in the normal way.

The limitations on the power of the Lords, contained in the Parliament Acts 1911 and 1949, are based on the belief that the principal legislative function of the non-elected House nowadays is to act as a chamber of revision, complementing, not rivalling, the elected House.

When a Bill has passed through all its parliamentary stages, it is sent to the Queen for royal assent, after which it is part of the law of the land and known as an Act of Parliament. The royal assent has not been refused since 1707.

Private Bills, promoted by people or organisations outside Parliament (often local authorities) to give them special powers not granted by the general law. go through substantially the same procedure as public Bills, but most of the work is done in committee, where procedures follow a semi-judicial pattern: the promoter must prove the need for the powers or privileges sought and the objections of opposing interests are heard. Both sides may be legally represented.

Delegated Delegated legislation, used to relieve pressure on parliamentary time, gives Legislation ministers and other authorities the power to regulate administrative details after a law has been passed. To minimise the risk that powers thus conferred on the executive might supersede or weaken parliamentary government, they are normally delegated to authorities directly responsible to Parliament. Moreover, the Acts of Parliament by which particular powers are delegated normally provide for some measure of parliamentary control over legislation made in carrying out these powers, for instance, by reserving to Parliament the right to affirm or annul the orders themselves. Certain Acts also require direct consultation with organisations affected before rules and orders can be made.

A joint committee of both Houses reports on the technical propriety of these 'statutory instruments'. In order to save time on the floor of the House, where statutory instruments may be considered, the Commons also uses standing committees to consider the merits of instruments, with any decisions reserved to the House.

Committees

Parliamentary Either House may resolve itself into a committee (of the whole House) to consider Bills in detail after their second reading. A committee of the whole House is Committees of presided over by the Chairman of Ways and Means (the Chairman of Committees the Whole House in the House of Lords) or a deputy chairman.

Standing Committees

House of Commons standing committees include those which examine public Bills at the committee stage and, in certain cases, at the second reading and report stages; two Scottish standing committees; the Scottish Grand Committee; the Welsh Grand Committee; and the Northern Ireland standing committee. Ordinary standing committees have no distinctive names, being referred to simply as Standing Committee A, B, C, and so on, and are each appointed specially to consider a specific Bill. Each has between 16 and 50 members with a party balance reflecting as far as possible that in the House as a whole. The Scottish Grand Committee, which comprises all 72 Scottish members (and may be convened in Edinburgh), considers the principles of Scottish Bills referred to it at second reading stage, the Scottish estimates and other matters concerning Scotland only. The Welsh Grand Committee, with all 38 Welsh members and up to five others, considers Bills referred to it at second reading stage, and matters concerning Wales only. The Northern Ireland committee considers matters relating specifically to Northern Ireland. A standing committee on regional affairs attended by any of the 523 members from the English constituencies is occasionally appointed to consider matters relating to the English regions. The Lords' equivalent to a standing committee, a Public Bill Committee, is rarely used.

Select Committees In 1979 a new House of Commons select committee structure was set up in an attempt to provide closer examination of government departments and policies, and of the way ministers discharge their responsibilities.

This was in response to a recognition that Parliament was probably less effective a check on the executive than it had been for much of the nineteenth century. With the growth of mass political parties, the individual independence of many MPs has tended to become subordinated to party interests, and with the great extension of the range and complexity of central government activities, and the parallel growth of bureaucracy, MPs have a more difficult task in checking the actions of ministers and their departments.

The 14 committees examine the expenditure, administration and policy of the main government departments and related bodies. The Foreign Affairs Committee, for example, 'shadows' the work of the Foreign and Commonwealth Office, and there are select committees on Scottish and Welsh Affairs. The committees are constituted on a party basis, in approximate proportions to party strength in the House. Other regular committees include those on European Legislation, Defence, Public Accounts, Members' Interests, the Parliamentary Commissioner for Administration, and Sound Broadcasting. The Committee of Selection and the Standing Orders Committee have duties relating to private Bills, and the Committees. A Liaison Committee considers general matters relating to select committees. On rare occasions a parliamentary Bill is examined by a select committee, a procedure additional to the usual legislative process—(this occurs, for example, every few years for the Armed Forces Bill).

In their scrutiny of government policies, the committees question ministers, senior civil servants and interested bodies and individuals. Through hearings and published reports, they bring before Parliament and the public a body of fact and informed opinion on many important issues, and build up considerable expertise in their subjects of inquiry.

In the House of Lords, besides the Appeal and Appellate Committees in which the bulk of the House's judicial work is transacted, there are two major select committees with several sub-committees on the European Communities and on Science and Technology. There are also select committees on House of Lords' Offices, Hybrid Instruments, Leave of Absence and Lords' Expenses, Personal Bills, Private Bills, Standing Orders, Privileges, Procedure, Selection and Broadcasting.

Joint Committees Joint committees are also appointed in each session to deal with Consolidation Bills and delegated legislation. The two Houses may also agree to set up joint select committees on other subjects. A joint committee was appointed in 1987 to examine private Bill procedure.

Party Committees In addition to the official committees of the two Houses there are several unofficial party organisations or committees. The Conservative and Unionist Members' Committee (the 1922 Committee) consists of the back-bench membership of the party in the House of Commons. When the Conservative Party is in office, ministers attend its meetings by invitation and not by right, but when

the party is in opposition, the whole membership of the party may attend meetings and the leader appoints a consultative committee which acts as the party's 'shadow cabinet'. The Parliamentary Labour Party is a corporate body comprising all members of the party in both Houses; when the Labour Party is in office a liaison committee acts as a channel of communication between the Government and its back-benchers in both Houses; when the party is in opposition the Parliamentary Labour Party is organised under the direction of an elected Parliamentary Committee which acts as the 'shadow cabinet'.

Other Forms of Parliamentary Control

The effectiveness of parliamentary control of the Government is a subject of continuing discussion, both inside and outside Parliament. Control is exercised finally by the ability of the House of Commons to force the Government to resign by passing a resolution of 'no confidence' or by rejecting a proposal which the Government considers so vital to its policy that it has made it a 'matter of confidence' or, ultimately, by refusing to vote the money required for the public service. In addition to the system of close scrutiny by select committees, the House of Commons offers a number of opportunities for a searching examination of government policy by both the Opposition and the Government's own back-benchers.

These include:

- 1. Question time when for an hour on Monday, Tuesday, Wednesday and Thursday, ministers answer MPs' questions. The Prime Minister's question time takes place on Tuesday and Thursday. Parliamentary questions are one means of eliciting information about the Government's intentions, as well as a way of airing, and possibly securing redress of, grievances brought to MPs' notice by constituents. MPs may also put questions to ministers for written answers, which are published in *Hansard*, the official report. At the daily question time in the House of Lords questions are addressed to the Government rather than to a particular minister.
- 2. The right of MPs to use motions for the adjournment of the House to open discussions on constituency cases or matters of public concern. There is a half-hour adjournment period at the end of the business of the day; and immediately before the adjournment for each recess (Christmas, Easter, spring and summer), a full day is spent discussing matters raised by private members. Moreover, an MP wishing to discuss a 'specific and important matter that should have urgent consideration' may, at the end of question time, ask leave to move the adjournment of the House. If the Speaker accepts the terms of the motion, the MP asks the House for leave for the motion to be put forward. Leave can be given unanimously, or it can be given if 40 or more MPs support the motion or if fewer than 40 but more than ten support it and the House (on a vote) is in favour. Once leave has been given, the matter is debated for three hours, usually on the next day.
- 3. The 20 Opposition days each session when the Opposition can choose subjects for debate.
- 4. Debates on the occasion of the passage, three times a year, of Consolidated Fund or Appropriation Bills, when members can exercise their traditional right of 'raising grievances', on matters for which any minister is responsible, when voting the necessary supplies (money) for the Crown.

Procedural opportunities for criticism of the Government also arise during the debate on the Queen's speech at the beginning of a session, during debates or motions of censure for which the Government gives up part of its own time, and during debates on the Government's legislative proposals.

Opportunities for criticism and examination of government policy are provided in the House of Lords at daily question time, during debates on specific motions and in 'unstarred' questions (which can be debated) at the end of the day's business as well as during debates on specific legislative proposals.

The main responsibilities of Parliament, and more particularly of the House of Commons, in managing the revenue of the State and payments for the public service are to authorise the taxes and duties to be levied and the various objects of expenditure and the sum to be spent on each. It also has to satisfy itself that the sums granted are spent only for the purposes which Parliament intended. No payment out of the central Government's public funds can be made and no taxation, charges or loans authorised, except by Act of Parliament, although interim payments can be made, within limits, from the Contingencies Fund. Scrutiny of public expenditure is carried out by House of Commons Select Committees (see p 44).

To keep the two Houses informed of European Community developments, and to enable them to scrutinise and debate Community policies and proposals, there is a select committee in each House (see p 44), and ministers make regular statements about Community business.

Parliamentary Commissioner for Administration The Parliamentary Commissioner for Administration (the 'Parliamentary Ombudsman') investigates, independently, complaints of maladministration when asked to do so by MPs on behalf of members of the public. Powers of investigation extend to administrative actions by central government departments and certain executive and non-departmental bodies but not to policy decisions (which can be questioned in Parliament) nor to matters affecting relations with other countries. Complaints by British citizens arising from dealings with British posts overseas are open to investigation in some circumstances. The Commissioner has access to departmental papers and reports the findings to the MP who presented the complaint. The Commissioner is required to report annually to Parliament. In addition, he or she publishes details of selected investigations at quarterly intervals and may submit other reports where necessary. A Commons select committee has responsibility for overseeing the Commissioner's work.

Parliamentary Privilege

Each House of Parliament has certain rights and immunities to protect it from unnecessary obstruction in carrying out its duties. The rights apply collectively to each House and individually to each member.

For the Commons the Speaker formally claims 'their ancient and undoubted rights and privileges' at the beginning of each Parliament. These include freedom of speech; freedom from arrest in civil actions; exemption from serving on juries, attending as witnesses or serving as sheriffs; and the right of access to the Crown, a collective privilege of the House. Further privileges include the rights of the House to control its own proceedings (so that it is able, for instance, to exclude 'strangers' if it wishes), to pronounce upon legal disqualifications for membership and to declare a seat vacant on such grounds; and to penalise for breach of its privileges and for contempt.

The privileges of the House of Lords are broadly similar to those of the House of Commons.

The Privy Council

Until the eighteenth century, the Sovereign in Council, or Privy Council, was the chief source of executive power in the State. As the system of Cabinet government developed, however, the Privy Council became less prominent. Many powers were transferred to the Cabinet as an inner committee of the Council,

and much of its work was handed over to newly created government departments, some of which were originally committees of the Privy Council.

Nowadays the main function of the Privy Council is to advise the Queen to approve Orders in Council (those made under prerogative powers, such as Orders approving the grant of royal charters of incorporation; and those made under statutory powers). Members of the Privy Council attending meetings at which Orders are made do not thereby become personally responsible for the policy upon which the Orders are based; this rests with the minister responsible for the subject matter of the Order in question, whether or not he or she was present at the meeting.

The Privy Council also advises the Crown on the issue of royal proclamations, some of the most important of which relate to prerogative acts (such as summoning or dissolving Parliament). The Council's own statutory responsibilities, which are independent of the powers of the Sovereign in Council, include powers of supervision over the registering bodies for the medical and allied professions.

Apart from Cabinet ministers, who must be Privy Counsellors and are sworn in on first assuming office, membership of the Council (retained for life except for very occasional removals) is accorded by the Sovereign on the recommendation of the Prime Minister to eminent people in independent monarchical countries of the Commonwealth. There are about 390 Privy Counsellors, A full Council is summoned only on the death of the Sovereign or when the Sovereign announces his or her intention to marry.

Committees of the Privy Council

There are a number of advisory Privy Council committees whose meetings differ from those of the Privy Council itself in that the Sovereign cannot constitutionally be present. These may be prerogative committees, such as those dealing with legislative matters submitted by the legislatures of the Channel Islands and the Isle of Man and with applications for charters of incorporation; or they may be provided for by statute as are those for the universities of Oxford and Cambridge and the Scottish universities.

The Judicial Committee of the Privy Council is the final court of appeal from the courts of the United Kingdom dependencies, courts of independent members of the Commonwealth which have not discontinued the appeal, courts of the Channel Islands and the Isle of Man, and certain other courts, some professional and disciplinary committees and ecclesiastical sources.

Administrative work is carried out in the Privy Council Office under the Lord President of the Council, a Cabinet minister.

Her Majesty's Government

Her Majesty's Government is the body of ministers responsible for the administration of national affairs.

The Prime Minister is appointed by the Queen, and all other ministers are appointed by the Queen on the recommendation of the Prime Minister.

> The majority of ministers are members of the Commons, although the Government is also fully represented by ministers in the Lords. The Lord Chancellor is always a member of the House of Lords.

Composition The composition of governments can vary both in the number of ministers and in the titles of some offices. New ministerial offices may be created, others may be abolished, and functions may be transferred from one minister to another.

Prime Minister The Prime Minister is also, by tradition, First Lord of the Treasury and Minister for the Civil Service. The head of the Government became known as the Prime Minister during the eighteenth century. The Prime Minister's unique position of authority derives from majority support in Parliament and from the power to choose ministers and to obtain their resignation or dismissal individually. By modern convention, the Prime Minister always sits in the House of Commons.

The Prime Minister informs the Queen of the general business of the Government, presides over the Cabinet, and is responsible for the allocation of

functions among ministers.

The Prime Minister's other responsibilities include recommending to the Queen a number of appointments. These include: Church of England archbishops, bishops and deans and some 200 other clergy in Crown 'livings'; high judicial offices, such as the Lord Chief Justice, Lords of Appeal in Ordinary, and the Lords Justices of Appeal; Privy Counsellors, Lord-Lieutenants and certain civil appointments, such as Lord High Commissioner to the General Assembly of the Church of Scotland, Poet Laureate, Constable of the Tower, and some university posts; and appointments to various public boards and institutions, such as the British Broadcasting Corporation, as well as various royal and statutory commissions. Recommendations are likewise made for the award of many civil honours and distinctions and of Civil List pensions (to people who have achieved eminence in science and the arts and are in some financial need). The Prime Minister also selects the trustees of certain national museums and institutions.

The Prime Minister's Office at 10 Downing Street (the official residence in central London) has a staff of civil servants who attend to the day-to-day discharge of the Prime Minister's numerous responsibilities. The Prime Minister may also appoint special advisers to the Office from time to time to assist in the formation of policies.

Departmental Ministers Ministers in charge of government departments, who are usually in the Cabinet, are known as 'Secretary of State' or 'Minister', or may have a special title, as in the case of the Chancellor of the Exchequer.

Non-Departmental Ministers The holders of various traditional offices, namely the Lord President of the Council, the Chancellor of the Duchy of Lancaster, the Lord Privy Seal, the Paymaster General and, from time to time, Ministers without Portfolio, may have few or no departmental duties and are thus available to perform any special duties the Prime Minister may wish to give them. In the present Government the Lord President of the Council, for example, co-ordinates the presentation of information on government policies and the Chancellor of the Duchy of Lancaster is Minister of Trade and Industry in the Department of Trade and Industry.

Lord Chancellor and Law Officers

The Lord Chancellor holds a special position, being a minister with departmental functions and also head of the judiciary. The four Law Officers of the Crown are: for England and Wales, the Attorney General and the Solicitor General; for Scotland, the Lord Advocate and the Solicitor General for Scotland.

Ministers of State

Ministers of State usually work with ministers in charge of departments with responsibility for specific functions, and are sometimes given titles which reflect these particular functions. More than one may work in a department. A Minister of State may be given a seat in the Cabinet and paid accordingly.

Junior Ministers

Junior ministers (generally Parliamentary Under-Secretaries of State or, where the senior minister is not a Secretary of State, simply Parliamentary Secretaries) share in parliamentary and departmental duties. They may also be given

responsibility, directly under the departmental minister, for specific aspects of the department's work. The Parliamentary Secretary to the Treasury and other Lords Commissioners of the Treasury are in a different category as Government Whips (see p 40).

Ministerial Salaries

The salaries of ministers in the House of Commons range from £34,808 a year (from January 1988) for junior ministers to £51,068 for Cabinet ministers. The Prime Minister receives £62,698 and the Lord Chancellor (from October 1987) £83,000.

Ministers in the Commons, including the Prime Minister, receive a parliamentary salary of £16,911 a year (which is included in the above figures) in recognition of their constituency responsibilities and are entitled to claim the other allowances which are paid to all MPs (see p 37).²

The Cabinet

The Cabinet is composed of about 20 ministers chosen by the Prime Minister and may include departmental and non-departmental ministers. Its origins can be traced back to the informal conferences which the Sovereign held with leading ministers, independently of the Privy Council, during the seventeenth century. After the Sovereign's withdrawal from an active role in politics in the eighteenth century, and the development of organised political parties stimulated by successive extensions of the franchise from 1832 onwards, the Cabinet assumed its modern form.

The functions of the Cabinet are: the final determination of policies, the supreme control of government and the co-ordination of government departments. The exercise of these functions is vitally affected by the fact that the Cabinet is a group of party representatives, depending upon majority support in the House of Commons.

Cabinet Meetings

The Cabinet meets in private and its proceedings are confidential. Its members are bound by their oath as Privy Counsellors not to disclose information about its proceedings; although after Cabinet papers have been in existence for 30 years they may be made available for inspection in the Public Record Office. Diaries published by several former ministers have given the public an insight into Cabinet procedures in recent times.

Normally the Cabinet meets for a few hours once or twice a week during parliamentary sittings, and rather less often when Parliament is not sitting. To keep the amount of work coming before the Cabinet within manageable limits, a great deal of work is carried on through the committee system, which involves the reference of issues either to a standing Cabinet committee or to an *ad hoc* committee composed of the ministers primarily concerned. The committee then considers the matter in detail and either disposes of it or reports upon it to the Cabinet with recommendations for action. The present Cabinet has four standing committees: a defence and overseas policy committee and an economic strategy committee, both under the chairmanship of the Prime Minister; and a home and social affairs committee and a legislation committee, both under the chairmanship of the Lord President of the Council. Sub-committees of the standing committees may be established. Membership and terms of reference of all Cabinet committees are confidential.

Non-Cabinet ministers may be invited to attend meetings on matters affecting

¹ These figures show the salaries to which the holders are entitled; however, the Prime Minister has decided to draw no more than the salary payable to other Cabinet ministers in their respective Houses.

 $^{^2}$ The Leader of the Opposition in the Commons receives a salary of £31,237 for the post, as well as the parliamentary salary of £16,911; the Leader of the Opposition in the Lords also receives a salary.

their departments, and may be members of Cabinet committees. The Secretary of the Cabinet and other senior officials of the Cabinet Office also attend meetings of the Cabinet and its committees as appropriate.

The Cabinet Office

The Cabinet Office, headed by the Secretary of the Cabinet, under the direction of the Prime Minister, comprises the Cabinet Secretariat, the Central Statistical Office, the Management and Personnel Office and the Historical Section.

The Cabinet Secretariat serves ministers collectively in the conduct of Cabinet business and operates as an instrument in the co-ordination of policy at the highest level.

The Management and Personnel Office is responsible for the management and organisation of the Civil Service and recruitment into it, training, efficiency, personnel management and senior appointments. (To be reconstituted in late 1987 as the Office of the Minister for the Civil Service, with responsibilities for duties and standards in the Civil Service and selection and development of civil servants; its functions relating to financial management, manpower, pay and financial conditions of service will be transferred to the Treasury.)

The Central Statistical Office is concerned with the preparation and interpretation of the statistics needed for central economic and social policies and management, such as the national accounts, balance of payments and the index of industrial production, and co-ordinates the statistical work of other departments.

The Historical Section of the Cabinet Office is in the process of completing the official histories of the second world war, and is responsible for the preparation of official histories of certain peacetime events.

Ministerial Responsibility

'Ministerial responsibility' refers both to the collective responsibility which ministers share for government policy and actions and to ministers' individual responsibility to Parliament for their departments' work.

The doctrine of collective responsibility means that the Cabinet acts unanimously even when Cabinet ministers do not all agree on a subject. The policy of departmental ministers must be consistent with the policy of the Government as a whole. Once the Government's policy on a matter has been decided, each minister is expected to support it or resign. On rare occasions, ministers have been allowed free votes in Parliament on government policies involving important issues of principle.

The individual responsibility of a minister for the work of his or her department means that, as political head of that department, he or she is answerable for all its acts and omissions and must bear the consequences of any defect of administration, any injustice to an individual or any aspect of policy which may be criticised in Parliament, whether personally responsible or not. Since most ministers are members of the House of Commons, they must answer questions and defend themselves against criticism in person. Departmental ministers in the House of Lords are represented in the Commons by someone qualified to speak on their behalf, usually a junior minister.

Departmental ministers normally decide all matters within their responsibility, although on important political matters they usually consult their colleagues collectively, through the Cabinet or a Cabinet committee. A decision by a departmental minister binds the Government as a whole.

The responsibility of ministers for their departments is an effective way of keeping government under public control, for the knowledge that any departmental action may be reported to and examined in Parliament discourages the taking of arbitrary and ill-considered decisions.

On assuming office ministers must resign directorships in private and public

companies, and must order their affairs so that there is no conflict between public duties and private interests.

Government Departments

Government departments are the main instruments for giving effect to government policy when Parliament has passed the necessary legislation, and for advising ministers. They may, and frequently do, work with and through local authorities, statutory boards, and government-sponsored organisations operating under various degrees of government control.

A change of government does not necessarily affect the number or general functions of government departments, although a radical change in policy may be accompanied by some organisational change.

The work of some departments (for instance, the Ministry of Defence) covers the United Kingdom as a whole. Other departments (like the Department of Employment) cover England, Wales and Scotland, but not Northern Ireland. Others, such as the Department of the Environment, are mainly concerned with affairs in England.

Some departments, such as the Department of Trade and Industry, maintain a regional organisation, and some which have direct contact with the public throughout the country (for example, the Department of Employment) also have local offices.

A department is usually headed by a minister. Certain departments in which questions of policy do not normally arise are headed by a permanent official, and a minister with other duties is responsible for them to Parliament. For instance, ministers in the Treasury are responsible for the Central Office of Information, Her Majesty's Stationery Office, HM Customs and Excise, the Inland Revenue and a number of small departments including the Treasury Solicitor's Department, the Royal Mint, and the National Investment and Loans Office. Departments generally receive their funds directly out of money provided by Parliament and are staffed by the Civil Service.

Non-Departmental Public Bodies A number of bodies with a role in the process of government are neither government departments nor part of a department (in April 1986 the figure was 1,658). Known as non-departmental public bodies, but often popularly described as 'quangos' ('quasi-autonomous non-governmental organisations', although there is no precise definition of the term), they are of three kinds: executive bodies, advisory bodies and tribunals. Executive bodies normally employ staff and have their own budget; they consist of public bodies which carry out, among other duties, administrative, executive, regulatory and commercial functions. They operate typically within broad policy guidelines set by departmental ministers but are in varying degrees independent of government in carrying out their day-to-day responsibilities. Examples include the Arts Council of Great Britain, the British Council, the Commonwealth Development Corporation and the Commission for Racial Equality. Tribunals are a specialised group of judicial bodies which are akin to courts of law. They are normally set up under statutory powers which also govern their constitution, functions and procedure. Tribunals often consist of laymen, but generally have a legally qualified chairman. They tend to be less expensive, and less formal, than courts of law. Independently of the executive, tribunals decide the rights and obligations of private citizens towards one another or towards a government department or other public authority. Important examples are industrial tribunals, rent tribunals and social security tribunals. Tribunals usually consist of an uneven number of people so that a majority decision can be reached. Members are normally appointed by the minister concerned with the subject. Tribunals and advisory bodies do not normally employ staff or spend money themselves, but their expenses are paid by government departments concerned; a note on advisory bodies is set out below.

As a result of a major review of non-departmental public bodies undertaken in 1979 and subsequent further reviews there has been a net reduction of 509 in the total number of bodies. Scrutiny of these bodies continues with a view to improving performance and value for money.

Advisory Bodies

Many government departments are assisted by advisory councils or committees which undertake research and collect information, mainly to give ministers access to informed opinion before coming to a decision involving a legislative or executive act. In some cases a minister must consult a standing committee, but usually advisory bodies are appointed at the discretion of the minister.

The membership of the advisory councils and committees varies according to the nature of the work involved, and will usually include representatives of varying interests and professions.

In addition to the standing advisory bodies, there are committees set up by the Government to examine and make recommendations on specific matters. For certain important inquiries Royal Commissions, whose members are chosen for their wide experience and diverse knowledge, may be appointed. Royal Commissions examine written and oral evidence from government departments, interested organisations and individuals, and submit recommendations. The Government may accept the recommendations in whole or in part, or may decide to take no further action or to delay action. Inquiries may also be undertaken by departmental committees.

Government Information Services

Each of the main government departments has its own information division or directorate, public relations branch or news department staffed by professional information officers responsible for communicating their department's policies and activities to the news media and the public (sometimes using publicity services provided by the Central Office of Information—see p 54) and for advising their department on the public's reaction to them. The presentation of government policy is co-ordinated, at official level, by the Prime Minister's Press Secretary. As press adviser to the Prime Minister, the Press Secretary and other staff in the Prime Minister's Press Office have direct and constant contact with the parliamentary press through regular meetings with the Lobby correspondents (a group of political correspondents who have the special privilege of access to the Lobby of the House of Commons where they can talk privately to government ministers and other members of the House) and other day-to-day contacts. The Prime Minister's Press Office forms the accepted channel through which information about parliamentary business is conveyed to the media.

Distribution of Functions

An outline of the principal functions of the main government departments is given below. Departments are arranged in alphabetical order, except for the Scottish and Northern Ireland departments which are grouped at the end of the section and the Cabinet Office, which was described on p 50. Further information on the work of some departments is given in later chapters under the relevant subject headings.

DEPARTMENT

Main areas of responsibility

The work of many departments listed on pp 53–5 covers the United Kingdom as a whole. Where this is not the case, the following abbreviations are used: (GB) for functions covering England, Wales and Scotland; (E, W & NI) for those covering England, Wales and Northern Ireland; (E & W) for those covering England and Wales; and (E) for those concerned with England only.

DEPARTMENT	Main areas of responsibility	
Ministry of Agriculture, Fisheries and Food	Policies for agriculture, horticulture and fishing (E & W); food policies.	
Office of Arts and Libraries	General promotion of arts (GB); library and information services (E with advict to W and NI); national museums (E); public libraries and local museums (E British Library; national heritage.	
Crown Prosecution Service	An independent department specialising in the prosecution of criminal offences. Headed by the Director of Public Prosecutions, who acts under the superintendence of the Attorney General (E & W).	
HM Customs and Excise	Collecting and accounting for revenues of Customs and Excise, including valuadded tax; agency functions including controlling certain imports and exportant compiling overseas trade statistics.	
Ministry of Defence	Defence policy and control and administration of the armed services.	
Department of Education and Science	General promotion of education (E); the Government's relations with universities (GB); fostering civil science in Britain and internationally.	
Department of Employment	Manpower policies, labour legislation, payment of unemployment benefit through local offices and issue of work permits to workers from overseas; health and safety at work; small businesses; Advisory, Conciliation and Arbitration Service and tourism (GB); Race Relations Employment Advisory Service and policy for the Careers Service (E); international representation on employment matters.	
Department of Energy	Policies for all forms of energy, including its efficient use and the development of new sources; the Government's relations with the nationalised energy industries and the Atomic Energy Authority.	
Department of the Environment	Policies for planning and regional development, local government, new towns, housing, construction, inner city matters, environmental protection, water, the countryside, sport and recreation, conservation, historic buildings and ancient monuments (E); and Property Services Agency (GB).	
Export Credits Guarantee Department	Provision of insurance for exporters against risk of not being paid for goods and services, and access to bank finance for exports; insurance cover for new investment overseas.	
Foreign and Commonwealth Office	Conduct of Britain's overseas relations.	
Office of Gas Supply	Monitoring of British Gas as a gas supplier.	

DEPARTMENT Main areas of responsibility

Department of Health and Social Security

National Health Service, personal social services provided by local authorities, and certain aspects of public health, including hygiene (E); the social security system (GB).

Home Office

Administration of justice; criminal law; treatment of offenders, including probation; the prison service; the police; crime prevention; fire and civil defence services; licensing laws; scrutiny of local authority by-laws; control of firearms and dangerous drugs; electoral matters (E & W). Gaming and lotteries (GB). Regulation of broadcasting; passports, immigration and nationality; race relations and sex discrimination. Responsibilities relating to the Channel Islands and the Isle of Man.

Central Office of Information

Provision of publicity material and other information services on behalf of government departments and a number of public agencies.

Board of Inland Revenue

Administration of direct taxes; collection of National Insurance contributions. Valuation of land and buildings (GB).

The Law Officers' Department

Provision of advice to the Government on English law and representation of the Crown in appropriate domestic and international cases, both civil and criminal, by the Law Officers of the Crown for England and Wales—the Attorney General and the Solicitor General (E & W). The Attorney General is also Attorney General for Northern Ireland.

The Lord Chancellor's Department

Administration of the Supreme Court (Court of Appeal, High Court, Crown Court) and the county courts (E & W), together with certain other courts and tribunals, and all work relating to judicial and quasi-judicial appointments. Responsibility for promoting general reforms in the civil law and for operating the Legal Aid and Advice Scheme. (The Home Office has important responsibilities for the criminal law.)

Ordnance Survey

Official surveying and mapping, including geodetic surveys and associated scientific work and topographic surveys covering all of Great Britain and some overseas countries.

Overseas Development Administration

Administration of financial aid to, and technical co-operation in, developing countries.

Parliamentary Counsel

Drafting of government Bills (except those relating exclusively to Scotland); advising departments on parliamentary procedure (E, W & NI).

Paymaster General's Office

Provision of banking services for government departments other than the Boards of Inland Revenue and Customs and Excise, and the payment of public service pensions.

Office of Population Censuses and Surveys

Administration of the Marriage Acts and local registration of births, marriages and deaths: population estimates and projections: compilation of health statistics: censuses (E & W). Surveys for other government departments (GB).

DEPARTMENT

Main areas of responsibility

Procurator General and Treasury Solicitor's Department Provision of a common legal service for a large number of government departments. Duties include instructing Parliamentary Counsel on Bills and drafting subordinate legislation: providing litigation and conveyancing services; and giving general advice on the interpretation and application of the law (E & W).

Her Majesty's Stationery Office Provision to Parliament, government departments and certain public bodies of stationery, printing and related services; and publication and sale of government documents.

Office of Telecommunications (OFTEL) Monitoring of British Telecom and other public and non-public telecommunications operators; enforcing competition legislation and representing telecommunications consumers' interests.

Department of Trade and Industry Industrial and commercial policy, including industrial innovation policy; regional industrial policy; international trade policy; commercial relations and export promotion; competition policy; company law; insolvency; consumer protection and safety. Sponsorship of manufacturing and service industries (excluding transport, construction, food and pharmaceuticals industries); radio regulation (GB).

Department of Transport

Land, sea and air transport, including sponsorship of the nationalised airline, rail and bus industries; airports; domestic and international civil aviation; shipping and the ports industry; navigational lights, pilotage, HM Coastguard and marine pollution; oversight of road transport (GB); motorways and trunk roads; road safety; and oversight of local authorities' transport planning (E).

HM Treasury

Broad economic strategy with particular responsibilities for public finance and expenditure, including control of manpower and pay in the Civil Service.

Welsh Office

Many aspects of Welsh affairs, including health and personal social services; education, except for terms and conditions of service, student awards and the University of Wales; the Welsh language and culture; local government; housing; water and sewerage; environmental protection; sport; agriculture and fisheries; forestry; land use, including town and country planning; countryside and nature conservation; new towns, ancient monuments and historic buildings; roads; tourism; a range of matters affecting the careers service and the activities of the Manpower Services Commission in Wales; selective financial assistance to industry; the urban programme in Wales; the operation of the European Regional Development Fund in Wales and other European Community matters; non-departmental public bodies; civil emergencies; all financial aspects of these matters including Welsh rate support grant; and oversight responsibilities for economic affairs and regional planning in Wales.

SCOTLAND

Scotland has its own system of law and wide administrative autonomy. The Secretary of State for Scotland, a Cabinet minister, has responsibility in Scotland (with some exceptions) for both formulating and carrying out policy relating to agriculture and fisheries, education, law and order, local government and environmental services, social work, health, housing, roads and certain aspects of shipping and road transport services.

Central

Services

The Secretary of State also has a major role in the planning and development of the Scottish economy, and important functions relating to industrial development, with responsibility for financial assistance to industry, for the Scottish Development-Agency, and the Highlands and Islands Development Board, the Scottish Tourist Board and for the work of the Manpower Services Commission and the Careers Service. The Secretary of State plays a full part in determining energy policy, particularly in relation to responsibility for the electricity supply industry in Scotland. He is also responsible for the government interest in a range of other functions from fire services to sport.

The distinctive features and the different conditions and needs of Scotland and its people are reflected in separate Scottish legislation on many domestic matters or else in special provisions applying to Scotland alone, inserted in Acts which otherwise apply to the United Kingdom generally.

The Secretary of State discharges his responsibilities principally through the Scottish Office's five departments, supported by Central Services (see below) and four smaller departments—the Department of the Registers of Scotland, the Scottish Record Office, the General Register Office for Scotland and the Scottish Courts Administration.

United Kingdom government departments with significant Scottish responsibilities have offices in Scotland with delegated powers and work closely with the Scottish Office.

An outline of the main functions of the Scottish departments is given below.

Services to the five Scottish departments. These include the Office of the Solicitor to the Secretary of State, the Scottish Information Office, and Finance

DEPARTMENT	Functions
Department of Agriculture and Fisheries for Scotland	Promotion of the agricultural and fishing industries.
Scottish Development Department	Housing; building control; water supplies and sewerage; environmental protection and the countryside; land-use planning; general policy relating to local government organisation; ancient monuments and historic buildings; roads; certain transport functions.
Scottish Education Department	Education (excluding universities); student awards; libraries; museums and galleries; sport and recreation; the arts; social work services.
Scottish Home and Health Department	Central administration of law and order (including police service, criminal justice, legal aid and penal institutions); the National Health Service; fire, home defence and civil emergency services.
Industry Department for Scotland	Industrial and regional economic development matters; energy; tourism.

DEPARTMENT **Functions**

Lord Advocate's Department and Crown Office

Provision of legal advice to the Government on issues affecting Scotland and the principal representation of the Crown for litigation in Scotland by the Law Officers of the Crown for Scotland (the Lord Advocate and the Solicitor General for Scotland); control of all prosecution in Scotland.

Scottish Courts Administration

Organisation, administration and staffing of the courts and court offices; jurisdiction and procedure of civil courts; enforcement of judgments; and programme of Scottish Law Commission.

Other Administrative Departments

Department of the Registrar General for Scotland; Scottish Record Office; Department of the Registers of Scotland.

NORTHERN **IRELAND**

Between 1921 and 1972 Northern Ireland had its own Parliament and Government, subordinate to the Parliament at Westminster, but in 1972, following the resignation of the Northern Ireland Government, the British Government assumed direct responsibility with a United Kingdom Cabinet minister responsible for functions previously exercised by the Northern Ireland Government. Attempts have been made by successive governments to find a means of restoring devolved government to Northern Ireland on a basis that would command widespread acceptance throughout the community. The most recent attempt failed in June 1986 when the Northern Ireland Assembly, elected in 1982, was dissolved after it ceased to discharge its responsibilities of making proposals for the resumption of devolved government and of monitoring the work of the Northern Ireland departments. The Government expressed the hope that a new Assembly would be established which would contribute to the better government and administration of Northern Ireland.

The Secretary of State for Northern Ireland is the Cabinet minister responsible for Northern Ireland. Through the Northern Ireland Office he has direct responsibility for constitutional developments, law and order and security, and electoral matters. The work of the Northern Ireland departments, whose functions are listed below, are also subject to the direction and control of the Secretary of State.

DEPARTMENT Functions

Department of Agriculture for

Development of agricultural, forestry and fishing industries; administration of agricultural grant schemes; advisory service to farmers; agricultural research, Northern Ireland education and training.

Department

Development of industry and commerce, as well as the administration of government policy in relation to tourism, energy and minerals; administration Development for of an employment service and labour training schemes and assistance to Northern Ireland industrial development, through the Industrial Development Board for Northern Ireland.

Department

Central policy, co-ordination, legislation, oversight, and financial control of the of Education for five education and library boards and education as a whole from nursery to adult Northern Ireland and continuing education, youth services, sport and recreation, cultural activities and community services and facilities including the improvement of community relations.

DEPARTMENT

Functions

Department of the **Environment for**

Housing (policy, programmes and finance); planning (regional strategy, development plans, development control and comprehensive development); construction and maintenance of roads, transport and traffic management, and motor Northern Ireland taxation; water and sewerage; environmental protection; ordnance survey; collection of rates; harbours; historic monuments and buildings; maintenance of public records; and certain controls over local government.

Department of Finance and Personnel

Control of public expenditure; liaison with HM Treasury and the Northern Ireland Office on financial matters, economic and social planning and research; Ulster Savings; charities; valuation and Lands Service; formulating, coordinating and monitoring policies for equal opportunities and personnel management; and general management and control of the Northern Ireland Civil Service.

Department of Health and Social Services for Northern Ireland

Health and personal social services; social security; social legislation; and the Office of the Registrar-General.

The Civil Service

The Civil Service is concerned with the conduct of the whole range of government activities as they affect the community, ranging from policy formulation to carrying out the day-to-day duties that public administration demands.

Civil servants are servants of the Crown. They are responsible to the minister in whose department they work for carrying out his or her policies. Ministers alone are answerable to Parliament for their policies and the actions of their staff (though civil servants may give evidence to parliamentary select committees on their minister's behalf). In the determination of policy the civil servant has no constitutional responsibility or role distinct from that of the minister. A change of minister, for whatever reason, does not involve a change of staff. (Ministers sometimes appoint special advisers from outside the Civil Service; the advisers are paid from public funds, but their appointments come to an end when the Government's term of office finishes, or when the Minister to whom the special adviser is appointed leaves the Government or moves to another appointment.)

Including part-time staff (two part-time officers being reckoned as equivalent to one full-time), in January 1987 there were around 599,000 civil servants (nearly half of them women), roughly half of whom were engaged in the provision of public services, such as paying sickness benefits and pensions, collecting taxes and contributions, running employment services, staffing prisons, and providing services to industry and agriculture. Over a quarter were employed in the Ministry of Defence. The rest were divided between: central administrative and policy duties; service-wide support services, such as accommodation, printing and information; and largely financially self-supporting services, for instance, those provided by the Department for National Savings and the Royal

The total number includes about 93,000 'industrial' civil servants, mainly manual workers in government industrial establishments.

Over three-quarters of civil servants work outside London. The number of civil servants has fallen from 732,000 in April 1979 to 599,000 in January 1987, reflecting the Government's policy of controlling the cost and size of the Civil GOVERNMENT

Service and to improve its efficiency. It is planned to achieve a further reduction to 594,000 by April 1988 from which date the primary consideration when employing further staff will be whether it is consistent with the limits set on running costs.

Within the Civil Service reforms of all aspects of the management of government departments are being implemented to ensure improved management performance, in particular through the sharper accountability of individual managers based on clear objectives and responsibilities. These reforms include an experimental performance-related pay scheme, and other means to encourage and reward improved performance.

Savings are also being sought by subjecting services in government departments to competitive tendering and by contracting out such services whenever commensurate with sound management and good value for money. By April 1986 savings of £22 million net a year had been achieved.

Northern Ireland has its own Civil Service and Civil Service Commission, modelled on its counterpart in Great Britain.

and Structure

Responsibility for central co-ordination and management of the Civil Service is divided between the Treasury and the Cabinet Office (Management and Personnel Office). In addition to its other functions, the Treasury is responsible for controlling Civil Service manpower, pay, pensions and allowances, while the Management and Personnel Office, which is part of the Cabinet Office and under the control of the Prime Minister, as Minister for the Civil Service, is responsible for the organisation, structure, personnel management and overall efficiency of the Service. The function of official Head of the Home Civil Service is combined with that of Secretary to the Cabinet. At the senior levels of the Home Civil Service there is an open structure of unified grades which, with few exceptions, covers all posts whatever the nature of their duties. Grades 1, 2 and 3 replace the former grade titles of Permanent Secretary, Deputy Secretary and Under-Secretary while Grades 4, 5, 6 and 7 cover the senior levels of most occupational groups and classes down to Principal, Principal Scientific Officer, Principal Professional and Technology Officer and equivalent levels.

Below this the structure of the non-industrial Civil Service is based on a system of categories and occupational groups, which are the basic groupings of staff for the purposes of recruitment, pay and personnel management. These include the General Category (covering the Administration, Economist, Statistician, Information Officer and Librarian groups), the Science Category, the Professional and Technology Category (including architects, surveyors, electrical and mechanical engineers, graphics officers and marine services staff), and the Training Category (covering Instructional Officers) and the Legal, Police, Secretarial, Research Officer, Social Security, Security and Museum Categories. These 11 categories account for some 75 per cent of non-industrial staff. Work requiring specialist skill is always done by appropriately qualified individuals.

Personnel management policies encourage the deployment of staff so that talent can be used to the best advantage, and, with higher posts open to people of outstanding ability (whatever their specialist background or original method of entry into the Service), ensure that people with the necessary qualities can gain suitably wide experience to fit them for posts at the highest levels. The exchange of staff between the Civil Service and industry is also encouraged.

The Diplomatic The Diplomatic Service, a separate service of some 4,600 or so people, provides Service the majority of the staff for the Foreign and Commonwealth Office and at United Kingdom diplomatic missions and consular posts abroad. Its functions include advising on policy, negotiating with overseas governments and conducting business in international organisations; promoting British exports and trade

generally, administering aid, presenting ideas, policies and objectives to the people of overseas countries; and protecting British interests abroad.

The Service has its own grade structure, linked for salary purposes with that of the Home Civil Service, and conditions of work are in many ways comparable while taking into account the special demands of the Service, particularly of postings overseas. Members of the Home Civil Service and the armed forces, and individuals from the private sector, may also serve in the Foreign and Commonwealth Office and at overseas posts on loan or attachment.

Recruitment and Training

Recruitment of staff to the middle and higher levels of the Home Civil Service and the Diplomatic Service is the responsibility of the Civil Service Commission which, in conjunction with departments, ensures that staff are selected solely on merit through fair and open competition. The selection of junior staff, such as those engaged in clerical and manual work, is undertaken by the departments.

For the Administration Group, the central part of the Home and Diplomatic Civil Services, entry is at three levels relating broadly to the academic achievements of: a second class honours degree, or better; GCE Advanced level; and GCE Ordinary level. The selection procedure for the highest of these levels (the Administration Trainee entry) comprises qualifying tests, followed by tests and interviews at the Civil Service Selection Board and an interview by the Final Selection Board. For the next level (the Executive Officer entry) selection involves qualifying tests followed by an interview. For the lower level (the clerical entry) selection is normally by interview of those holding the prescribed educational qualifications.

Entry to the professional and technical grades usually requires appropriate qualifications, and selection is on the basis of past record and by interview.

Most government departments employ full-time training officers and tutors to help to identify staff training needs and to organise training by the most appropriate methods (for example, formal courses or self-instruction). The Civil Service College provides training most efficiently undertaken centrally. Use is also made of external institutions.

Civil servants under the age of 18 may continue their education by attending courses usually for one day a week ('day release' schemes). Adult staff may be entitled to financial assistance to undertake, mainly in their own time, private studies leading to recognised educational or professional qualifications in approved subjects. There are also opportunities for civil servants to obtain fellowships for research in areas of interest both to themselves and to their departments.

Promotion and Departments are responsible for promotion at all grade levels. Normally **Terms of** promotion is from grade to grade, but there can be accelerated promotion for staff who show exceptional promise. Promotion or appointment to Grades 1 and 2 and all transfers between departments at these levels are approved by the Prime Minister, who is advised by the official head of the Home Civil Service.

Terms of service for civil servants are generally governed by agreements between senior officials (the Official Side of the National Whitley Council) and representatives of the employees (the Trade Union Side of the National Whitley Council). For industrial civil servants, the negotiating body is the Joint Co-ordinating Committee of government industrial establishments.

Political and Civil servants are required to discharge loyally the duties assigned to them by Private the Government of the day of whatever political persuasion. For the Civil Service to serve successive governments of different political complexions it is essential that ministers and the public should have confidence that civil servants' personal views do not cut across the discharge of their official duties. The GOVERNMENT 61

purpose of the rules which govern political activities by civil servants is to allow them the greatest possible freedom to participate in public affairs without infringing these fundamental principles. The rules are concerned with political activities liable to give public expression to political views, rather than with privately held beliefs and opinions.

The Civil Service is divided into three groups for the purposes of deciding the extent to which individuals may take part in political activities. The 'politically free' group, consisting of industrial staff and non-office grades, are free to engage in any political activity including adoption as a candidate for the United Kingdom or the European Parliament (although they would have to resign from the Service if elected). The 'politically restricted' group, which comprises Principal and equivalent grades and above as well as Administration Trainees, are debarred from national political activities but may apply for permission to take part in local political activities. The 'intermediate' group, which comprises all civil servants not in either of the other two groups, may apply for permission to take part in national or local political activity, apart from candidature for the United Kingdom or the European Parliament.

Where required, permission is granted to the maximum extent consistent with the reputation of the Civil Service for political impartiality and the avoidance of any conflict with official duties. (It is granted subject to a code of discretion requiring moderation and the avoidance of embarrassment to ministers.)

Generally, there are no restrictions on the private activities of civil servants, provided that these do not bring discredit on the Civil Service, and that there is no possibility of conflict with official duties. For instance, a civil servant is required to seek permission before taking part in any outside activity which involves the use of official experience, or before accepting a directorship in any company holding a contract with his or her department.

Security

As a general rule the political views of civil servants are not a matter of official concern. However, no one whose loyalty is in doubt may be employed on work vital to the security of the State. For this reason certain posts are not open to those who are known to be members of communist or fascist organisations or of subversive groups, or associated with them in such a way as to raise legitimate doubts about their reliability, or to anyone whose reliability may be in doubt for any other reason.

Each department is responsible for its own internal security, advised as necessary by the Security Service. The Security Commission, if requested to do so by the Prime Minister after consultation with the Leader of the Opposition, may investigate and report on breaches of security in the public service and advise on changes in security procedure.

Local Government

A wide range of public services is provided by democratically elected local authorities throughout the United Kingdom. The gradual expansion of local services, particularly in the period between the late 1940s and mid-1970s, has inevitably led to a steady rise in local government expenditure and in its support from central funds. In recent years central government has sought to check this growth as part of a general policy of reducing public expenditure. Measures introduced to promote greater efficiency and cost-effectiveness have included the holding back of central government grant from authorities spending above government targets, the prescription of maximum levels of spending and rates for selected high-spending authorities in England and the establishment in England and Wates of the independent Audit Commission to audit accounts and

seek economical use of resources. Legislation is proposed to promote greater competition in the provision of some local authority services. In Scotland there is an independent Commission for Local Authority Accounts and similar action has been taken to control local authority expenditure. Moreover, since staff costs form such a significant part of public expenditure, local authorities have been urged to reduce staff levels. Local authorities in England, Wales and Scotland are now required to publish quarterly staffing levels for particular services.

The specific powers and duties of local authorities are conferred on them by Parliament, or by measures made under its authority. The actual administration, and the exercise of discretion within statutory limits, are the responsibility of the local authority. In the case of certain services, however, ministers have powers to secure a measure of national uniformity in the standard of a service provided, to safeguard public health, or to protect the rights of individual citizens. For some services the minister concerned has wide powers of supervision; for others there are strictly limited powers.

The main links between local authorities and the central government are: in England, the Department of the Environment, although other departments are concerned with various local government functions; in Scotland, the Scottish Office; in Wales, the Welsh Office; and in Northern Ireland, the Department of the Environment for Northern Ireland.

Principal Types of Local Authority

England and Wales (outside Greater London) are divided into 53 counties, within which there are 369 districts. All the districts and 47 of the counties—the 'non-metropolitan' counties—have independent, locally elected councils with separate functions. County authorities provide the large-scale local government services, while the district authorities are responsible for the more local ones (see p 64).

In Greater London (an area of about 1,580 sq km (610 sq miles) and a population of some 7 million) the local government authorities are the councils of 32 London boroughs and the Corporation of London, while in the six metropolitan counties there are 36 district councils.

Until April 1986 Greater London and the metropolitan counties had their own councils but these were abolished by the Local Government Act 1985, which was designed to create a more effective, economical and accountable system by removing a tier of local government. As a result many of the functions previously carried out by the Greater London Council and the metropolitan county councils have been transferred to the London borough and metropolitan district councils. However, a number of services (waste regulation and disposal in certain areas; the police and fire services, including civil defence, and public transport in all metropolitan counties; and the fire service, including civil defence, in London) which require a statutory authority over areas wider than the boroughs and districts are now run by joint authorities composed of elected councillors nominated by the borough or district councils. Education in inner London is the responsibility of a new, independent and directly elected authority. As a direct result of abolition, it is expected that some 7,000 posts will eventually be shed, producing an estimated saving of about £100 million a year.

Special residuary bodies have been appointed to take responsibility for certain residual county council and Greater London Council matters. These include compensation, unassigned legal rights and liabilities, and the disposal of surplus property. The residuary bodies are required to prepare proposals to wind up their affairs as soon as practicable.

Within rural districts in England, parish councils or meetings are focuses for local opinion as bodies with limited powers of local interest. In Wales community councils have similar functions.

GOVERNMENT 63

On the mainland of Scotland local government is on a two-tier basis: nine regions are divided into 53 districts, each area having its own elected council. There are three virtually all-purpose authorities for Orkney, Shetland and the Western Isles. Provision is also made for local community councils, although these are not local authorities.

The areas and electoral arrangements of local authorities are kept under review by the Local Government Boundary Commissions for England, Wales and Scotland.

In Northern Ireland 26 district councils are responsible for local environmental and certain other services. Statutory bodies, such as the Northern Ireland Housing Executive and area boards, are responsible to central government departments for the administration of major services such as housing, education and libraries, and health and personal social services. Regional services such as roads, water and sewerage, and planning, are the responsibility of central government, through the Department of the Environment for Northern Ireland.

Election of Councils

Local authority councils consist of a number of elected unpaid councillors presided over by a chairman. Councillors can claim a flat-rate attendance allowance or a financial loss allowance for performing council business; they are also entitled to travelling and subsistence allowances. Parish and community councillors cannot claim expenses for duties within their own areas.

In England, Wales and Northern Ireland each council annually elects a chairman and vice-chairman. Some districts have the ceremonial title of borough, or city, both granted by royal authority (in Northern Ireland by the Secretary of State). In boroughs and cities the chairman is normally known as the Mayor (in the City of London and certain other large cities, he or she is known as the Lord Mayor). In Scotland the chairman of the district council of each of the four cities is called the Lord Provost. No specific title is laid down for the chairmen of other councils, but some are known as conveners, while others continue to use the old title of 'provost'.

Councillors are elected for four years. All county councils, London borough councils, and about two-thirds of non-metropolitan district councils are elected in their entirety every four years. In the remaining districts (including all metropolitan districts) one-third of the councillors are elected in each of the three years between county council elections.

In Scotland local elections are held every two years, alternately for districts and for regions and islands authorities, so that all types of authority are elected for four years at a time.

Anyone is entitled to vote at a local government election in Great Britain provided he or she is aged 18 years or over, is a British citizen, other Commonwealth citizen, or a citizen of the Irish Republic, is not subject to any legal incapacity and is registered as a local government elector for the area for which the election is held. To qualify for registration a person must be resident in the council area on the qualifying date. In Northern Ireland there are slightly different requirements.

A candidate for election as councillor normally stands as a representative of one of the national political parties, or of some local interest, or as an independent. Candidates must be British citizens, other Commonwealth citizens or citizens of the Irish Republic and aged 21 or over. In addition, they must be registered as local electors in the area of the local authority to which they seek election; or have resided in or occupied (as owner or tenant) land or other premises in that area during the whole of the 12 months preceding the day on which they are nominated as candidates or, in that 12 months, have had their principal or only place of work there. No one may be elected to a council of

which he or she is an employee, and there are some other disqualifications.

Local authority areas are generally divided into electoral areas for local council elections. Administrative counties in England and Wales are divided into electoral divisions. Districts in England, Wales and Northern Ireland are divided into electoral 'wards', returning one councillor or more. In Scotland the electoral areas in the regions and islands areas are called electoral divisions, each returning a single member; the districts are divided into wards, similarly returning a single member. For parish or community council elections in England and Wales, each parish or community, or ward of a parish or community, forms an electoral area which returns one member or more.

The procedure for local government voting in Great Britain is similar to that for parliamentary elections. Postal voting for such elections was introduced in 1987. In Northern Ireland local government elections are held on the basis of proportional representation and electoral wards are grouped into district electoral areas.

Functions and Services

Local authorities' functions are far-reaching. Some are primarily duties, others purely permissive.

Broadly speaking, functions in England and Wales are divided between county and district councils on the basis that county councils are responsible for matters requiring planning and administration over wide areas or requiring the support of substantial resources while district councils as a whole administer functions of more local significance.

English county councils are generally responsible for strategic planning, transport planning, highways, traffic regulation, consumer protection, refuse disposal, police and the fire service. Education, libraries and the personal social services are functions of county councils in non-metropolitan areas and of district councils in metropolitan areas. All district councils are responsible, for instance, for environmental health, housing, decisions on most planning applications, and refuse collection. They may also provide off-street car parks subject to the consent of the county council. Powers to carry out some functions—such as the provision of museums, art galleries and parks—are available at both levels; arrangements depend on local agreement.

In the metropolitan counties the district councils are responsible for the full range of services (apart from the police, the fire service and public transport and, in some areas only, waste regulation and disposal—see p 62). In Greater London the boroughs and the City Corporation are responsible for a similar range of functions but London's metropolitan police force is directly responsible to the Home Secretary. Responsibility for passenger transport lies with London Regional Transport and in inner London, education is administered by the Inner London Education Authority. Responsibility for land drainage and flood protection, including the Thames Barrier, rests with the Thames Water Authority.

In Wales the division of functions between county and district councils is much the same as that between county and district councils in non-metropolitan areas of England.

Local authorities in England and Wales may arrange for any of their functions to be carried out on their behalf by another local authority, other than functions relating to education, police, the personal social services and national parks.

In Scotland the regional and district authorities discharge local government functions in a way broadly similar to that of authorities in England and Wales.

Orkney, Shetland and the Western Isles, because of their isolation from the mainland, have single, virtually all-purpose authorities.

ln Northern Ireland local environmental and certain other services, such as leisure and the arts, are administered by the district councils. Responsibility for

GOVERNMENT

planning, roads, water supply and sewerage services is exercised in each district through a divisional office of the Department of the Environment for Northern Ireland. Area boards, responsible to central departments, administer locally education, public libraries and the health and personal social services. The Northern Ireland Housing Executive, responsible to the Department of the Environment, administers housing.

Internal Local authorities have considerable freedom to make arrangements for carrying Organisation of out their duties. They may co-operate or share among themselves the discharge Local Authorities of their functions. Most use a committee system, whereby policy and principle are decided in full council, and the various services are administered by committees composed of selected members of the council and, where the authority so chooses, 'persons of experience'. A council may delegate to a committee or officer any of its functions except those in connection with raising loans, levying rates (see p 67) or making financial demands on other local authorities liable to contribute; these are legally reserved to the council as a whole. Some councils have policy advisory or co-ordinating committees which originate policy for implementation by the full council. The powers and duties of local authority committees (which may be advisory or executive) are usually laid down in formal standing orders. Parish and community councils in England and Wales are often able to do their work in full session although they appoint committees from time to time as necessary. An independent inquiry into the conduct of business in local authorities in Great Britain was completed in June 1986; the Government is considering its proposals.

Public The public (including the press) are admitted to council, committee and Access sub-committee meetings, and have a right of access to agenda, reports and minutes of meetings and certain background papers. Local authorities may exclude the public from meetings and withhold these papers only in limited circumstances specified by legislation.

Officers and Nearly 3 million people are employed by local authorities in Great Britain. These Employees include administrative, professional and technical staff, teachers, firemen, those engaged on law and order services, and manual workers. Nearly half of all local government workers are employed in the education service.

Although a few appointments must be made by all the authorities responsible for the functions concerned, councils are individually responsible within national policy requirements for determining the size, composition and deployment of their workforces. In Northern Ireland each council must by law appoint a clerk of the council as its chief officer.

As a general rule, employees are of three kinds: heads of departments or chief officers; administrative, professional, clerical and technical staff; and manual workers. Senior staff appointments are usually made on the recommendation of the committee or committees particularly concerned; most junior appointments are made by heads of departments, who are also responsible for engaging manual workers. Appointments and engagements always conform to the council's set establishment, and committees are informed of appointments which they have not made themselves.

Pay and conditions of service for local authority staff are generally a matter for each council, although there are scales recommended by national negotiating machinery set up by the local authorities themselves.

Authorities differ in the degree to which they employ staff to carry out certain functions (for example, building work, street cleaning or refuse collection) or use private firms under contract. The Government's policy of promoting value for money is encouraging the use of private firms where there are resultant economies, and legislation is before Parliament to require authorities to open up further services to competition from the private sector. In the specific case of building and maintenance work, the Local Government, Planning and Land Act 1980 obliges authorities' direct labour organisations to bid for such work in open competition if they wish to undertake it.

Local

In 1986-87 expenditure by local authorities in the United Kingdom was some Authority £38,700 million, about one-quarter of total public expenditure. Current Finance expenditure amounted to some £34,500 million, and capital expenditure to about £4,200 million. Education accounts for over one-third of the total. Most of the remainder is spent on law and order, housing and other environmental services, personal social services and transport.

Current

Local authority current expenditure in England and Wales is financed by a Expenditure combination of central government grants and local rates (a tax based on property values). A few services such as the police, housing and transport and the urban programme for inner city areas receive specific central government grants towards their cost. However, most central government support for current spending is provided through the rate support grant. This has two elements, domestic rate relief grant, which is paid to rating authorities as a direct subsidy to domestic rates, and block grant. Block grant is a general grant which is designed to compensate for variations in the needs which local authorities have to provide for and for differences in the resources they may be able to raise in local rates. Each local authority's grant is, therefore, calculated to be sufficient for it to provide a similar level of service to that of other authorities while at the same time charging the same rate level. This system requires an assessment of each authority's need to provide services which takes account of a large number of factors and characteristics of an authority's area and population.

Within this system, local authorities are free to decide on their overall level of spending and on their priorities between particular services. However, because of the need to control public expenditure, the method for calculating an authority's entitlement to block grant provides that for almost all authorities, grant entitlement decreases as expenditure increases, thus giving an incentive for expenditure restraint. The previous system of setting expenditure targets for each authority has now been discontinued. The Government has power, subject to parliamentary approval, to fix upper limits on the rates of selected authorities whose spending it considers to be excessive. In 1987-88, 20 English authorities had an upper limit set on their rate levies, and 20 of the new authorities set up after the abolition of the Greater London Council and the metropolitan county councils have an upper limit on their precepts.

In Scotland the grant is distributed in three parts: the 'needs' element, designed to give most help to authorities whose spending needs are greatest; the 'resources' element, used to supplement the rate income of authorities whose rateable value per head of population falls below a standard figure, prescribed for each year; and the 'domestic' element, which compensates authorities for loss of rate income from reductions in rate poundage which they are required to give to householders. Local authorities are free to decide on their level of spending, but central government can make selective grant and rate reductions in the case of individual authorities planning excessive and unreasonable expenditure. Current expenditure guidelines are issued and the grant payable to authorities is reduced where the level of expenditure planned by authorities is in excess of the guidelines. The Government has power to set a general limitation on rates.

In Northern Ireland district councils receive central government grants comprising specific grants which assist with the financing of certain functions

GOVERNMENT 67

(for example, the acquisition of open space, and the provision of clean air) and certain capital projects (for example, leisure centres), and a general grant, which is paid by the Department of the Environment for Northern Ireland. The general grant compensates councils for loss of rate income arising from statutory derating of premises; it also contains a resources element which brings the rating resources of poorer councils up to a standard level determined by the Department.

Capital Expenditure Local government capital expenditure is financed primarily by borrowed money which is supplemented by capital grants and other income, especially receipts from property sales. By far the most significant service is housing which in 1986–87 accounted for 50 per cent of gross expenditure. Every year each local authority receives from the Government a capital expenditure allocation for each of the main blocks of services for which it is responsible. An authority may in any year borrow amounts of money broadly equal to the total of the allocations it has received. Allocations may be supplemented by a proportion of the capital receipts generated by the authority. With other minor additions, this constitutes a ceiling on the total of most types of capital expenditure which the authority may undertake in that year. Authorities have almost complete discretion, within their legal powers, to spend according to locally determined priorities.

Rates

Rates are local taxes paid by the occupiers of land and property (with certain exceptions, see below) to meet part of the cost of local services. Each occupier's payment is calculated annually by the rating authority by multiplying the rateable value of a property (broadly equivalent to its annual rental value) by the rate poundage—an amount per & of rateable value fixed by the authority according to its projected financial needs. Rateable values are assessed periodically, and there is a system of appeals for disputed assessments. Crown (government) property is not rateable but payments are made, based on values assessed by the Treasury Valuer, in place of rates.

Government grants reduce domestic rates below the levels paid by commercial concerns. Rating relief is available in certain circumstances on premises adapted for the use of the disabled. Agricultural land and buildings (apart from living accommodation and farm shops) and places of religious worship are exempted from rates. Charities pay half the full rate on premises occupied for charitable purposes and may be given further relief by rating authorities, who can also reduce or remit the rates for a wide range of non-profit-making bodies. In England and Wales rating authorities have the discretion to levy a rate on property unoccupied for more than three months. For non-domestic property this is limited to 50 per cent of the full rate, with complete exemption for empty warehouses and industrial property. In enterprise zones, which have been set up in certain areas to foster industrial and commercial regeneration, commercial and industrial properties are exempted from paying rates for ten years.

In Scotland industrial (including freight transport) premises are rated at 60 per cent of net annual value. Most empty properties pay no rates.

Proposals for the reform of local authority finance in Great Britain, which are designed to strengthen local democratic accountability, were announced in 1986. The main features are a national non-domestic rate, the proceeds of which would be distributed to local authorities in proportion to the number of adults; the replacement of domestic rates by a community charge which each authority would set and which would be payable by every resident adult; and a grant system that would compensate for differences in local authorities' needs and would provide additional help by way of a fixed sum per adult. The new system is to begin to be introduced in Scotland in April 1989 and is expected to begin to

come into effect in England and Wales in 1990 to coincide with a revaluation of non-domestic properties.

In Northern Ireland all industrial premises are fully derated as are commercial premises in enterprise zones. Certain other properties, such as freight transport and recreational premises, are partially derated.

Loans

Local authorities are allowed to borrow money long term to finance new capital expenditure and also to refinance loans raised for capital finance thus enabling flexible debt management. Authorities are not permitted to borrow long term to finance revenue expenditure but they may borrow money short term in anticipation of revenues receivable. In Northern Ireland long-term borrowing by district councils is subject to central approval; in Scotland central approval is given to capital expenditure, not to loans.

Most long-term borrowing by authorities is from the Public Works Loan Board (or, in Northern Ireland, the Consolidated Fund). The Board draws its funds from the Government's National Loans Fund and thus allows authorities to enjoy interest rates lower than any institution except the Government. Authorities may also borrow money by means of private mortgages, issuing stock upon the Stock Exchange, issuing bonds which may or may not be quoted on the Stock Exchange, and issuing bills. All loan charges are secured against the revenues of the authority and represent a first charge on those revenues.

Control of Finance

Local councils normally have a finance committee to keep their financial policy under constant review. They must have their annual accounts audited by independent auditors appointed by the Audit Commission in England and Wales, or by the Commission for Local Authority Accounts in Scotland. In Northern Ireland this role is exercised by a local government audit section appointed by the Department of the Environment for Northern Ireland.

Local Government Complaints System A complaints system for local government in England and Wales involves independent statutory Commissions for Local Administration comprising local commissioners (local government Ombudsmen). The English Commission has three local commissioners and the Welsh, one. In Scotland the statute provides for a single commissioner. All commissioners are responsible in their particular area for investigating citizens' allegations of injustice resulting from maladministration by local authorities. In normal circumstances, the Commissioners can only initiate an investigation at the request of a local councillor.

In Northern Ireland a Commissioner for Complaints deals with complaints alleging injustices suffered as a result of maladministration by district councils and certain other public bodies.

Fire Services

Every part of the United Kingdom is covered by a local authority fire service, which is subject to some general oversight by central government. Other than in Northern Ireland, where the fire service is financed wholly from central government funds, the cost is shared between local authorities and central government, the latter contribution through the rate support grant.

Each of the 64 fire authorities must by law make provision for fire-fighting, and maintain a brigade of sufficient strength to meet all normal requirements (in some parts of Scotland combined authorities provide fire cover). Other authorities also maintain fire brigades, for instance, the Army and Royal Air Force Departments of the Ministry of Defence; the Civil Aviation Authority at airports; and some large industrial and commercial concerns. These work in co-operation with the local authority fire services.

GOVERNMENT 69

The Home Secretary and the Secretary of State for Scotland have central responsibility in England and Wales and in Scotland respectively. Central government is concerned mainly with ensuring the operational efficiency of brigades. Ministers have statutory powers to prescribe standards and general requirements on administrative and operational matters of service-wide significance. These include appointments and promotions, the provision of a central training institution, pensions and disciplinary matters. Their approval is also required for reductions in the fire-fighting establishments of fire brigades. Each minister is advised by a Central Fire Brigades Advisory Council, comprising the respective home departments, local authorities, fire service representative organisations and certain specialist advisers. In the home departments, inspectorates of fire services advise on operational and technical matters. Most fire brigades include part-time personnel who provide fire cover in less-densely populated areas in return for a retaining fee and call-out and attendance fee. Fire authorities also employ people for duties in controls, communications, and mobilising and staff duties. There are about 39,000 full-time and 19,700 part-time operational members of fire brigades in Britain.

The standardisation of some equipment is encouraged, in order to assist compatibility when a fire is attended by more than one brigade. The principal types of fire-fighting appliances bought by fire authorities are based upon specifications approved by the Secretaries of State and issued in the form of advice by the Central Fire Brigades Advisory Councils. The specifications aim to describe the minimum standards required while allowing some freedom of design.

Each fire authority must appoint a Chief Fire Officer (Firemaster in Scotland) who exercises day-to-day control from brigade headquarters. Divisional officers in charge of the geographical areas into which most brigade regions are divided are responsible for mobilising forces. Constant communication is maintained between divisional and brigade headquarters and if additional resources are required to deal with an incident, neighbouring divisions, or a neighbouring fire brigade, are asked to provide assistance.

Fire Prevention

Fire authorities are concerned in some way with fire precautions in most buildings used by the public and have major responsibility for enforcing legislation concerning fire precautions. They must also make efficient arrangements for giving advice on fire prevention, restricting the spread of fires, and means of escape. Courses in fire prevention are held at the Fire Service College for fire brigade officers. In addition to their enforcement and advisory duties, brigades are also involved in education and publicity to promote fire safety, particularly in the home; the Home Office also promotes fire safety in the home. Central government is advised on prevention by the Joint Fire Prevention Committee of the Central Fire Brigades Advisory Councils, representing the fire service and central and local authorities.

Research

Research into health hazards to fire-fighters, fire prevention, fire-brigade organisation and fire-fighting equipment is conducted by the Home Office with the help of the fire services under the auspices of the Joint Committee on Fire Research of the Central Fire Brigades Advisory Councils. Individual research projects are undertaken by the Home Office Scientific Research and Development Branch or, under contract to the Home Office, by other government agencies, notably the Fire Research Station, which is part of the Building Research Establishment of the Department of the Environment, or by private consultants. The Fire Research Station is the principal organisation studying and investigating technical aspects of fire.

Special Services

Fire authorities have discretion to use their brigades and equipment in a variety of non-fire emergencies. These are known as 'special services' and include rail, road and aircraft accidents, collapse of buildings, flooding of premises, leakage of harmful gas or liquids and the rescue of people or animals from dangerous situations. Fire authorities are entitled to levy a charge for such services.

Fire Losses

The direct cost of damage to buildings and goods destroyed by fires in Great Britain in 1986 amounted to an estimated £455.5 million (consequential losses from the interruption of business are not included in this total). Most fires involving heavy losses occur when the premises are unattended; and fires are more likely to start in storage areas than in production departments. Industries which suffer most severely include engineering and electrical firms; textiles; food, drink and tobacco warehousing; chemical and allied industries; paper, printing and publishing firms; and retailing.

Fire Casualties

About 900 people, particularly the elderly and young children, die in fires every year (most of them at home) and about a further 11,000 suffer injury. Among the chief causes of fatal fires are ignition of upholstery, bedding and clothing by smokers' materials and by heaters.

3 Overseas Relations

Britain's overseas relations reflect both its traditional position as a major trading and maritime power whose people have settled throughout the world, and its concern to help to maintain peace and to secure world-wide economic and social progress through international co-operation. It has diplomatic relations with 165 countries, and with about 20 of these has common security arrangements, principally through the North Atlantic Treaty Organisation. Commercial activities have helped Britain to maintain its position as a world financial centre. It has considerable overseas investments, imports over a third of its food and more than half of its raw material requirements, and exports account for over a quarter of its gross national product. Britain provides development assistance to over 120 independent countries as well as to its remaining dependencies.

In the belief that its overseas objectives can best be attained through co-operation with other nations on a regional or global basis, Britain is a member of some 120 international organisations ranging from the world-wide United Nations concerned with problems of world peace, international economic co-operation and social issues to regionally based and technically orientated bodies. In particular, it is a member of the European Community and is increasingly co-ordinating its overseas policies through the Community's political co-operation mechanism. As a member of the Commonwealth, Britain is a part of a representative cross-section of the international community, which has evolved from the British Empire (since 1945 Britain has progressively, and largely peacefully, dismantled its Empire and prepared nearly 50 countries for independence) and whose 49 members share a common language and close professional, academic and commercial links.

Britain also has strong ties with the United States, including a common language and similar political and cultural traditions.

A long involvement in world affairs has given Britain both a vital interest and a firm belief in the maintenance of international order governed by respect for a generally accepted system of law. As a permanent member of the United Nations Security Council it makes support for the United Nations a central feature of its foreign policy.

Administration

The general conduct of overseas relations is the responsibility of the Secretary of State for Foreign and Commonwealth Affairs acting through the Foreign and Commonwealth Office and the 207 British diplomatic posts overseas. The latter comprise embassies and high commissions in about 130 countries, ¹ together with subordinate consulates-general and consulates, and missions at ten international organisations. These posts, like the Foreign and Commonwealth Office, are staffed by members of the Diplomatic Service and locally engaged people. Excluding supporting administrative and communications services, 30 per cent of front line diplomatic staff and senior locally engaged staff are involved in commercial work such as export promotion and the protection of British

¹ A few embassies are accredited to more than one country; for example, the embassy at Dakar in Senegal is also accredited to Mauretania, Guinea, Guinea-Bissau, Mali and Cape Verde.

commercial interests, 25 per cent in consular/entry clearance services, 18 per cent in political and economic work, 9 per cent in information and 7 per cent in other work; 11 per cent are concerned with providing services for heads of posts.

Other departments which have a primary concern with overseas relations include the Ministry of Defence, the Department of Trade and Industry, the Treasury and the Overseas Development Administration (which is part of the Foreign and Commonwealth Office); but the involvement of most has increased with the growing dependence of domestic economic policy on international decisions and with Britain's membership of the European Community.

Where questions of overseas policy involve matters within the responsibility of other departments, the Foreign and Commonwealth Office formulates policy in consultation with the departments concerned. The balance of responsibilities is a matter of constant adjustment, and the department with the predominant functional interest, even though it may be primarily domestic, takes the lead. This is particularly so in policy concerning the European Community and international monetary matters. In the case of policy towards the Community, the Foreign and Commonwealth Office exercises its co-ordinating role at official level through the machinery of the Cabinet Office.

Other bodies whose work has an overseas dimension include the British Overseas Trade Board and the Export Credits Guarantee Department, which provide export services for industry; the Crown Agents for Oversea Governments and Administrations, which helps to arrange purchases from British aid funds and appointments under technical co-operation programmes (as well as providing mainly purchasing and management services to overseas governments and institutions); and the British Council.

The British Council

The British Council, established in 1934, aims to promote overseas an enduring understanding and appreciation of Britain through cultural, educational and technical eo-operation. The activities of the Council, which has staff in over 80 countries, include the teaching of English and the recruitment of British teachers for posts overseas; administering the Government's educational assistance and technical co-operation training programmes; fostering personal contacts between British and overseas people, especially in the educational, professional and scientific areas; running, or helping to maintain, libraries of British books and periodicals overseas and providing information through touring exhibitions and bibliographical services; and presenting overseas the best of British arts and culture. In Britain, the Council is concerned mainly with arranging programmes for professional visitors and with the placing, administration and welfare of overseas students. A basic principle is that the Council's work should be of benefit both to Britain and to the receiving country.

In 1986–87 the Council assisted 24,750 overseas students, trainees and visitors to come to Britain, and an average of 56,000 students at any one time were learning English in the Council and associated teaching centres overseas. Book, audio-visual and periodical issues made by the Council's 116 libraries around the world totalled $7\cdot 1$ million from a stock of $2\cdot 1$ million. In many places the libraries are no longer just book collections but centres with film and video stocks, software demonstration equipment and on-line access to British databases. The Council handled over 700,000 inquiries about Britain. The Council subsidises annually some 600 British drama, dance or music tours in other countries.

About three-quarters of the Council's funds, which amount to an estimated £260 million in 1987–88, is provided by the Foreign and Commonwealth Office

¹ A public body established in 1833 to look after the financial and supply needs of British dependent territories, the Crown Agents has been reorganised with a view to its privatisation in due course.

(including the Overseas Development Administration) and on its behalf the Council is responsible for the implementation of more than 30 cultural agreements with other countries. Overseas it acts as education adviser to Britain's diplomatic missions and is responsible for educational assistance in developing countries in which it is represented and for links and exchanges in higher education which require official support. Increasingly, the Council is undertaking education projects paid for by overseas clients and is providing English classes abroad; it is estimated that these and other activities amounted to nearly £50 million in 1986–87.

Membership of the European Community

Britain is a fully committed member of the European Community, an association of 12 democratic nations which originated in the need for countries in Western Europe to co-operate in the reconstruction of their ruined economies at the end of the second world war and their desire to use this economic co-operation to promote peace and freedom. In 1952 Belgium, France, the Federal Republic of Germany, Italy, Luxembourg and the Netherlands established the European Coal and Steel Community to include their coal and steel resources within a common market. This was followed by the Treaties of Rome, signed in March 1957, setting up the European Economic Community and the European Atomic Energy Community. Britain became a member in 1973, together with Denmark and the Irish Republic; Greece followed in 1981 and Portugal and Spain in 1986. The separate institutions established by the three Community treaties were merged in 1967.

The Community's aim, as set out in the Treaty of Rome, is to lay the

The European Community



foundations for a closer union between the peoples of Europe on the basis of a common internal market, the gradual approximation of member states' economic policies and a framework of common law. The Community has abolished internal tariffs and some other trade barriers, established a common external customs tariff and made provision for freer movement of labour, capital and services. The Community also negotiates on behalf of its member states in international trade negotiations. Overseas countries having special links with the Community are accorded preferential treatment in aid and the development of trade. The Community accounts for about a fifth of world trade, and nearly half of Britain's trade is with the other 11 member states.

Britain plays a constructive part in the development of the Community which it regards as a means of strengthening democracy and reinforcing stability in Europe and of increasing the collective strength of member states in international trade and other negotiations. In addition, it welcomes the member states' commitment, enshrined by a treaty in 1986, to political co-operation on foreign policy issues.

Community Institutions

Under the treaties major policy decisions are taken by the Council of Ministers, on which member states are represented by foreign or other ministers as appropriate to the subject under discussion. The Presidency of the Council changes at six-monthly intervals, Britain having assumed it for the third time from July to December 1986. Most Council decisions are taken on the basis of a proposal made by the European Commission; some may be decided by majority or qualified majority, with votes weighted according to provisions set out in the treaties. In other cases the Council proceeds on the basis of unanimity. In 1986 the Council agreed in the Single European Act to improve decision-taking through more use of majority voting, particularly on internal market measures.

Heads of Government meet at least twice a year as the European Council, which takes important decisions and discusses Community policies and world affairs generally.

The European Commission puts forward policy proposals, executes decisions taken by the Council of Ministers and ensures that Community rules are correctly observed. It is composed of 17 Commissioners (two from Britain), nominated by member governments and appointed by common agreement, and is pledged to act independently of national or sectional interests.

The European Parliament, directly elected by the people in member states at five-yearly intervals, has 518 members, 81 of whom come from Britain. Members sit in eight main groups according to party affiliation and not nationality.

The Parliament is consulted on a wide range of issues before the Council takes final decisions and these arrangements have been recently improved. The Commission can be removed from office as a whole by a two-thirds majority of all members of the Parliament in a vote of censure. The Parliament can also reject in its entirety the draft annual budget as presented by the Commission and approved by the Council. Members may also put questions to the Council of Ministers and the Commission.

The European Court of Justice, consisting of 13 judges, interprets and adjudicates on the meaning of the treaties and of any measures taken by the Council of Ministers and the Commission; it also hears complaints and appeals brought by or against Community institutions, member states or individuals and gives preliminary rulings on cases referred to it by courts in the member states. It represents the final authority on all aspects of Community law. The Single European Act provides for a Court of First Instance to be attached to the Court of Justice.

The European Court of Auditors examines all Community revenue and expenditure to see that it has been legally received and spent, and to ensure

sound financial management. It draws up an annual report and may submit observations on specific questions as the Community institutions request.

Community policies are implemented by regulations, which are legally binding and directly applicable in all member countries; directives, which are binding, as to the result to be achieved, on member states to which they are addressed but allow national authorities to decide on means of implementation; decisions, which are binding on those to whom they are addressed (for example. member states, firms or individuals); and recommendations and opinions. which have no binding force. The Council can also indicate a general policy direction through resolutions.

In addition to, and separately from, the institutions operating within the Community framework established by treaty, the member states have set up machinery under which they consult each other before taking up final positions on important questions of foreign policy. Known as political co-operation, these consultations include regular meetings of foreign ministers, monthly meetings of senior officials, and contacts at working level among those concerned with particular questions. In addition, the 12 foreign ministries are linked by a secure communications system and a small secretariat assists the Presidency.

Finance The Community is financed by a system of levies on agricultural imports, customs duties and the product of a notional rate of value added tax (VAT) levied on a Community harmonised basis at a rate at present not exceeding 1.4 per cent. These are known as 'own resources'.

Without some form of adjustment Britain's contributions under the system would be much higher than its receipts from Community policies, because the Common Agricultural Policy absorbs about two-thirds of Community spending and Britain's agricultural sector is relatively small. This problem was foreseen during the accession negotiations, and Britain was given an assurance that, if unacceptable situations arose, the very survival of the Community would demand that its institutions found equitable solutions.

In 1980 the Community recognised that there was a problem for Britain, and after a series of annual budgetary refunds the European Council reached an agreement in June 1984 under which Britain obtains a rebate of 66 per cent of the gap between its shares of VAT payments and of Community expenditure. The VAT ceiling of 1 per cent was increased to 1·4 per cent from 1986, partly to meet the costs of enlargement of the Community. At the same time the Council requested the Commission to produce a report on the results of budgetary discipline, the Community's financial needs and the breakdown of budgetary costs among member states. The Commission put forward wide-ranging proposals for the future financing of the Community in February 1987; these are currently being considered by the Council of Ministers.

In addition to agriculture the Community budget includes spending on regional and social policies; projects concerned with research, energy, the environment, industry and transport; and aid to developing countries.

Internal Policies In Britain's view, completion of the common internal market by removing the The Internal remaining barriers impeding the movement of goods and services would be the Market most effective means of promoting a more united Europe, and it would enable the Community to compete on equal terms in world markets and generate prosperity for its citizens. In 1985 the Community, with full British support, agreed a target date (1992) for the completion of a genuinely free internal market. In particular Britain wants action on harmonisation of standards, the opening of public purchasing to competition, the modernisation and improvement of eustoms procedures, mutual recognition of professional qualifications, liberalisation of transport (including better and cheaper air services) and a European financial services industry able to operate freely in all member states and to meet competition from the United States and Japan. During Britain's Presidency in 1986 a record number of nearly 50 measures were agreed to improve the operation of the internal market.

Transport Britain favours the establishment of a system of deregulated transport within the Community. It is therefore pressing for action to increase competition in eivil aviation and has welcomed the June 1986 agreement by transport ministers to abolish by 1992 all quota restrictions on the movement of road haulage in intra-Community trade. Britain's links with other member states will be improved as a result of the 1986 decision taken by Britain and France to facilitate the construction and operation of a rail link under the Channel.

Industry

Community action seeks to encourage the development of new European high-teehnology industries and the restructuring of older ones. The ESPRIT programme supports research in advanced microelectronics, information processing, software technology, office automation and integrated manufacturing while the BRITE project is designed to promote the use of advanced teehnology in motor vehicles, aeronautics, ehemicals, textiles, engineering and other industries. Member states also participate in the EUREKA programme set up to improve European performance in high technology.

In traditional manufacturing member states have agreed that the steel industry should be given the opportunity to develop proposals for restructuring and that state aid to shipbuilding should help to adapt this industry to prevailing market eonditions.

Employment Britain believes that the Community has an important role to play in fighting unemployment. In December 1986, the Social Affairs Council agreed an action programme for employment growth with the aim of promoting new businesses, improving the working of the labour market, better training, and more help for the long-term unemployed. It was based on proposals put forward by Britain, the lrish Republic and Italy. Other measures agreed or adopted during the British Presidency included a Commission action programme on small and medium enterprises which was endorsed in outline, £1,000 million in loans to help small businesses gain access to new technology and a Council resolution emphasising the importance of cutting administrative burdens on business.

The Environment International eo-operation is often necessary to deal with environmental pollution which does not respect national boundaries. The Community has been active in this area for some 15 years and its role has been given explicit legal reeognition in the Single European Aet. Community instruments are eoneerned with such issues as water and air pollution, the disposal of wastes, noise and the protection of wild birds. Britain is actively participating in negotiations to reduce emissions from large power plants as part of the effort to reduce acid rain; in September 1986 the Government announced that three major coal-fired power stations would be retrofitted with flue gas desulphurisation equipment over the period from 1988 to 1997 at a cost of £780 million and that in future all new eoal-fired stations (some 6,000 megawatts of existing generating eapacity) would be fitted with similar technology. In May 1987 this was followed by the launching of a new £170 million ten-year programme to install low nitrogen oxide burners at the 12 largest power stations.

Britain is also concerned about pollution from vehicle exhausts, and, following a British initiative, the Council of Ministers adopted a directive in

March 1985 providing for the introduction of unleaded petrol throughout the Community not later than 1989.

Agriculture Decisions on the level of Community support prices for agriculture are taken annually on the basis of proposals presented by the European Commission. Over many years these support prices have not been adjusted sufficiently to take account of technical progress in agriculture which has caused a continued increase in production. The growing market imbalance has led to the creation of unwanted food surpluses. To deal with the problem, the Agriculture Council, under British chairmanship, agreed in December 1986 to reduce Community milk production by 9.5 per cent over two years and to restrict recourse to market intervention in the beef sector, thereby effectively reducing beef support prices by 13 per cent. Taken together these measures represent a major reform in Community agricultural policies. Similar reforms are also required regarding the pricing of cereals. Further tough measures, particularly on cereals and oilseeds, were agreed in June 1987. Since the Common Agricultural Policy is by far the largest item of Community expenditure, Britain considers reform to be central to the Community's efforts to ensure better budgetary control and management.

Fisheries

Britain has a particular interest in the control of Community fishing since a sizeable proportion of the total catch taken in the area bounded by member states' 200-mile limits is in British waters. It therefore took an active role in negotiations on an agreement reached in 1983 on a new Community fisheries policy; this covers access to coastal waters, conservation of fish stocks, the allocation of catch quotas among member states within each year's total allowable catch, enforcement of these rules and financial aid to promote the adaptation and development of the Community's fishing fleet. In 1986 measures were agreed to strengthen conservation of fish stocks and to monitor more effectively compliance with Community fisheries policy.

Other Policies The European Social Fund assists areas of high unemployment by providing grants towards schemes of training, job creation and geographical mobility of workers. The European Regional Development Fund provides grants for industrial and infrastructure projects in the less-developed or industrially declining regions of the Community with the aim of reducing existing imbalances or preventing the creation of new ones. In 1986, Britain received £336 million (17 per cent of the resources) from the regional fund and £414 million (16 per cent) from the social fund.

Britain also receives about a fifth of the lending of the European Investment Bank, which was set up in 1958 to provide finance on a non-profit-making basis for investment to develop the Community's less-favoured regions, to modernise industry and to help projects of common interest to two or more member states.

The European Monetary System was established in 1979 to promote monetary stability in Europe. It consists of an exchange-rate mechanism, a monetary unit known as the European Currency Unit (ECU—based on a 'basket' of national currencies including sterling, the value of which is recalculated daily) which is used within the Community for budgetary and other purposes, and enlarged Community short- and medium-term credit facilities. The member states are also committed to the establishment of a European Monetary Fund. Britain has participated in the system from the outset, although not in the exchange-rate arrangements, and has deposited 20 per cent of its gold and dollar currency reserves with the European Monetary Co-operation Fund in exchange for ECUs. The Government intends that Britain should join the exchange-rate mechanism when conditions permit.

Britain has given high priority to Community action to combat drugs and terrorism. In October 1986 a meeting of ministers responsible for these subjects set up a high-level working group to study ways of improving co-operation against crime and terrorism and an action plan to fight drug abuse. The Community is also committed to closer co-operation in the fight against AIDS.

External European Political Co-operation is the process of co-operation between the 12 Relations member states on foreign policy issues. Its aim is to maximise the influence of the Twelve in international affairs and it takes place outside the framework of the Treaty of Rome.

The six original Community members first decided to co-operate on foreign policy matters in 1970 and it was then decided to establish separate arrangements to cover foreign policy co-operation. Successive political agreements and declarations have extended the scope of the process. Since Britain's accession in 1973, it has played a leading role in developing European political co-operation; as the result of a British initiative, the Single European Act, which came into effect in July 1987, places the basic commitments on a treaty basis for the first time.

East-West Relations

Britain considers that the 12 member states should ensure that a coherent Western European voice is heard in the management of East-West relations. The Twelve have stressed the need for the Soviet Union to address humanitarian issues seriously and to honour commitments made on human rights in the 1976 Helsinki Final Act (see p 85). At the current Vienna follow-up meeting, the Twelve are pressing for a thorough review of how these commitments have been complied with and for practical progress for the benefit of individual citizens throughout Europe.

East

The Middle In July 1980, the European Council's Venice Declaration stated that a lasting solution to the problem of the Middle East required the mutual acceptance of two basic principles—the right of all countries in the area, including Israel, to secure existence within guaranteed borders and the right of the Palestinian people to self-determination. The Twelve support the proposal for an international peace conference on the Middle East. Member states have repeatedly called on Israel to withdraw from territory occupied in 1967 and are opposed to Israeli measures aimed at altering the legal, geographical and demographic structure of this territory.

The Twelve have also consistently emphasised the importance of the complete withdrawal of foreign forces from Lebanon, except for those whose presence is requested by the Lebanese Government, and of the obligation on all parties to co-operate with the UN Interim Force in Lebanon. Member states have consistently called for a ceasefire in the conflict between Iraq and Iran, and support the United Nations Secretary-General's efforts to achieve this.

Central

The Twelve firmly believe that the problems of Central America must be solved by political and not military means and that such solutions must come from within the region. They have therefore consistently supported the efforts of the Contadora Group (Colombia, Mexico, Panama and Venezuela) to negotiate a comprehensive and verifiable peace agreement, most recently at the meeting of foreign ministers from European Community, Central American and Contadora countries in Guatemala City in February 1987. The Community has a co-operation agreement with the Central American countries and Panama providing for closer economic links and improved Community aid to the region.

Afghanistan

Member states have deplored the Soviet Union's continuing occupation of

Afghanistan and continue to call for the immediate withdrawal of the occupying forces in order that a permanent settlement can be reached restoring the right of the Afghan people to self-determination.

South Africa

The Twelve have repeatedly called for a peaceful end to the system of apartheid. They have adopted a wide range of measures in an attempt to bring home to the South African Government the need for a genuine national dialogue and to help the victims of apartheid. At the request of the European Council the Foreign and Commonwealth Secretary, Sir Geoffrey Howe, visited Southern Africa in late July 1986 in an attempt to build on the work of the Commonwealth Group of Eminent Persons, to help create conditions in which genuine dialogue could begin in South Africa and to explain the Twelve's policy to South Africa's neighbours. In September 1986 the Twelve called on the South African Government to take the necessary steps to facilitate national dialogue and undertook to work towards a programme of political action designed to promote the achievement of this objective. They also emphasised the importance of strengthened and more effective co-ordination of positive measures to assist the victims of apartheid and adopted a new package of restrictive measures consisting of bans on new investment and on the import of gold coins, iron and steel from South Africa. Agreement has since been reached on the coverage and means of implementing of these measures.

Terrorism

Because of the threat posed by international and other terrorism, some of which has been state supported, member states have sought to act jointly against it. Early in 1986 the Twelve decided not to export arms or other military equipment to countries clearly implicated in terrorist activity and to take steps to prevent such material being diverted for terrorist purposes. In the course of 1986 the Twelve agreed to take measures against both Libya and Syria following evidence of their involvement in terrorist activity. In December 1986 the European Council agreed that there should be no concessions made under duress to terrorists or their sponsors; that there should be improved police and intelligence co-operation to prevent terrorism and bring the guilty to justice; and that terrorist attacks against any member state should be met with a united response. Among the measures agreed by ministers responsible for countering terrorism are the establishment of a secure communications link between police forces and arrangements for regular assessments and analyses of terrorist threats to member states.

Trade

Under the Treaty of Rome, the European Commission is given explicit powers to act on behalf of the Community vis-à-vis third countries on matters within Community competence such as the common commercial policy. The Commission accordingly negotiates on behalf of the Community in major international trade negotiations. As a single trade bloc it plays a major role in seeking to preserve the world open trading system on which member states depend for future growth and jobs, and in defending the interests of its members against protectionist measures. One of the Community's priorities was the successful launch in 1986 of the Uruguay Round of trade negotiations under the auspices of the General Agreement on Tariffs and Trade (GATT). This new round will seek to secure adherence to GATT rules; for the first time these negotiations will cover trade in services, which accounts for about 20 per cent of world trade, and will tackle agricultural trade problems. Another major trade development brought to a successful conclusion in 1986 was the renewal for a further five years of the Multi-Fibre Arrangement governing world trade in textiles and the consequential renegotiation of 29 bilateral textile agreements between the Community and third country suppliers. The Community also agreed its priorities for future co-operation with the European Free Trade Association.

Association or co-operation agreements giving preferential access to Community markets have been concluded with all countries with a Mediterranean coastline except Albania and Libya. Non-preferential co-operation agreements have also been made with individual countries in South Asia and Latin America as well as with the Association of South East Asian Nations, the Andean Pact and the Central American States. Trade relations with the developing countries of Africa, the Caribbean and the Pacific are governed by the third Lomé Convention (see below).

The Community has also improved its generalised scheme of preferences designed to benefit the poorest developing countries. The scheme provides duty-free access for almost all manufactured and semi-manufactured goods exported by developing countries and preferential access for agricultural products. The 1987 scheme contains a number of innovations; highly competitive products from advanced developing countries will, for the first time, be excluded. This is an important first step towards the acceptance by the newly industrialised countries of their full GATT obligations.

Aid

The third Lomé Convention, which governs aid, trade and co-operation between the Community and 66 developing countries in Africa, the Caribbean and the Pacific (ACP), was signed in December 1984 and came into force in May 1986. Over half the ACP countries are members of the Commonwealth. The Convention, which runs from 1986 to 1989, provides for aid totalling over £5,000 million and a further £770 million in the form of loans from the European Investment Bank; it also covers industrial and agricultural co-operation, a scheme designed to help stabilise the commodity export earnings of the ACP countries and assistance for ACP mineral producers whose production and income suffer from temporary disruptions beyond their control. In addition, it offers duty-free access to the Community for ACP exports of all industrial and most agricultural goods, including privileged access for sugar, bananas, rum and beef. Emphasis is being placed on food production and on measures to prevent desertification. All British dependent territories (with the exception of Bermuda, Gibraltar and Hong Kong), together with the overseas territories of other Community members, are formally associated with the Community under provisions parallel to those of the Lomé Convention and with similar aid and trade benefits.

Britain played a leading part in the Community's adoption of an aid programme for developing countries in Asia and Latin America not covered by the Lomé Convention or having any other special relationship with the Community. This has grown steadily since 1976 and was worth some £137 million in 1986. Priority is given to rural development and agricultural production in the poorest countries, most of which are in Asia.

Co-operation and association agreements with individual countries and regional groupings also include provision for development aid. In 1987, for instance, new five-year financial protocols were agreed with most of the Community's Mediterranean partners; these will provide for £445 million of Community aid and £725 million in loans from the European Investment Bank.

In 1986 the Community spent some £276 million on food aid, of which Britain's share was about £59 million, much of which went to Africa. In the same year, Britain reached agreement with its partners on far-reaching reforms of the Community's food aid programme designed to make it an effective instrument of development policy rather than a short-term expedient for the disposal of unwanted food surpluses.

The Commonwealth

The Commonwealth is a voluntary association of 49 independent states with a

combined population of over 1,100 million, about a quarter of the world total. Commonwealth members are a representative cross-section of nations at all stages of social and economic development. They include some of the richest and poorest members of the world community and also some of the largest and smallest. Their peoples are drawn from practically all the world's main races, from all continents and from many faiths. Britain participates fully in all Commonwealth activities and values it as a means of consulting and cooperating with peoples of widely different cultures and perspectives, thereby increasing international understanding, stability and peace, and contributing to more balanced global economic development.

The members are Antigua and Barbuda, Australia, Bahamas, Bangladesh, Barbados, Belize, Botswana, Britain, Brunei, Canada, Cyprus, Dominica, Fiji, The Gambia, Ghana, Grenada, Guyana, India, Jamaica, Kenya, Kiribati, Lesotho, Malawi, Malaysia, Maldives, Malta, Mauritius, Nauru, New Zealand, Nigeria, Papua New Guinea, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Seychelles, Sierra Leone, Singapore, Solomon Islands, Sri Lanka, Swaziland, Tanzania, Tonga, Trinidad and Tobago, Tuvalu, Uganda, Vanuatu, Western Samoa, Zambia and Zimbabwe. Nauru and Tuvalu are special members, entitled to take part in all Commonwealth meetings and activities except Commonwealth Heads of Government Meetings. The Queen is recognised as head of the Commonwealth; she is also head of State in 18 of these countries.

The origin of the Commonwealth lies in the gradual granting of selfgovernment to the older-established British colonies (later known as the Dominions) in Australia, Canada, New Zealand and South Africa1 where European settlement had occurred on a large scale. Their fully independent status in relation to Britain was legally formulated in the Statute of Westminster of 1931. The modern Commonwealth, comprising republics and national monarchies as well as monarchies under the Queen, became possible when it was agreed in 1949 that India, on becoming a republic, could continue to be a member. Since then, almost all of Britain's former dependent territories have attained their independence and have voluntarily joined the Commonwealth.

Consultation As a member of the Commonwealth, Britain participates in a system of mutual consultation and co-operation which benefits member countries and contributes to international understanding. Consultation takes place through diplomatic representatives known as High Commissioners, meetings of heads of Government, specialised conferences of other ministers and officials, expert groups, and discussions at international conferences and the United Nations. Trade and cultural exhibitions and conferences of professional and unofficial medical, cultural, educational and economic organisations are other ways in which frequent contacts are made.

Heads of Government usually meet every two years, most recently in Nassau in 1985; they will next meet in Vancouver in October 1987. Proceedings are held in private, facilitating a frank and informal exchange of views. No votes are taken, decisions being reached by consensus. These meetings allow Prime Ministers and Presidents to discuss international issues and decide on collective initiatives. Common views on matters of major international concern are formulated and reflected in the communiqués issued at the ends of the meetings. Occasionally, separate declarations are made on particular issues. These have included the 1971 Declaration of Commonwealth Principles, the 1977 Gleneagles statement, which commits member governments to take every practical step to discourage sporting contacts with South Africa, and the 1985 Commonwealth Accord on Southern Africa, which provides for measures

South Africa ceased to be a member of the Commonwealth in 1961.

designed to impress on South Africa the urgency of dismantling the apartheid system. Following the failure of Commonwealth and other attempts in 1986 to encourage the evolution of a political dialogue leading to the establishment of a non-racial and representative government, a summit of seven Commonwealth leaders, meeting in London in August 1986, agreed on the need for further measures against South Africa. Britain, while believing that mandatory economic sanctions would not succeed in promoting peaceful change, agreed to impose voluntary bans on new investment in, and the promotion of tourism to. South Africa, as well as to implement European Community decisions to ban the import of iron and steel (see p 79).

With many small states among its members the Commonwealth has expressed concern about their security and development. At Nassau Commonwealth leaders called for action which would reduce the vulnerability of small states while not diminishing their status as independent, sovereign and equal members of the world community. British policy is to co-operate with other member states in order to increase the security of small nations by encouraging regional co-operation and by providing economic aid and technical assistance.

Finance ministers meet annually to discuss world economic problems, and in recent years have paid particular attention to the problems of development and the establishment of a fairer international economic order. Other meetings include those of agriculture, education, health and law ministers which take place every two or three years. Ministers of industry, labour and employment, trade and women's affairs also meet.

The Commonwealth Secretariat, established in London in 1965 and financed by Commonwealth member states, is the main agency for multilateral communication between **Secretariat** them. It is headed by a Secretary-General appointed by heads of Government and responsible to member states collectively.

The Secretariat promotes consultation, disseminates information on matters of common concern, and organises meetings and conferences, including those of heads of Government and of ministers. It co-ordinates many Commonwealth activities related to international economic, social and political affairs, including education, food production and rural development, the role of women in development, human rights, youth programmes, management development, science and technology, law and health. The Secretariat also administers the Commonwealth Fund for Technical Co-operation.

Because of its neutral position the Secretariat has been able to make its good offices available in cases of dispute, and has carried out, on request, special assignments requiring demonstrable impartiality.

Technical

Britain plays an active part in the work of the Commonwealth Fund for **Co-operation** Technical Co-operation, established within the Secretariat to provide technical assistance for economic and social development in Commonwealth developing countries, and contributes almost a third of its income. The Fund provides experts to undertake advisory assignments or fill specific posts and uses consultancy firms to make studies for governments. Its fellowships and training programme is of particular help in raising levels of technical, industrial, managerial and other skills, and makes wide use of training facilities within developing member countries for the benefit of other developing countries. It has a special programme to help countries develop their exports, another on food production and rural development and a small technical assistance group to give advice in key areas. An industrial development unit, the main executive agency of the Commonwealth Action Programme of Industrial Co-operation, investigates the feasibility of establishing new industries in developing countries and helps to prepare and initiate agreed projects.

Expenditure by Britain on bilateral technical co-operation with Commonwealth developing countries in 1986 was nearly £130 million, the greater part being spent on financing staff for service with Commonwealth governments and in financing training places in Britain for people from Commonwealth countries. In particular, Britain is a major contributor to the Commonwealth Scholarship and Fellowship Plan, a system of awards for people of high intellectual promise to study in Commonwealth countries other than their own. It was agreed in 1984 that the number of awards would be increased to about 1,700 of which Britain would provide some 800. In 1986, the Overseas Development Administration's Shared Scholarship Scheme, funded jointly by the Government and certain universities and polytechnics, was introduced to finance 150 new scholarships each year over a period of five years, the awards being open to private sector students from developing Commonwealth countries. Other assistance includes sending volunteers to serve overseas, consultancy services, the supply of training and research equipment and the provision of advice by British scientific and technical institutions. (About 76 per cent of Britain's gross bilateral aid in 1986 went to Commonwealth countries, including Britain's remaining dependencies—see p 92.)

Commonwealth Organisations

The Commonwealth Foundation was established in 1966 and reconstituted as an international organisation in 1983. Financed by member governments, it promotes closer co-operation among professional and other non-governmental organisations within the Commonwealth. It has assisted over 30 Commonwealth professional associations, and has helped in the creation and growth of many national ones; it has also supported 16 multidisciplinary professional centres. It promotes understanding of work carried out by non-government organisations and is encouraging the strengthening of information links through the establishment of liaison units in each Commonwealth country.

The Commonwealth Institute in London promotes the Commonwealth, its countries and its peoples to the British public. Funded mainly by the British Government, it has three main galleries of permanent exhibitions and a changing programme of temporary exhibitions, conferences and performances. Its education service runs an extensive programme of teaching about the Commonwealth in schools around Britain. The Institute is open to the public every day without charge. The Royal Commonwealth Society, which is over 100 years old, is a centre for study and discussion, its library in London housing one of the largest collections on the Commonwealth. The Society has branches in many countries.

In keeping with the fact that the Commonwealth is an association of peoples as well as governments, many unofficial organisations, professional bodies and voluntary societies provide machinery for co-operation. Professional bodies include associations of architects, doctors, educators, engineers, journalists, lawyers, librarians, magistrates, museum curators, nurses, pharmacists, planners, surveyors and veterinary surgeons. Other organisations include the Commonwealth Parliamentary Association, which organises an annual conference of parliamentarians, the Commonwealth Press Union, the Association of Commonwealth Universities, the Commonwealth Games Federation and the English Speaking Union of the Commonwealth.

DEPENDENCIES

There are 14 remaining British dependent territories: Anguilla; Bermuda; British Antarctic Territory; British Indian Ocean Territory; British Virgin Islands; Cayman Islands; Falkland Islands; Gibraltar; Hong Kong; Montserrat; Pitcairn, Ducie, Henderson and Oeno; St Helena and St Helena Dependencies (Ascension, Tristan da Cunha); South Georgia and the South Sandwich Islands; and the Turks and Caicos Islands. They have a combined population of 5·5

million, of which 5·3 million live in Hong Kong. Few are rich in natural resources, and some are scattered groups of islands. There are no permanent inhabitants in the British Antarctic Territory, British Indian Ocean Territory or South Georgia and the South Sandwich Islands. Most dependencies have considerable self-government with their own legislature and civil service. Britain is generally responsible, through a Governor, for defence, internal security and foreign affairs.

It is Britain's policy to give independence to those dependencies that want it and where it is practicable to do so, and not to force it on those which do not or where it is not practicable. In the case of the Falkland Islands, which is the subject of a territorial claim by Argentina, the inhabitants wish to retain the link with Britain. The Government is committed to the defence of the Islanders' right to live under a government of their own choosing. The Islanders' right of self-determination is reflected in the new Falkland Islands Constitution, which came into effect in 1985.

Argentina and Chile have claims to territory which overlaps part of the British Antarctic Territory. Claims to territorial sovereignty in the Antarctic, however, are suspended by the provisions of the 1959 Antarctic Treaty.

Gibraltar is the subject of a territorial claim by Spain, which imposed border restrictions in the 1960s. Since the return of democracy to Spain, Britain and Spain have reached agreement on the method for handling their differences over Gibraltar, Spanish restrictions being lifted in February 1985. Britain wishes to see the development of practical co-operation between Gibraltar and Spain to the benefit of both peoples and remains committed to honouring the wishes of the people of Gibraltar as to their future.

In 1984 an agreement was signed between Britain and the People's Republic of China on the future of Hong Kong. Under the agreement, which was ratified by the two Governments in 1985, Britain will continue to be responsible for the administration of Hong Kong until 1997, when the territory will be restored to China. The Chinese Government will then establish a Hong Kong Special Administrative Region, which will enjoy a high degree of autonomy, except in foreign and defence affairs. It will be vested with executive, legislative and independent judicial powers and its government will be composed of local inhabitants. The laws currently in force in Hong Kong will remain basically unchanged, as will its present social and economic systems and its way of life. Private property rights and other rights and freedoms will be protected by law. These arrangements will remain in place for 50 years after 1997.

International Peace and Security

Britain is concerned to protect its territorial integrity and political independence, as well as the interests of its dependencies and of its allies, and pursues these objectives through a national security policy in which deterrence and defence are coupled with efforts towards removing or alleviating the causes of international tension and achieving balanced and verifiable international arms control and disarmament.

British defence policy is based on the North Atlantic Treaty Organisation (NATO)¹ which member countries regard as their guarantee of security, freedom and well-being, and as an important contributor to international peace and stability. The purpose of NATO is to enable its member countries to maintain

¹ NATO's 16 member countries are Belgium, Britain, Canada, Denmark, France, the Federal Republic of Germany, Greece, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Turkey and the United States. France and Spain do not participate in NATO's integrated military structure.

peace with freedom. It pursues a strategy of deterrence, designed to convince any potential aggressor that the use of force, or the threat of it, carries risks far outweighing any likely advantage. At the same time NATO countries seek through international negotiations significant reductions in the level of nuclear and conventional forces.

Britain's defence resources are concentrated almost exclusively on key NATO tasks. However, the Government's defence policy is also designed to promote, whenever possible, British and more general Western interests outside the NATO area. In addition, Britain demonstrates its world-wide interests by periodic military deployments and exercises overseas; by supporting United Nations and other peacekeeping efforts; and by providing military assistance and training to a number of friendly countries.

East-West Britain seeks improvements in East-West relations based on a broader Relations understanding and on the recognition that East and West have a common interest in peace and security at a lower level of weapons. The Government believes that both sides should avoid policies which risk provoking confrontation and should aim instead for mutual accommodation and co-operation while exercising restraint in the conduct of international relations both in Europe and in the rest of the world. This is explicitly recognised in the 1975 Helsinki Final Act of the Conference on Security and Co-operation in Europe (CSCE), which states that European security has to be considered in the broader context of world security. Britain is committed to doing everything possible to reduce the risks of war and to avoid misunderstanding. The Government is following a policy of increased contacts at all levels with the Soviet Union and its allies; the Prime Minister, for instance, visited Moscow in 1987 for talks with the Soviet leaders. Britain welcomed the progress on nuclear arms control following the Geneva and Reykjavik summits in 1985 and 1986 between the United States and the Soviet Union (see p 86). The early and complete withdrawal of Soviet forces from Afghanistan, which the Soviet Union invaded in 1979, would remove an obstacle to improved relations between East and West.

CSCE Britain believes that full implementation by all participants of the provisions of the 1975 Helsinki Final Act would lead to increased stability in Europe and improved co-operation between the 35 European and North American signatory states. While not a legally binding document, the Final Act established a large number of important political commitments and a code of behaviour for what the participants hope will in time become a more normal and open relationship between both governments and peoples in East and West. To this end it contains undertakings about security, respect for human rights, and co-operation in economic, humanitarian and other matters. Meetings to review the application of the Final Act took place in Belgrade in 1977–78 and in Madrid between 1980 and 1983; a third began in Vienna in November 1986. The Madrid meeting, at which it was decided that renewed efforts should be made to give full effect to the Final Act, also convened an experts' meeting in Ottawa on the subject of human rights, a cultural forum in Budapest in 1985 and a meeting concerning human contacts which took place in Berne in 1986. Britain and other Western countries have taken the opportunity of the Vienna meeting to highlight the failure of the Soviet Union and the Eastern European countries to implement many of the commitments contained in the Final Act, particularly in the areas of human rights, human contacts and information. Together with its partners and allies, Britain has also tabled a number of new proposals to improve implementation in the future.

As a result of the Madrid meeting, a Conference on Confidence- and Security-Building Measures and Disarmament took place in Stockholm between 1984 and 1986 at which Britain and its NATO allies proposed an agreement that would lead to increased openness about military activities, thus reducing the likelihood of hostilities and the risk of miscalculation in times of tension. These proposals were incorporated in an agreement, signed by all 35 participating states in September 1986, which included advance notification and subsequent observation of planned military manoeuvres above specified thresholds and detailed information on their purpose, size, composition and dates, as well as provisions for their verification and on-site inspection.

Berlin

Together with France, the United States and the Soviet Union, Britain is a signatory to the 1972 Quadripartite Agreement on Berlin, which reaffirms the four countries' rights and responsibilities there, and provides for greatly improved travel and communications facilities between West Berlin and the Federal Republic of Germany, the German Democratic Republic and East Berlin, and for the maintenance and development of the ties between West Berlin and the Federal Republic.

Arms Control and Disarmament

Britain is committed to the search for significant balanced and verifiable measures of arms control and disarmament, and has played a prominent part in multilateral disarmament negotiations. Britain is a participating state in the Conference on Disarmament at Geneva, and in the Mutual and Balanced Force Reductions negotiations at Vienna; it also takes an active part in disarmament deliberations under the auspices of the United Nations.

Nuclear Weapons Britain strongly supports the negotiations between the United States and the Soviet Union on nuclear and space arms, which began in Geneva in 1985. It fully shares the agreed objective of working out effective agreements aimed at preventing an arms race in space and terminating it on earth, at limiting and reducing nuclear arms and at strengthening strategic stability.

The British Government welcomed the meeting between the United States and the Soviet Union at Reykjavik in October 1986, at which progress was made towards agreements to eliminate longer-range intermediate nuclear forces (INF) in Europe and to reduce US and Soviet strategic offensive forces by 50 per cent. Britain welcomed the Soviet decision in February 1987 to accept NATO's 1981 zero option offer to eliminate longer-range INF in Europe and to separate this question from space issues. The United States and the Soviet Union are negotiating an agreement that would eliminate globally both longer- and shorter-range INF. Britain takes an active part in NATO consultations on progress in the negotiations in Geneva.

Britain's nuclear deterrent is a minimum force which will remain so after the introduction in service of the Trident system, and is very small in comparison with Soviet nuclear forces. The priority therefore is for reductions in the arsenals of the superpowers. None the less, Britain has made it clear that, if the US and Soviet strategic arsenals were to be very substantially reduced and there had been no significant changes in Soviet defensive capability, Britain would review the position and consider how best it could contribute to arms control in the light of the reduced threat.

Britain has played a leading part in strengthening the regime of non-proliferation of nuclear weapons. It is a party to the most widely supported arms control agreement in existence, the 1968 Non-Proliferation Treaty, which is designed both to stop the spread of nuclear weapons by providing an assurance through international safeguards that nuclear facilities of non-nuclear-weapon states will not be used for making such weapons and to protect the right of all countries to use nuclear energy for peaceful purposes. Britain was the first nuclear-weapon state to conclude an agreement with the International Atomic

Energy Agency, which administers the safeguards. Britain reaffirmed its full support for the Treaty at a review conference in 1985, and has been active in strengthening it by seeking the widest possible adherence. It has also undertaken not to use nuclear weapons against non-nuclear weapon states which are parties to the Non-Proliferation Treaty or other internationally binding commitments not to manufacture or acquire nuclear explosive devices: this assurance would, however, not apply in the case of an attack on Britain, its dependent territories, its armed forces or its allies by such a state in association or alliance with a nuclear weapon state. Britain believes that limiting the security assurances to these states provides further support for nuclear non-proliferation.

Britain is also fully committed to progress towards a comprehensive, verifiable ban on all nuclear tests, and in recent years has tabled papers on verification at the Conference on Disarmament. However, solutions to verification problems need to be clearer before it would be appropriate to resume negotiations.

The British Government thinks that the establishment of nuclear-weapon-free zones in certain parts of the world could contribute to regional security, to non-proliferation and to disarmament in general, provided that nuclear weapons do not already feature in the security of the region involved, that all states concerned are prepared to participate on the basis of agreements freely entered into and in keeping with internationally recognised principles and that the balance of security is maintained. Britain was the first nuclear-weapon state to ratify the two additional protocols to the 1967 Treaty of Tlatelolco establishing a nuclear-weapon-free zone in Latin America. Britain has announced that it is not in its interests to become a party to the three additional protocols to the 1985 Treaty of Rarotonga, which establishes a nuclear-free zone in the South Pacific. However, the Government has made it clear that Britain has no intention of testing, manufacturing or basing nuclear weapons in the area.

Chemical and Biological Weapons Britain is committed to achieving a comprehensive and verifiable world-wide ban on chemical weapons, having abandoned its own chemical warfare capability in the late 1950s. Britain tabled a draft treaty in 1976 and in more recent years has presented a number of major papers to the Conference on Disarmament on compliance and verification of a Convention banning chemical weapons and on the organisation that would be needed to implement the Convention's provisions.

As a result of a British initiative, biological weapons are the subject of the 1972 Convention on Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction. A review conference which took place in September 1986 reaffirmed the value of the Convention and adopted measures which would involve the exchange of information (the arrangements for which were finalised at a meeting of experts in Geneva in 1987) aimed at increasing confidence between the parties and thereby strengthening the authority of the Convention.

Conventional Weapons

Conventional weapons are by far the largest component of national armouries. In the Vienna negotiations on Mutual and Balanced Force Reductions (MBFR), Britain, together with its NATO allies, is working for an agreement with the Warsaw Pact participants which would contribute to a more stable relationship and strengthen peace and security in Europe. This would require an approximate parity between NATO and Warsaw Pact forces in central Europe where the Warsaw Pact troops currently outnumber those of NATO by at least 200,000. Progress in the talks has been slow, mainly because of a long-standing disagreement over the size of Eastern forces in the reduction area. In an attempt to break the deadlock, the West tabled new proposals in December 1985 which.

based on ideas put forward by Britain and the Federal Republic of Germany, involve initial reductions of 5,000 US and 11,500 Soviet troops without insisting on prior agreement on force levels. Britain is also participating with its NATO partners in discussions with the Warsaw Pact in Vienna aimed at agreeing a mandate for negotiations on increased conventional stability at lower force levels throughout the whole of Europe.

Concerned about the rising scale of military expenditure in the world, Britain has supported proposals at the United Nations for the balanced and verifiable reduction of military budgets. Britain and its allies and partners have participated actively in developing a standardised system for reporting annual military expenditure to establish a basis for future comparison. Britain welcomes efforts to promote increased openness in the reporting of military expenditure and to this end has submitted figures on its military budget. British experts have taken part in a number of UN studies on aspects of arms control and disarmament.

Britain and the United Nations

Support for the United Nations and the purposes and principles of its Charter has been a cornerstone of British policy since 1945. Britain sees a strong and effective United Nations as a means of pursuing and achieving many of its foreign policy objectives such as the peaceful resolution of disputes, disarmament and arms control, the protection of human rights and the promotion of the rule of law. It believes that all member states have a responsibility to ensure that the organisation's efforts are devoted to the furtherance of the principles enshrined in the Charter, and has suggested reforms to make it more effective.

Keeping the Peace

The maintenance of international peace and security was the primary purpose envisaged for the United Nations at the time of its establishment. Britain believes that it is appropriate for the United Nations, as the only forum in which almost the whole international community is represented, to seek to resolve disputes which threaten peace and stability whether on a regional or world scale. As a permanent member of the Security Council, Britain plays an active part in the Council's work and has sought to develop and improve its role in the peaceful settlement of disputes.

In 1985, for example, Britain argued that the Council should engage in more preventive diplomacy in an effort to help countries engaged in a dispute before it reached an acute stage. Britain proposed a new form of Council meeting of a private and formal nature which would include states engaged in the dispute under discussion but would minimise opportunities for propaganda. Britain has also put forward proposals for rationalising the work of the General Assembly.

Britain strongly supports the United Nations' peacekeeping role, is the major contributor to the UN Force in Cyprus and has provided logistic support to the UN Interim Force in Lebanon.

Human Rights

Britain has consistently supported the efforts of the United Nations to promote human rights throughout the world through the establishment of internationally accepted standards. The UN Charter itself includes among the purposes of the United Nations the achievement of international co-operation in promoting and encouraging respect for human rights and fundamental freedoms for all without distinction as to race, sex, language or religion. Britain believes that this and the subsequent practice of the United Nations has established human rights as a legitimate matter for international concern and that the UN Charter imposes on member governments an obligation to

co-operate with appropriate UN bodies in the pursuit of policies which promote

human rights.

Fundamental human rights provisions are set out in the Universal Declaration of Human Rights proclaimed by the General Assembly in 1948, and in the two International Covenants (one on Economic, Social and Cultural Rights and the other on Civil and Political Rights) which impose legal obligations on those who ratify them and which came into force in 1976. Britain played a large part in their drafting and ratified the two Covenants in 1976. It also accepted the optional Article 41 of the Covenant on Civil and Political Rights recognising the competence of the Human Rights Committee established under this Covenant to receive and consider state complaints. (It is not party to the Optional Protocol to the Covenant which recognises the right of individuals to submit communications to the Committee; Britain recognises the right of individual petition under the European Convention on Human Rights.) Britain is also a party to other international instruments, including conventions on the elimination of racial discrimination and of discrimination against women, prevention of genocide, the abolition of slavery, the status of refugees and stateless persons, the political rights of women, and consent to marriage. In March 1985 Britain signed the UN Convention against Torture which was adopted with British support by the General Assembly in December 1984.

The adoption of conventions and covenants in itself is insufficient to secure the protection of human rights. It is up to states themselves to do that. Britain constantly urges states to adhere to those standards which have been agreed internationally as the basis of that protection. Britain has also supported the establishment of additional mechanisms such as the appointment of Special Rapporteurs or Representatives of the UN Commission on Human Rights to

investigate human rights abuses in specific countries or globally.

Britain plays a leading part in the discussion of human rights in the various multilateral fora provided by the United Nations. In 1987 it was re-elected to the UN Commission on Human Rights for a further three-year term, and the British delegation will continue to build on the initiatives taken there. There are British experts on the UN Sub-Commission on Prevention of Discrimination and Protection of Minorities, on the Human Rights Committee (which monitors the implementation of the provisions of the International Covenant on Civil and Political Rights by the parties to it), on the Committee on the Elimination of Racial Discrimination established under the Convention on the Elimination of All Forms of Racial Discrimination and on the UN Commission on the Status of Women.

Economic and Social Affairs

The UN Charter states that 'the promotion of the economic and social advancement of all peoples' is one of the principal aims of the United Nations, and an estimated 90 per cent of the organisation's efforts, in terms of resources and personnel, is now employed to this end. With the growing concern for the problems of development, the main emphasis has become increasingly the provision of direct assistance for member states. The UN system is now the largest single source of technical assistance for developing countries, as well as providing considerable emergency and relief aid, assistance for refugees and help in combating the problems associated with drug production, trafficking and abuse. (The provision of capital assistance has been generally confined to the World Bank group and regional development banks whose operations are usually considered separately from those of the rest of the UN system.)

Successive British governments have affirmed their support for the functional and developmental work of the United Nations. Britain is the sixth largest contributor to the UN's regular budget, providing some £23.5 million, 4.86 per cent of the total, in 1986. In addition, it contributed some £7.7 million to the

World Health Organisation, £3·9 million to the International Labour Organisation and £7·4 million to the Food and Agriculture Organisation. Britain provides considerable contributions to the UN's voluntary funds, donating £21 million in 1986 for the UN Development Programme, £17·3 million for the UN High Commissioner for Refugees, £5 million for the UN Relief and Works Agency for Palestinian Refugees, £6·7 million for the UN Children's Fund, £4·5 million for the UN Fund for Population Activities, and about £0·5 million for the World Food Programme. Britain is also a major donor to the UN Fund for Drug Abuse Control.

In the deliberations of the governing bodies of the various agencies and programmes, Britain encourages the deployment of the resources towards the poorest countries and the poorest communities in the developing world. It also seeks to promote the most efficient use of UN development resources and improvements in the co-ordination, control and effectiveness of the system, in order to avoid unnecessary duplication by the various agencies.

In December 1985, Britain withdrew from the United Nations Educational, Scientific and Cultural Organisation (UNESCO). The decision followed a period of notice of withdrawal during which Britain worked within UNESCO to secure its reform. Although Britain supports the ideals and objectives contained in UNESCO's constitution, it had major doubts about the effectiveness with which the Organisation was pursuing them. Aid amounting to \$£6.4 million, representing funds saved from the withdrawal, has been allocated to a number of educational, scientific and cultural programmes in developing countries.

Other International Organisations

Britain is a member of many other international organisations, including those concerned with the management of the world economy. It is a founder member of the International Monetary Fund, established in 1945 (along with the World Bank) to regulate the international financial system and to provide a source of credit for member countries facing balance of payments problems, and has welcomed the creation by the Fund of facilities to provide special assistance to developing countries experiencing financial or trading difficulties. The British Government strongly supports the objectives of the current Uruguay Round of negotiations conducted under the auspices of the General Agreement on Tariffs and Trade; launched in 1986 they are designed to liberalise world trade further and promote its growth especially for developing countries, and are focusing on a number of specific areas such as agriculture and services.

Britain is also a member of the Organisation for Economic Co-operation and Development (OECD). An instrument for intergovernmental co-operation among 24 industrialised countries, the OECD's aims are to promote policies designed to achieve the highest sustainable economic growth and employment, and a rising standard of living in member countries while maintaining financial stability, and thus to contribute to the development of the world economy; to assist developing countries; and to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

Other organisations to which Britain belongs or extends support are more restricted in their operations and include the regional development banks in Africa, the Americas and Asia and specialist technical, agricultural and medical institutions.

With 20 other nations Britain is a member of the Council of Europe, which aims to provide the widest possible European forum for the discussion of political, economic, social, cultural and scientific issues with a view to achieving greater unity between its members. Membership is open to any European

parliamentary democracy which accepts the principles of the rule of law and the protection of human rights. The Council was responsible for the adoption in 1950 of the European Convention on Human Rights, to which Britain became a party in 1951. In 1985, with Britain's support, the Council adopted a declaration reaffirming its commitment to respect for human rights and calling upon all countries to comply fully with their international obligations in this area. In January 1986 Britain renewed its acceptance for a further five years of the optional articles of the Convention which recognise both the right of individual petition and the compulsory jurisdiction of the European Court of Human Rights.

Development Co-operation

The basic objective of Britain's aid programme is the promotion of sustainable, non-inflationary economic and social progress and the alleviation of poverty in developing countries. Britain's ability to support development overseas is dependent on the state of its own economy, and alongside development objectives, due weight is given to political, commercial and industrial considerations in the deployment of aid resources.

Official aid is only one aspect of Britain's support for overseas development. Private investment is also important and benefited from the abolition of exchange controls in 1979. Britain is one of the world's largest overseas investors: in 1986 estimated net outward direct investment by British companies in developing countries amounted to £1,850 million out of a total of £10,000 million. Such investment is important not only because of the money provided but because of the transfer of skills, management expertise and the development of indigenous resources which accompany it. Trade, too, is vital, developing countries providing 13 per cent of British imports in 1986.

Aid is also provided by voluntary agencies which concentrate their activities in the poorest countries. Some of their activities receive substantial support from the official aid programme.

In order to assist the poorest and most heavily indebted countries in sub-Saharan Africa, Britain has proposed international action to reduce interest rates payable on these debts to well below market levels, to convert aid loans into grants and to allow for longer repayment periods in rescheduling other official loans

Britain's aid represents part of a wider Western effort to help developing countries. In 1986 total net official development assistance disbursed by the 18 countries belonging to the OECD's Development Assistance Committee, amounted to \$37,021 million. Members of the Organisation of Petroleum Exporting Countries provided \$4,540 million and countries belonging to the Council for Mutual Economic Assistance (the Soviet bloc countries) an estimated \$4,200 million.

Official and Other Flows In 1986 total official flows 1 of aid amounted to some £1,420 million net, of which £1,193 million represented official development assistance and £227 million other official flows. Of the former, bilateral aid accounted for £697 million including technical co-operation funds of £276 million; some £496 million was provided through multilateral agencies. Repayments of capital came to £84

Total official flows' is an international reporting concept. Its main component—official development assistance—is defined as official flows for development purposes with a grant (concessional) element of 25 per cent or more. The main British reporting concept is 'public expenditure on overseas aid' which differs from total official flows by excluding certain British flows which benefit developing countries but are not considered developmental, and by recording some contributions to multilateral agencies at a different time. All concepts can be measured before (gross) or after (net) deducting capital repayments.

million; another £25 million of capital repayments and £2 million of interest were cancelled. Payment on interest came to £66 million.

Aid performance is commonly measured as a proportion of gross national product (GNP), particularly with reference to the two UN targets for resource transfers to developing countries: these state that net official development assistance should equal 0.7 per cent of GNP and that combined private and official flows should equal 1 per cent of GNP. Britain accepts in principle the first of these but is not committed to a timetable for reaching it. Successive governments have made it clear that progress must depend on Britain's economic situation and upon other calls on its resources. In 1986 net official development assistance amounted to £1,193 million, 0.32 per cent of GNP, close to the total 0.36 per cent for donor countries belonging to the OECD's Development Assistance Committee. Total net financial flows from Britain to developing countries amounted to £5,015 million, 1.34 per cent of GNP.

Bilateral Aid

Britain's aid programme began as part of the discharge of its responsibilities towards dependent territories, and the main emphasis remains on the Commonwealth, which includes among its members some of the world's poorest countries. In 1986, £847 million of gross public expenditure on overseas aid was disbursed bilaterally. Some £535 million (76 per cent of that directly allocated to countries) went to the Commonwealth, including £46 million to Britain's remaining dependencies, which are a first charge on the aid programme. Aid was disbursed regionally as follows: Asia £302 million, Africa £285 million, the Americas and the Caribbean £60 million, Pacific (Oceania) £32 million, Europe £19 million and the Middle East £11 million. (A further £136 million was not allocable by region.)

The country receiving the largest amount (£143 million) was India. Other major recipients included Malaysia, Bangladesh, Zambia, Kenya, Sudan, Pakistan and Ghana. In line with the policy of concentrating aid on the poorest countries, $62 \cdot 5$ per cent of gross bilateral aid went to the poorest 50 developing countries (excluding states with a population under 100,000 and dependencies).

Financial Aid

Gross bilateral financial aid in 1986 totalled £520 million. Aid for individual projects totalled £401 million, the principal sectors supported being agriculture, fisheries and forestry (£69 million), manufacturing (£7 million), energy (£106 million), mining (£57 million), transport and communications (£46 million) and social and community services (£80 million). Non-project aid totalled £119 million, of which £56 million was for import financing, £8 million for food aid, £29 million for debt relief, £8 million for budgetary support and £19 million for disaster relief. About 99 per cent of the ODA's financial aid in 1986 was provided in grants. Since 1975, development aid to the poorest countries has been on grant terms. In 1984 these terms were extended to the majority of recipients of British financial aid, and simplified loan terms were introduced for those countries still not qualifying for grants. Britain has more than fulfilled the 1978 resolution of the United Nations Conference on Trade and Development on easing the terms of financial aid. Britain has concluded agreements to remove the burden of past aid loans worth over £1,000 million from 22 of the poorest countries.

Financial aid is normally tied to the purchase of goods, equipment and services from Britain (58 per cent in 1986), although there may be a substantial element for local costs and foreign content in contracts financed from tied aid in appropriate cases. Commitments can be untied, if the recipient agrees, to the extent that goods can be purchased either from the poorest developing countries or from Britain.

Aid Projects Britain's aid programme aims to promote development by providing essential economic infrastructure in areas such as communications and power supplies; by improving human resources through education, health services or housing; and by raising incomes directly through improvement of agricultural and industrial productivity. Most aid projects also try to help local organisations to take increasing responsibility for future development through training in the country concerned or in Britain. Major projects currently being supported by Britain through the aid programme include improved tsetse and trypanosomias control in Somalia to free 3,900 sq km (1,500 sq miles) from tsetse infestation and to lead to an increase in the production of milk and cattle and camel meat. ln Bangladesh, Britain is to contribute £8 million to a major international effort to support the Government's population programme, the aims being to reduce infant mortality by up to 25 per 1,000 live births, to save mothers' lives, and to help reduce population growth by increasing the use of contraceptives. In Nepal, in addition to the rehabilitation of 40 km (25 miles) of road, support is being given to a forestry project designed to produce 700,000 cubic metres (24.7 million cubic feet) of fuel wood and 500,000 tonnes of leaf fodder; over 500,000 people will benefit and the project will also reduce the risk of further deforestation of the hills.

Under the Aid and Trade Provision, which is designed to match the mixed credit practices of other donors by providing aid in combination with export credits to support sound development projects which offer commercial opportunities to British exporters, expenditure amounted to £78 million. In November 1985, the Government introduced a new soft loan facility under the Provision in order to respond to the preferences of certain developing countries and to counter the practices of competitors. Increased funds are being made available to enable British companies to double by 1988–89 the business won annually with the Provision. As a matter of general policy, however, the Government would like to see a reduction in the use of mixed credit by all exporting nations in the interests of more open competition and freer trade.

The Commonwealth Development Corporation is empowered to invest in Commonwealth countries which have achieved independence since 1948, the remaining British dependencies and, with ministerial approval, in other developing countries. Its aim is to assist in the development of these countries' economies. By the end of 1986, the Corporation had invested some £675 million out of a total commitment of £972.2 million. Of this total, £436.8 million was in Africa, £272.4 million in Asia, £155.3 million in the Caribbean and Latin America and £103.9 million in the Pacific Islands. Commitments approved in 1986 totalled over £100 million, of which 47 per cent was allocated to agriculture, fisheries and forestry.

Technical Technical co-operation, the transfer of specialised knowledge and skills from Co-operation country to country, complements financial aid, expertise often being essential to the success of a programme of financial aid or investment. Expenditure on it has increased in recent years and was £291 million, 34 per cent of gross bilateral aid, in 1986. This included £72 million for the provision of expert personnel, including volunteers, £60 million for students and trainees in Britain and overseas, £42 million for the British Council's education and training programmes, £20 million for research services and projects, £33 million for consultancy services, and £10 million for the provision of equipment and supplies.

At the end of 1986 there were 1,750 people financed by Britain (other than volunteers) working in developing countries, of whom 673 were engaged in the field of education, 300 in agriculture and allied fields, and 164 in health services. In addition, under the British Volunteer Programme there were 1,258 volunteers, mainly graduates or otherwise qualified, working in developing countries, about half in education. Recruitment, training and placing overseas is undertaken by four voluntary bodies (Catholic Institute for International Relations, International Voluntary Service, United Nations Association International Service and Voluntary Service Overseas), the bulk of their costs being met by the British Government.

Britain receives large numbers of students and trainees from developing countries. Some 12,200 were financed in 1986 under regional programmes of technical co-operation, by awards under the Commonwealth Scholarship and Fellowship Plan, and under British Council schemes. In early 1983 the Government decided to make an additional £46 million available (some outside the aid programme) over the next three years for the support of overseas students. A new scheme for students from Commonwealth developing countries was introduced in 1986 (see p 83).

To support development overseas, the Government maintains a specialist scientific organisation, the Overseas Development Natural Resources Institute (formed in 1987 as the result of a merger between the Tropical Development and Research Institute and the Land Resources Centre), and provides support for many others, including overseas units/divisions of the government-financed Transport and Road Research Laboratory, the Building Research Establishment, the British Geological Survey, the Overseas Surveys Directorate of the Ordnance Survey, and of Hydraulics Research Ltd. These organisations provide specialist information, advice and experts for service overseas, and undertake field and laboratory research investigations.

Aid Evaluation

To ensure the most effective use of aid resources, the objectives and content of country aid programmes are determined through a systematic programming exercise which takes account of the circumstances of the recipient country, its development priorities, the activities of other donors, and what Britain can offer by way of expertise, goods and services. In addition, individual projects are carefully appraised before approval, monitored during progress against quantifiable targets and assessed in a project completion report, while a programme of special evaluation studies, often undertaken by independent evaluators, examines in more detail the achievements of particular projects and of special issues. The Overseas Development Administration also supports international studies of aid effectiveness.

Multilateral Britain is a major subscriber to the World Bank group of institutions—the Aid International Bank for Reconstruction and Development, the International Development Association (IDA) and the International Finance Corporation. The resources of the IDA, which provides interest-free loans to developing countries unable to service loans on conventional terms, are replenished at roughly three-year intervals. The British commitment to its Eighth Replenishment (July 1987 to June 1990) is £524 million towards a total of \$12,000 million. Britain contributes to the resources of the Asian Development Bank, the Inter-American Development Bank, the Caribbean Development Bank and the African Development Bank. Its contribution to the United Nations Development Programme for 1986 was £21 million, and it is the largest source of expertise and the second largest of fellowships and equipment provided under the Programme. There is also a major British contribution to other UN agencies and programmes, including the World Health Organisation's special programme for the prevention and control of AIDS. Some 44 per cent of British multilateral aid is now channelled through the European Community's aid programme. Britain's commitment to the sixth European Development Fund established by the third Lomé Convention, covering the period from 1985 to 1989, is over £800 million at present exchange rates.

Voluntary Agencies Voluntary agencies provided an estimated £130 million net for work in developing countries in 1986, mainly on agriculture, health and nutrition, education projects, and emergency relief operations.

There are about 200 agencies in all, including church and missionary societies; among the best known are Oxfam, Christian Aid, War on Want, the Save the Children Fund, the British Red Cross Society and the Catholic Fund for Overseas Development. The funds are raised largely through regular donations and collections, legacies and trading activities and, particularly in response to specific emergencies, through appeals in the media. The Government cooperates with the agencies in various ways, especially in immediate post-disaster relief and rehabilitation operations and through its Joint Funding Scheme. Under this it meets half the cost of selected development projects undertaken by the agencies and aimed at helping the poorest people. Such projects include community health, non-formal education, the improvement of food supplies, agricultural training, water supply and irrigation. Expenditure on the Scheme in 1986 was some £5.4 million.

Voluntary agencies' work on behalf of refugees overseas also receives official support.

4 Defence

The primary objectives of Britain's defence policy are to ensure the country's security, to preserve peace with freedom, and to enable it to pursue, by just and peaceful means, its legitimate interests both within Britain and overseas. Britain's policy is based on the North Atlantic Treaty Organisation (NATO), a defensive alliance whose collective strength provides each of its members with far greater security than any could achieve alone. Britain is fully committed to NATO and its strategy of deterrence and, in assigning directly or indirectly to NATO the vast majority of its forces and over 95 per cent of its defence budget, makes a major contribution to the Alliance's deterrent capabilities. It also plays a full part in the Alliance's efforts, complementary to its defence preparations, to negotiate balanced and verifiable arms control agreements and to reduce tension so as to achieve a more just and lasting peace in Europe.

The defence budget for 1987–88 is nearly £18,800 million. In 1986 Britain's defence expenditure as a proportion of gross domestic product was an estimated 5·1 per cent, the highest in NATO after the United States and Greece.

Within the budget, resources have been switched from manpower to equipment (some 45 per cent of Britain's defence expenditure is devoted to equipment); manpower is being used with increased effectiveness, particularly by diverting personnel from non-operational support to front-line tasks; and measures are in hand to improve efficiency and value for money, especially through increased competition in the purchase of equipment.

Britain's defence programme is designed to ensure the most effective use of these resources in pursuit of its commitment to Western security, the main threat to which is posed by the nuclear and conventional forces of the Warsaw Pact. In recent years the structure and balance of the defence forces have been improved to increase their combat effectiveness and so enhance Britain's contribution to NATO. As a result of these improvements Britain also has the flexibility to respond quickly and effectively to challenges to its interests outside the NATO area.

Organisation and Management The Ministry of Defence was reorganised in 1985 to improve policy formulation and to tighten control over the defence budget, while devolving responsibility for day-to-day management to the Services and the Procurement Executive.

The new structure established an integrated military/civilian Defence Staff responsible for defence policy and strategy, operational requirements and commitments; it reports to the Chief of Defence Staff and the Permanent Under-Secretary through a Vice-Chief of Defence Staff. An Office of Management and Budget reporting to the Permanent Under-Secretary is concerned with budgetary control and resource management. Each Service Chief of Staff reports through the Chief of Defence Staff to the Secretary of State on matters related to the fighting effectiveness, management, efficiency and morale of his Service. The management of the three Services is exercised through executive committees of the Service Boards, which are chaired by their respective Chiefs of Staff, and act in accordance with centrally determined policy objectives and budgets. The Procurement Executive deals with the purchase of equipment, including equipment collaboration with allies and friendly nations.

A management information system enables ministers and senior management to scrutinise the activities, costs and efficiency of all areas of the Ministry. Increased awareness of the need to manage resources cost-effectively is being promoted, with managers becoming more accountable for the resources allocated.

NATO's Strategy

NATO's security policy is based on deterrence and defence, its aims being to prevent war or, should aggression occur, to respond at the right level to make the aggressor quickly cease his attack and withdraw. This strategy, called flexible response, is based on three key principles: a manifest determination to act jointly and to defend the Treaty area against all forms of aggression; a recognisable capability to respond effectively at all levels of aggression, and to escalate, if necessary, in order to convince the Warsaw Pact of NATO's resolve: and a flexibility that prevents the Soviet Union from predicting with confidence NATO's specific response to aggression but which would leave it in no doubt of the grave risk it would run in resorting to the use or the threat of force against the Alliance. These principles in turn are built on a combination of political will and military capacity. The latter comprises the following elements, which must be both visible and credible: adequate conventional forces deployed well forward to deter any Soviet non-nuclear attack; theatre nuclear forces to enhance deterrence by providing a link between conventional and strategic nuclear forces, and deterring the use of similar weapons by the other side; and strategic nuclear forces to provide the ultimate deterrent by having the ability to inflict unacceptable damage against a potential enemy, even after suffering a pre-emptive first strike.

To maintain the Alliance's defence and deterrent capacity, NATO members have agreed, among other things, to improve their conventional defences, including a doubling of funds for infrastructure projects such as airfield and port facilities and communications systems, an increase in ammunition stocks and the continued exploitation of new technology (including the co-ordination of research and procurement). NATO's intermediate-range nuclear forces are also being modernised. Britain is actively involved in these measures, and is also updating its own strategic nuclear capability.

The NATO allies have acknowledged the continuing Soviet threat to Western interests outside the NATO area and recognised the need, in the last resort, for those members with the means to do so to take action in consultation with their allies. At the same time, the NATO allies recognise the right of regional countries to self-determination and, as far as possible, to defend themselves. In the Government's view, these principles can best be satisfied through the provision of military assistance, including training courses in Britain, the loan of Service personnel and the sale of defence equipment. Britain's commitment to these principles is also demonstrated by periodic deployments, exercises and the maintenance of a capability to intervene militarily in the last resort.

Britain's NATO Contribution

Britain's contribution to NATO is concentrated in areas where it can best help to maintain Alliance security, principally NATO's strategic nuclear deterrent and the defence of the Central Region of Europe, the Eastern Atlantic and English Channel, and the British 'home' base and its immediate approaches.

Britain's strategic forces, now equipped with improved Polaris missiles (to be replaced by a Trident force in the 1990s) represent an essential European element in NATO's deterrent strategy, by providing a second and independent centre of decision-making within the Alliance and an important insurance against any Warsaw Pact misconception that the United States would not be prepared to use its nuclear forces in Europe's defence. Britain has also committed its other nuclear systems to NATO, and is continuing to provide

DEFENCE

bases for ground-launched cruise missiles which, with Pershing II missiles, the United States began deploying in Europe from 1983 in order to modernise NATO's intermediate-range nuclear forces.

Britain's decision to update its strategic deterrent has led to increased calls from some groups within the country for unilateral nuclear disarmament, both on the grounds of cost and as an example to others. While the Government understands the widespread concern regarding nuclear war, it believes that the best way of preventing war between East and West—nuclear and conventional is firm support for NATO's policy of nuclear deterrence and efforts to relax East-West tensions, including the pursuit of arms control, which have helped to maintain peace in Europe for more than 40 years. The Government believes that unilateral nuclear disarmament by Britain would weaken NATO's ability to deter aggression in the face of the continuing Soviet nuclear and conventional threat, without significantly altering the views on arms control of other states which possess, or may think of acquiring, nuclear weapons.

Virtually all of the Royal Navy, the largest navy among the European NATO partners, is earmarked for assignment to the Alliance and permanent contributions are made to NATO's two standing naval forces, in the Atlantic and the Channel, and to its Mediterranean force when activated. The British Army of the Rhine (BAOR) and Royal Air Force (RAF) Germany are stationed in the Federal Republic of Germany. BAOR's combat element consists of three strong divisions (with supporting artillery), one division containing three armoured brigades and the two other divisions each containing two armoured brigades and an infantry brigade (one of the latter being an air-mobile brigade that will convert into an armoured formation in 1988). Additionally, a reinforcing division comprising one regular and two Territorial Army brigades is located in Britain. On mobilisation, BAOR's peacetime strength of around 55,000 would be almost trebled by rapid reinforcement from Britain. Nearly all the RAF's combat and support aircraft are assigned to NATO. RAF Germany's 14 squadrons (two of helicopters) are equipped for strike/attack, reconnaissance, close support, air defence and air transport roles, while RAF Strike Command, which is based in Britain, provides forces for these and for the maritime patrol and antisubmarine warfare roles.

Britain also provides important elements of NATO's specialist reinforcement forces, including shipping and marine commando units forming the bulk of a British-Netherlands amphibious force, ground and air units for the Allied Command Europe Mobile Force, and several squadrons for NATO's Strategic Air Reserve.

Forces from all three Services are stationed at Gibraltar, which, positioned at the western entry to the Mediterranean, is an important base for NATO.

Europe and the Alliance

Britain's contribution to NATO is part of the wider effort which the European allies make to the defence of the West, including the protection of their common interests outside the NATO area. Since the security of each NATO member is inextricably linked to that of the others, substantial European forces are essential to the defence of the North American continent. There is no substitute for the United States' nuclear guarantee nor for North American forces stationed in Europe in peacetime; but, of NATO's ready forces in Europe, the European allies provide about 90 per cent of the manpower, 80 per cent of combat aircraft, 85 per cent of tanks and 95 per cent of artillery, as well as 70 per cent of the fighting ships in European and Atlantic waters. They also provide some 7 million men and women on active and reserve duties and are able to supply around 900 military facilities for United States forces and essential support requirements such as communications and transport.

Britain and its European allies recognise the value of co-operation and

organisations in Great Britain. It also gives the police powers to arrest people suspected of being involved in terrorism (whether international or relating to Northern Ireland) without warrant and hold them for 48 hours and, with the approval of the Secretary of State, for up to a further five days. Both Acts have been subject to independent review. The Emergency Provisions Act is renewable every six months and the Prevention of Terrorism Act annually; the latter has a total life of five years.

The security forces in Northern Ireland are subject to the law and can be prosecuted for criminal offences. Procedures for handling complaints against the police involve two independent elements: the Director of Public Prosecutions if allegations of criminal conduct are made; and the Police Complaints Board for Northern Ireland when complaints relate only to disciplinary offences.

The Criminal Jurisdiction Act 1975 makes it possible to try in Northern Ireland a person accused of certain offences committed in the Irish Republic. It also enables evidence to be obtained in Northern Ireland for the trial of offences in the Irish Republic. Reciprocal legislation is in force in the Irish Republic. One of the aims of the Anglo-Irish Agreement signed in November 1985 is to improve security co-operation in combating terrorism. The accession of the Irish Government to the European Convention on the Suppression of Terrorism in 1986 is expected to increase the prospects of securing extradition from the Republic of people accused or convicted of terrorist crimes in Britain.

Britain attaches importance to international action to combat terrorism and plays an active part in the work of a group of European Community ministers (known as 'Trevi') which facilitates the confidential exchange of information and intelligence about terrorism affecting member countries. Britain believes that there should be no substantive concessions to terrorist demands and that international co-operation should take place on tracking down and arresting terrorists and on impeding the movement of international terrorists from one country to another.

THE POLICE

In enforcing the law, police action rests mainly upon common consent, for there SERVICE is only a small number of officers in relation to the population (roughly one officer to every 400 or so people). Officers do not normally carry firearms (their only weapon is a truncheon) and there are strict limitations on police powers.

The powers of the police in England and Wales have been modernised and clarified by the Police and Criminal Evidence Act 1984, which at the same time has enhanced safeguards for the citizen. The Act does not generally extend to Scotland, where separate legislation applies.

The interception of communications on behalf of the police is regulated by the Interception of Communications Act 1985, which establishes a statutory framework governing the interception of messages in the telecommunications and postal services and sets out the grounds on which certain Secretaries of State are empowered to authorise interception. So far as the police are concerned, these are the prevention and detection of serious crime, and, in some instances, the protection of national security. The other ground for interception is the safeguarding of the economic well-being of the United Kingdom. Interception outside the procedures established by the Act is a criminal offence.

Forces Each of Britain's 52 police forces is responsible for law enforcement in its area, but there is constant co-operation among them. In order to improve their effectiveness, forces pay particular attention to ensuring that manpower and other resources are used as efficiently as possible.

Outside London most counties (regions in Scotland) have their own police forces, though in the interests of efficiency several have combined forces. The policing of London is in the hands of the Metropolitan Police Force, with DEFENCE 101

by industry, leads to nationally recognised qualifications for large numbers of Service personnel.

Commissioned ranks receive initial training at the Britannia Royal Naval College, Dartmouth; the Royal Military Academy, Sandhurst; or the Royal Air Force College, Cranwell. This is followed by specialist training, often including degree courses at university or Service establishments. Higher training for officers is provided by the Royal Naval College, Greenwich, the Army Staff College at Camberley, and the Royal Air Force Staff College at Bracknell. Selected senior officers and civilian officials from Britain and other countries attend the Joint Services Defence College, Greenwich, and the Royal College of Defence Studies, London, which provides the wider background necessary for those destined to fill higher appointments.

Operational training includes joint-Service and inter-allied exercises. Training is provided for the armed forces of allied, Commonwealth and other countries.

Reserve Forces

Reserve and auxiliary forces are an integral part of the armed forces. In addition to supplementing the regular forces on mobilisation with trained personnel able immediately to take their places either as formed units or as individual reinforcements, they form an important link between the Services and the civil community. Some members of these forces have a reserve liability following a period of regular service (regular reserve); others are volunteers who train in their spare time. Volunteer reserve forces include the Territorial Army, whose role is to reinforce the ground forces committed to NATO and help to maintain a secure home base in the United Kingdom; its strength is being increased over the remainder of the decade. Set up in 1985, a Home Defence Force, linked to the Territorial Army and with a planned strength of about 5,000 by 1990, would on mobilisation assist in guarding important civilian and military installations. Other volunteer forces include the Royal Naval Reserve, the Royal Marines Reserve, the Royal Naval Auxiliary Service, the Royal Auxiliary Air Force and the Royal Air Force Volunteer Reserve. All have been expanded substantially in recent years or are planned to increase in strength in the near future. The Ulster Defence Regiment (see p 100) is also a reserve force. At the beginning of 1987 regular reserves totalled 217,900, and volunteer reserves and auxiliary forces 95,700. Cadet forces, which make a significant contribution to recruitment to the regular forces, totalled 144,300.

COMBAT
FORCES
Strategic
Nuclear Forces

The Royal Navy's Polaris force comprises four nuclear submarines, each of which can remain on underwater patrol for long periods and is capable of carrying 16 nuclear-armed Polaris missiles. The missile system, now incorporating improvements designed to penetrate anti-ballistic missile defences, will maintain the force's effectiveness until it is replaced in the mid-1990s by a Trident nuclear submarine force which will extend Britain's nuclear deterrent into the twenty-first century. The Trident programme, which will cost an estimated £9,265 million (at 1986–87 prices), is expected to account on average for about 3 per cent of the defence budget (about 6 per cent of the equipment budget) during its procurement period. It is also estimated that more than 60 per cent of the money for the project will be spent in Britain. The first Trident submarine was ordered in 1986.

Royal Navy General Purpose Combat Forces Britain's naval forces, while capable of operating throughout the world when required, are concentrated in the Eastern Atlantic and English Channel where they constitute the majority of forces immediately available to NATO. They include three Invincible-class anti-submarine warfare carriers, carrying Sea King anti-submarine and airborne early warning helicopters, Sea Harrier aircraft, and Sea Dart defence missile systems; 15 nuclear-powered attack

submarines (with another three under construction or on order) equipped with torpedoes and the Sub-Harpoon anti-ship missile, and 13 diesel electric-powered submarines, which will be replaced by the more powerful Upholder class; and about 50 destroyers and frigates for air defence, anti-submarine and general purpose duties. Most of these have weapon-carrying helicopters (principally the Lynx), and armaments installed include the Exocet surface-to-surface, Sea Wolf point air defence, Sea Dart area air defence and Sea Skua anti-ship missile systems, and the Ikara anti-submarine guided weapons system. There is also an amphibious capability comprising two assault ships, Fearless and Intrepid, supporting vessels and the Royal Marines. Other ships include about 40 mine counter-measures vessels, including 11 of the new Hunt and 12 of the River classes, and offshore patrol vessels for protecting fishing interests and oil and gas installations.

In coming years Britain's contribution to NATO's maritime defence will be based increasingly on an enhanced anti-submarine warfare element made up principally of nuclear-powered attack submarines and advanced diesel-electric conventional submarines, of which four have been ordered, one being under construction; the Type 23 frigate (the first of four that have been ordered will enter service in the early 1990s); and Nimrod maritime patrol aircraft, equipped with Searchwater radar and armed with Harpoon anti-ship missiles and Sting Ray anti-submarine torpedoes. In addition, the surface fleet is being strengthened by 14 multi-role Type 22 frigates: eight are already in service and the other six are being built. New or improved weapons will include the Harpoon missile for the last four Type 22 and for the new Type 23 frigates, the Sea Eagle anti-ship missile, the Goalkeeper close-in weapon system, and the Spearfish torpedo for submarines. The vertically launched Sea Wolf point-defence and the Sea Dart surface-to-air missiles are also being developed or improved.

Army Combat Forces Most of the Army's combat forces, consisting of BAOR and the forces stationed in Britain, have primary roles in support of NATO. Others are stationed overseas in support of treaty commitments.

All three armoured divisions in BAOR are equipped with the Chieftain or Challenger main battle tanks. Seven of the 12 regiments in Europe will be equipped with Challenger. The war maintenance reserve will be strengthened with some of the Chieftains replaced in the front line by Challengers. Improvements for both tanks will be the fitting of thermal imaging sights and new 120-mm high-pressure guns. Tracked combat reconnaissance vehicles include the Scorpion light tank with a 76-mm gun, Scimitar with a 30-mm cannon and Striker which mounts the Swingfire long-range anti-tank missile. The primary tracked armoured personnel carrier is the FV432. The continuing purchase of the Saxon armoured personnel carrier and the introduction of the Warrior mechanised combat vehicle will increase the mobility of infantry. The crew-portable Milan anti-tank missile is deployed throughout BAOR (front-line and all regular and Territorial Army reinforcing battalions) and will be joined shortly by the man-portable light anti-tank weapon, LAW80. Lynx helicopters are fitted with an improved TOW long-range anti-tank weapon. The multiplelaunched rocket system will enter service at the end of the decade. Tactical nuclear support is provided by the Lance missile and dual-capable artillery. Integral air defence is based on the Rapier missile, improved tracked versions of which are being introduced, the Starstreak missile and the Javelin manportable missile, a development of the Blowpipe missile which it is replacing. Important improvements in command, control and communications systems include the PTARMIGAN secure communication and the WAVELL computerised information systems now entering service in BAOR; a computer-based artillery targeting system (BATES) is planned to enter service by the end of the 1980s.

DEFENCE 103

Royal Air Force General Purpose Forces

Phantom and Lightning aircraft, together with Rapier and Bloodhound surface-to-air missiles, provide Britain's air defence, assisted by Shackleton airborne early warning aircraft and the ground radars of the United Kingdom Air Defence Ground Environment system. The Tornado GR1 has replaced Jaguars and Vulcans in the strike/attack role and will, in due course, replace some Jaguars in the reconnaissance role. Harrier GR3s provide close air support to ground troops. Nimrod maritime aircraft form part of Britain's anti-submarine warfare capability, and also undertake long-range surveillance operations against surface ships, offshore surveillance and fishery protection. Improved Buccaneers, armed with Sea Eagle and Martel missiles, are employed in an anti-ship role. Victor and converted Hercules, TriStar and VC10 aircraft are used as tankers for in-flight refuelling. Tactical transport is provided by VC10 and Hercules aircraft, medium and light support being given by Chinook, Puma and Wessex helicopters. Sea King and Wessex helicopters perform search and rescue duties around the British Isles. Weapons in service include Skyflash, Sparrow, Sidewinder, Martel and Sea Eagle missiles, and guided and cluster bombs.

The Royal Air Force is undergoing a comprehensive re-equipment programme. Improvements to Britain's air defences include seven squadrons of the Tornado F3, which are soon to start replacing Lightning and some Phantom squadrons; and replacement or modernisation of the radars and command, control and communications systems for the United Kingdom Air Defence Ground Environment. In addition, 72 Hawk trainer aircraft have been equipped with air-to-air missiles and cannon for local air defence.

The Government has decided that in the 1990s airborne early warning for Britain's air defence will be provided by Boeing E3A aircraft purchased from the United States. The air-to-air refuelling capability is being increased by the entry into service of converted VC10s and TriStars in the tanker role. The Tornado GR1 has enhanced the offensive power of the Royal Air Force as will the new Harrier GR5s, which are to be delivered from 1988 to replace the Harrier GR3. All strike/attack and offensive support aircraft will be installed with advanced electronic warfare equipment to increase their ability to survive, and the Tornado GR1, already being equipped with the British JP233 airfield attack weapon, will have the anti-radiation missile (ALARM) and a Sky Shadow pod carrying electronic counter-measures equipment. The RAF's support helicopter fleet will also be modernised.

Defence Procurement

Responsibility for providing the armed forces with the equipment they need lies with the Ministry of Defence's Procurement Executive. About 45 per cent of the defence budget will be spent on equipment in 1987–88, making the Ministry British industry's largest customer. The Procurement Executive works with the Service users and industry to obtain the best long-term value over a project's life, from concept formulation (drawing on the research programme) through development and production to in-Service support. Where possible, work is placed with industry under firm-price contracts won through competition.

Research and Development Research is undertaken by the Ministry's research establishments, which have a very wide technological capability. The Ministry also sponsors a substantial amount of research by industry and the universities. Around £401 million is expected to be spent on defence research and £1,945 million on development in 1987–88. Nearly all design and development of defence equipment is carried out by industry. The Ministry is also increasingly seeking to involve industry in the planning of the research programme and to promote civil applications. As part of the Government's policy of improving the strength of Britain's science base, the

Ministry, together with the research councils, is funding a series of joint ventures with academic institutions in areas of strategic research.

Strategic Defence Initiative Britain and other NATO countries are participating in the United States' Strategic Defence Initiative (SDI), which was set up in 1983 to determine the feasibility of establishing an effective defence against ballistic missile attack. In 1985 Britain and the United States signed a Memorandum of Understanding to promote British participation, and an SDI Participation Office in the Ministry of Defence was formed to work in close concert with British firms and institutions. British participation in the SDI programme, valued at \$34 million by the end of 1986, is intended to enhance Britain's research in areas of high technology relevant to both defence and civil programmes.

Alliance Co-operation International co-operation has been a feature of armaments procurement for over 20 years, and Britain was one of its pioneers in programmes such as the Anglo-French Jaguar and Lynx/Puma/Gazelle helicopter package; the FH70 towed howitzer developed jointly with the Federal Republic of Germany and Italy; and the highly successful Tornado aircraft developed and produced with the same two partners. Britain also worked with the United States on the Harrier GR5/AV8B programme.

In recent years there has been a growing recognition that more, and more systematic, collaboration will be necessary for the future if Britain and its Alliance partners are to eliminate wasteful duplication of effort and make better use of limited resources. Britain is playing an active role in the promotion of such co-operation in forums such as NATO, the Conference of National Armaments Directors, and the Independent European Programme Group.

Major new programmes under way as part of this process include the EH101 helicopter (with Italy), the new European Fighter Aircraft (the Federal Republic of Germany, Italy and Spain), and the Multi-Rocket Launch System (with France, the Federal Republic of Germany, Italy and the United States).

Production

In accordance with its plans to introduce private capital into the company, the Government sold Royal Ordnance plc to British Aerospace plc in April 1987. The same principles were behind the Government's decision to introduce from 1987 commercial management to two of the Royal Dockyards, at Devonport and Rosyth, which carry out most of the refitting and repair of Royal Navy ships.

Defence Sales

Sales of British defence equipment enable allies and friendly governments to take advantage of Britain's extensive research and development programmes to improve their own defence. The Defence Export Services Organisation of the Ministry of Defence provides a wide range of assistance to industry in promoting equipment and negotiating contracts with overseas customers. This includes collecting market information, demonstrating equipment, providing expert military advice, training and support, staging exhibitions and negotiating with overseas governments. Government and private companies employ International Military Services Ltd to obtain and carry out export contracts for British defence equipment and associated services. Britain is one of the West's top three defence exporters. In 1986 defence exports were worth around £5,800 million, an increase of 100 per cent over 1985. Such orders continue to maintain more than 100,000 jobs.

Civil Defence

Civil defence arrangements are based on the extended and adapted use of the peacetime resources of government departments, local authorities, emergency

DEFENCE 105

services and nationalised industries, supplemented by the efforts of voluntary organisations and individual volunteers. Civil defence regulations introduced in 1983 require local authorities to make and keep up to date plans for a range of essential functions in the event of war; to arrange training and exercises for civil defence staff and volunteers; and to provide suitable emergency centres for direction of civil defence in wartime. Following legislation in 1986, local authorities may use their civil defence resources in responding to peacetime emergencies.

Expenditure on civil defence has been growing steadily and was nearly £98 million in 1986–87. This is being used to improve the quality and readiness of central and local government planning; increase training opportunities arranged by the Home Office on staff college lines at the Civil Defence College, Easingwold; help local authorities to plan for better community involvement in civil defence; and improve the emergency system for decentralised government control and communications. Improvements are also being made in the communications, equipment and administrative facilities of the United Kingdom Warning and Monitoring Organisation. This includes the civilian Royal Observer Corps, which is organised to provide public warning of an attack, of the location and strength of nuclear explosions, and of the distribution and level of radioactive fall-out.

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5 Justice and the Law

The Law

Although the United Kingdom is a unitary state, England and Wales, Scotland and Northern Ireland all have their own legal systems and law courts. There is substantial similarity on many points, but considerable differences remain in law, organisation and practice. In Northern Ireland procedure closely resembles that of England and Wales but there are often differences in enacted law. However, a large volume of modern legislation applies throughout the United Kingdom and there is a common distinction between criminal law, concerned with wrongful acts harmful to the community, and civil law, concerned with individuals' rights, duties and obligations towards one another.

The main sources of law are legislation, common law and European Community law. Legislation consists of Acts of Parliament, Orders (rules and regulations made by ministers under the authority of an Act of Parliament) and by-laws made by local government or other authorities exercising powers conferred by Parliament. Common law, the ancient law of the land deduced from custom and interpreted in court cases by the judges, has never been precisely defined or codified but forms the basis of the law except when superseded by legislation. European Community law is confined mainly to economic and social matters; in certain circumstances it takes precedence over domestic law. It is normally applied by the domestic courts, but the most authoritative rulings are given by the European Court of Justice.

Certain changes to United Kingdom law have been enacted as a result of rulings of the European Court of Human Rights in particular cases where the domestic law was in breach of the European Convention for the Protection of Human Rights and Fundamental Freedoms, to which the United Kingdom is a party.

Criminal Justice

The Government's strategy for dealing with crime is to sustain the rule of law by preventing crime where possible; to detect culprits when crimes are committed; to convict the guilty and acquit the innocent; to deal firmly, adequately and sensibly with those found guilty; and to provide more effective support for the victims of crime. It is also concerned with ensuring that public confidence in the criminal justice system is maintained and that a proper balance between the rights of the citizen and the needs of the community as a whole is maintained.

With continuing concern in Britain, as in many other countries, over rising crime rates, public expenditure on the law and order programme reflects the special priority given by the Government to these services. Recent increases have been made to cover, in particular, greater police manpower, the probation service and extra spending on prison building. More than two-thirds of total expenditure is initially incurred by local authorities (with the help of central government grants), mainly on the police service.

A number of measures to strengthen the criminal justice system have been taken. The Drug Trafficking Offences Act 1986 provides for the pre-trial freezing

of suspected drug traffickers' assets, backed up on conviction by immediate confiscation of the assets to the value of the proceeds of the crime; similar provisions are included in the Criminal Justice (Scotland) Bill before Parliament. The Public Order Act 1986 codifies the common law offences of riot, unlawful assembly and affray; enhances the powers of the police to control public processions and assemblies likely to result in serious disorder or disruption; strengthens the law against incitement to racial hatred; and provides additional powers to combat football hooliganism. The Criminal Justice Act 1987 provides for the creation of a Serious Fraud Office and streamlined court procedures to deal with cases of fraud. Further government proposals for England and Wales include an extended scheme for confiscation of the proceeds of profitable crimes and changes in the jury system. Government proposals regarding improved arrangements for compensating victims of crime and for reform of the law on extradition would apply to Great Britain.

The Criminal

The criminal law, like the law generally, is interpreted by the courts but changes in the law are matters for Parliament. In practice most legislation affecting criminal law is government-sponsored, but there is usually consultation between government departments and the legal profession, the police, the probation service (in Scotland, the social work agencies) and voluntary bodies.

Crime Statistics

Chief constables in England and Wales must supply statistics relating to offences, offenders, criminal proceedings and the state of crime in their areas. Crime statistics are published annually by the Home Office and further information about crime trends (as well as about police matters) appears in the annual reports of Her Majesty's Chief Inspector of Constabulary and (for London) the Commissioner of Police of the Metropolis. Similar arrangements operate in Scotland and Northern Ireland.

Differences in the legal systems, police recording practices and statistical classifications in the countries of the United Kingdom make it impracticable to analyse in detail trends in crime for the country as a whole. Nevertheless, it is clear that, as in Western Europe generally, there has been a substantial increase in crime since the early 1950s. However, official statistics cover only crime recorded by the police and may thus be affected by changes in the proportion of crimes which are undiscovered or unreported. The level of police manning and deployment of the force may also affect recording.

Table 4 shows the rate of notifiable offences recorded by the police in England and Wales in 1986. These figures indicate a 7 per cent increase over the previous

Table 4: Notifiable Offences Recorded by the Police, per 100,000 Population (England and Wales) 1986

Offence group	1986
Homicide	1
Violence against the person (excluding homicide)	250
Sexual offences	45
Burglary	1,876
Robbery	60
Theft and handling stolen goods	4,014
Fraud and forgery	267
Criminal damage ^a	794
Other offences	24

Source: Home Office.

^a Excluding 'other criminal damage' valued at £20 and under.

year. Some 95 per cent of crime is against property, much of this being relatively small scale. This reinforces the need, in the Government's view, to encourage the development of crime prevention schemes.

The number of notifiable offences recorded by the police in England and Wales in 1986 was 3·8 million, 1 of which 32 per cent were cleared up. Clear-up rates for certain very serious offences were much higher—90 per cent for homicide and 70 per cent for violence against the person and for sexual offences. The Scottish police recorded 463,837 crimes, of which 34 per cent were cleared up.

Criminological Research

A wide range of research into criminal and social policies is carried out by the Home Office and the Scottish Home and Health Department. Research is also carried out in university departments, much of it financed by the Government. The principal university criminological research establishment is the Institute of Criminology at Cambridge.

Criminal Injuries Compensation

The Criminal Injuries Compensation Scheme provides compensation to victims of violent crimes (including violence within the family), to people hurt while trying to arrest offenders and prevent offences and to those bereaved as a result of violence. Compensation is assessed on the basis of common law damages and usually takes the form of a lump-sum payment. In 1985–86, just under 30,000 cases were resolved by the Criminal Injuries Compensation Board and over £41 million was paid in compensation. Under proposals before Parliament, the courts' powers to make compensation orders would be extended and the Criminal Injuries Compensation Scheme would be established on a statutory basis, thereby ensuring that for the first time victims would be entitled to compensation as of right.

In Northern Ireland there is separate, statutory provision in certain circumstances for compensation from public funds for criminal injuries, and for malicious damage to property including the resulting losses of profits.

There has been a rapid growth in the number of locally run victim support schemes which offer practical help to the victims of crime on a voluntary basis. The Government provides financial assistance, both to local schemes and to a national association.

Measures to Combat Terrorism

Legislation to protect the public against terrorism has given the authorities certain exceptional powers for dealing with and preventing terrorist activities. It is embodied in two Acts of Parliament which take account of the need to achieve a proper balance between the safety of the public and the rights of the individual. While acknowledging that the special powers make inroads into civil liberties the Government believes that they should continue in force as long as a substantial terrorist threat remains. Nobody can be imprisoned for political beliefs; all prisoners, except those awaiting trial, have been found guilty in court of criminal offences.

The Northern Ireland (Emergency Provisions) Act 1978 (first introduced in 1973), which is in force in Northern Ireland, provides the security forces with special powers to search, question and arrest suspected terrorists; allows the Secretary of State for Northern Ireland to proscribe terrorist organisations and provides for certain serious offences to be tried by a judge sitting alone without a jury to obviate the dangers of intimidation of jurors. The Prevention of Terrorism (Temporary Provisions) Act 1984 (first introduced in 1974), which is applicable throughout the United Kingdom, provides for the exclusion from Great Britain, Northern Ireland or the United Kingdom of people connected with terrorism related to Northern Ireland affairs and for the proscription of terrorist

¹Excluding 'other criminal damage' valued at £20 and under.

organisations in Great Britain. It also gives the police powers to arrest people suspected of being involved in terrorism (whether international or relating to Northern Ireland) without warrant and hold them for 48 hours and, with the approval of the Secretary of State, for up to a further five days. Both Acts have been subject to independent review. The Emergency Provisions Act is renewable every six months and the Prevention of Terrorism Act annually; the latter has a total life of five years.

The security forces in Northern Ireland are subject to the law and can be prosecuted for criminal offences. Procedures for handling complaints against the police involve two independent elements: the Director of Public Prosecutions if allegations of criminal conduct are made; and the Police Complaints Board for Northern Ireland when complaints relate only to disciplinary offences.

The Criminal Jurisdiction Act 1975 makes it possible to try in Northern Ireland a person accused of certain offences committed in the Irish Republic. It also enables evidence to be obtained in Northern Ireland for the trial of offences in the Irish Republic. Reciprocal legislation is in force in the Irish Republic. One of the aims of the Anglo-Irish Agreement signed in November 1985 is to improve security co-operation in combating terrorism. The accession of the Irish Government to the European Convention on the Suppression of Terrorism in 1986 is expected to increase the prospects of securing extradition from the Republic of people accused or convicted of terrorist crimes in Britain.

Britain attaches importance to international action to combat terrorism and plays an active part in the work of a group of European Community ministers (known as 'Trevi') which facilitates the confidential exchange of information and intelligence about terrorism affecting member countries. Britain believes that there should be no substantive concessions to terrorist demands and that international co-operation should take place on tracking down and arresting terrorists and on impeding the movement of international terrorists from one country to another.

THE POLICE SERVICE

In enforcing the law, police action rests mainly upon common consent, for there is only a small number of officers in relation to the population (roughly one officer to every 400 or so people). Officers do not normally carry firearms (their only weapon is a truncheon) and there are strict limitations on police powers.

The powers of the police in England and Wales have been modernised and clarified by the Police and Criminal Evidence Act 1984, which at the same time has enhanced safeguards for the citizen. The Act does not generally extend to Scotland, where separate legislation applies.

The interception of communications on behalf of the police is regulated by the Interception of Communications Act 1985, which establishes a statutory framework governing the interception of messages in the telecommunications and postal services and sets out the grounds on which certain Secretaries of State are empowered to authorise interception. So far as the police are concerned, these are the prevention and detection of serious crime, and, in some instances, the protection of national security. The other ground for interception is the safeguarding of the economic well-being of the United Kingdom. Interception outside the procedures established by the Act is a criminal offence.

Forces

Each of Britain's 52 police forces is responsible for law enforcement in its area, but there is constant co-operation among them. In order to improve their effectiveness, forces pay particular attention to ensuring that manpower and other resources are used as efficiently as possible.

Outside London most counties (regions in Scotland) have their own police forces, though in the interests of efficiency several have combined forces. The policing of London is in the hands of the Metropolitan Police Force, with

headquarters at New Scotland Yard, and the City of London force. The strength of the regular police in Great Britain at the end of 1986 was nearly 135,000 (including over 12,500 policewomen); in Northern Ireland the strength of the regular Royal Ulster Constabulary was 12,665, including over 4,420 full- and part-time members of the Royal Ulster Constabulary Reserve. The strength of the Metropolitan Police Force was over 26,900. It is recognised that the composition of the police forces should reflect the make-up of a multiracial society and efforts are being made to encourage more members of the ethnic minorities to join them

Police Authorities and Chief Constables

Each regular police force is maintained by a police authority. In England and Wales, these are committees of local councillors and magistrates, and in Scotland, they are the regional and islands councils. The police authority for the Metropolitan Police Force is the Home Secretary. In Northern Ireland the police authority is appointed by the Secretary of State.

The police authority's functions, some subject to ministerial approval, include appointing the chief constable, deputy chief constable and assistant chief constables; fixing the maximum permitted strength of the force; and providing buildings and equipment. In the Metropolitan Police area the commissioner of police and his immediate subordinates are appointed on the recommendation of the Home Secretary. The police authorities are financed by central and local government

Chief constables are responsible for the direction and control of police forces and for the appointment, promotion and discipline of all ranks below assistant chief constable. They are generally answerable to the police authorities on matters of efficiency, and must submit a report every year.

Central Authorities

The Home Secretary and the Secretaries of State for Scotland and Northern Ireland are concerned with the organisation, administration and operation of the police service. They approve the appointment of chief, deputy and assistant chief constables, and may require a police authority to retire a chief constable in the interests of efficiency, call for a report from a chief constable on matters relating to local policing or institute a local inquiry. They can make regulations covering such matters as police ranks; qualifications for appointment, promotion and retirement; discipline; hours of duty, leave, pay and allowances; and uniform. Some of these regulations are first negotiable within the Police Negotiating Board for the United Kingdom, which has an independent chairman and representatives of the police authorities, police staff associations and the home departments. Matters of a non-negotiable kind and general questions are discussed by the Police Advisory Boards.

All police forces (except the Metropolitan Police, for which the Home Secretary is directly responsible) are subject to inspection by inspectors of constabulary reporting to the Home Secretary, the Secretary of State for Scotland or the Secretary of State for Northern Ireland. Inspectors maintain close touch with the forces they inspect and have advisory functions.

Status and Duties

A British police officer is not employed by or under the direction of the police authority or of the Government, and may be sued or prosecuted for any wrongful act committed in carrying out duties. Statutory procedures, normally including an independent element, govern the way in which complaints are handled. The establishment of the new independent Police Complaints Authority, with powers to supervise the investigation of any serious complaint against a police officer, has substantially reformed the complaints system in England and Wales. In Scotland, complaints against police officers involving allegations of any form of

criminal conduct are investigated by independent public prosecutors. The 1985 Police Discipline Code is designed to prevent any abuse of the considerable powers enjoyed by a police officer, to ensure the impartiality of the service in its dealings with the public and to maintain public confidence.

Police work ranges from the protection of people and property, road or street patrolling (the trend is increasingly away from the car patrol and back to 'community' policing on foot) and traffic control to crime prevention, criminal investigation and arresting offenders. In urban areas, particularly, police officers have to deal with social problems and may bring in other social agencies and expert help.

Because the police force attaches great importance to developing and maintaining the trust and the confidence of the community, most forces have community liaison departments to co-ordinate their efforts to produce good relations with the community. The Police and Criminal Evidence Act 1984 requires arrangements to be made for obtaining the views of people in the area about the policing of it and for obtaining their co-operation with the police in preventing crime. Almost all areas have police/community consultative groups which enable people to discuss issues of concern with the police in a constructive spirit. Particular efforts are made to develop relations with young people, through greater contact with schools, for example. Emphasis is also placed on relations with ethnic minorities; racially discriminatory behaviour by police officers is an offence under the Police Discipline Code, and training in community relations is available to officers.

To release as many uniformed police officers as possible for operational duties, police authorities employ over 41,800 civilians (including part-time employees) in England and Wales and over 2,300 in Scotland. The number of civilian support staff has been growing as forces secure economies by replacing police officers with civilians where posts do not require police powers and training. Traffic wardens (of whom there are nearly 4,800 in England and Wales and about 540 in Scotland) carry out specified duties concerned with traffic and parking. Wardens are under the control of the chief constable.

Each force has an attachment of volunteer special constables who perform police duties in their spare time, without pay, acting mainly as auxiliaries to the regular force. In Northern Ireland there is a part-time and full-time paid reserve.

Members of the police service may not belong to a trade union nor may they withdraw their labour in furtherance of a trade dispute. All ranks, however, have their own staff associations to represent their interests.

Common Services A number of common services are provided by central government departments and by arrangements between forces. The most important are: training services; a Forensic Science Service in England and Wales (the Metropolitan Police maintains its own laboratory); telecommunications services which provide police radio equipment; and central and provincial criminal records available to all forces. Regional crime squad teams of detectives from several forces investigate major crimes involving inquiries in more than one police area; all squads have detectives who specialise in investigating major drug trafficking organisations. The Scottish Crime Squad assists forces in crime investigation and prevention.

Certain special services such as liaison with the International Criminal Police Organisation (Interpol) are provided for other British forces by the Metropolitan Police. The National Drugs Intelligence Unit assists police forces and the Customs service throughout Britain. The services of the Fraud Squad, run jointly by the Metropolitan Police and City of London Police to investigate company frauds, are available in England and Wales.

In all areas of police work the use of scientific aids is widespread. A national

police computer helps to rationalise records and speed up the dissemination of information.

Powers of Arrest

In England and Wales arrests may be made with and without a warrant issued by a magistrate. The police may arrest a person without a warrant under the arrest scheme established by the Police and Criminal Evidence Act 1984, which provides a general conditional power to arrest a person reasonably suspected of any offence. However, a person can only be arrested under the scheme if it is necessary in order to ensure that he (or she) can be brought before a court (for example, because of failure to give a satisfactory address for service of a summons or in order to prevent injury to persons or property). Furthermore, the Act categorises certain offences as 'arrestable' or 'serious arrestable' and provides a full power of arrest without warrant in respect of them for the protection of the public.

Detention, Treatment and Questioning

A code of practice on detention, treatment and questioning is one of four codes which the Home Secretary has issued under the 1984 Act. Failure to comply with the provisions of these codes can render a police officer liable to disciplinary proceedings.

An arrested person has a statutory right to consult a solicitor and to ask the police to notify a named person likely to take an interest in his or her welfare about the arrest. Where a person has been arrested in connection with a serious arrestable offence, but has not yet been charged, the police may delay the exercise of these rights in the interests of the investigation if certain criteria are met. The police must caution a person whom there are grounds to suspect of an offence before any questions are put for the purpose of obtaining evidence. Questions relating to an offence may normally not be put to a person after he or she has been charged with that offence or informed that he or she may be prosecuted for it.

The detention scheme in the Police and Criminal Evidence Act provides for a person to be detained only if, and for as long as, necessary for a purpose specified by law up to a maximum of 96 hours before charge. A person can only be detained beyond 36 hours if a warrant is obtained from a magistrates' court.

Reviews must be made of a person's detention (whether before or after charge) at regular intervals to check whether the criteria for detention are still satisfied. If they are not, the person must be released immediately.

As a practical means of developing public confidence in the treatment of people detained by the police, the Government is encouraging the establishment of schemes whereby lay visitors make random checks on the interrogation and detention of suspects in police stations.

A person who thinks that the grounds for detention are unlawful¹ may apply to the High Court for a writ of habeas corpus against the person who detained him or her, requiring the person to appear before the court to justify the detention. An application for this writ is normally made by the person detained or by someone acting on his or her behalf. Similar procedures apply in Northern Ireland.

Charging

As soon as there is sufficient evidence to charge a person, the police must decide on an appropriate method of dealing with him or her. As an alternative to charging immediately, they can, for example, decide to defer charging, to caution, to deal with the matter by summons or to take no further action and

¹ Detention is lawful in pursuance of criminal justice, for contempt of court or of either House of Parliament and when expressly authorised by Parliament. It is also sometimes lawful in the case of the mentally disordered.

release the person with or without bail. Where an immediate charge is appropriate the person may continue to be held in custody if the name or address furnished is considered suspect, if there are grounds for believing that detention is necessary for his or her own protection, to prevent harm to people or property, or if there is a risk that the person would otherwise fail to appear in court or could interfere with the administration of justice. When no such considerations apply, the person must be released with or without bail depending on the circumstances of the case. Where a person is detained after charge, there is provision in the Act for him or her to be brought before a magistrates' court quickly. This will usually be no later than the following day.

Under the Prosecution of Offences Act 1985 there is provision for statutory time limits on the period from arrest to the beginning of trial in England and Wales: from April 1987 such limits were introduced in three police authority areas and it is hoped that they will be extended to the rest of the two countries by the end of 1987.

Grant of Bail by the Court

It is for the court to decide, under the provisions of the Bail Act 1976, whether an accused person in criminal proceedings should be released on bail. A court may only withhold bail in certain specified circumstances, for instance, if the court has substantial grounds for believing that the accused person would abscond, commit an offence, interfere with witnesses, or otherwise obstruct the course of justice if released on bail. A court may also impose conditions before granting bail. If bail is refused, the defendant may apply to a High Court judge or to the Crown Court for bail, and application can be made to the Crown Court for conditions imposed by a magistrates' court to be varied. The majority of people remanded by magistrates are given bail.

Scotland

In Scotland, the police may detain and question a suspected person for a period of up to six hours. Thereafter the person must either be released or charged. An arrest must be accompanied by a criminal charge. Once a person has been charged there is little scope for questioning and only voluntary statements will normally be allowed in evidence at the trial. The court will reject statements unless satisfied that they have been fairly obtained. Anyone arrested must be brought before a court with the least possible delay (generally not later than the first day after being taken into custody), or-in less serious cases-liberated by the police, often on a written undertaking to attend court on a specified date. Where a prosecution on indictment is intended (that is, where an accusation of a more serious offence is to be made), the accused is brought before the sheriff to be committed, either for further examination or until liberated in due course of law. A judicial examination may take place. Eight days may elapse between commitment for further examination and commitment until liberated in due course of law. The latter-which is also described as 'full committal'-is commitment for trial. No evidence needs to be presented to the sheriff for such commitment. Anyone accused of a crime, except murder or treason, is entitled to apply for release on bail. Even in cases of murder or treason, bail may be granted at the discretion of the Lord Advocate or a quorum of the High Court. Money bail has been virtually abolished and the courts, or the Lord Advocate, may release an accused person on conditions.

Breach of any of the conditions without reasonable excuse is a separate offence. There is a right of appeal to the High Court by the accused person against the refusal of bail, or by the prosecutor against the granting of bail, or by either party against the conditions imposed. The writ of habeas corpus does not apply in Scotland but if a person is to be prosecuted on indictment and has been kept in custody pending trial, the trial must begin within 110 days of the date of

full committal. The trial of a person charged with a summary offence and held in custody must begin within 40 days.

CRIMINAL COURTS

The initial decision to bring a charge normally lies, in England and Wales, with the police. Responsibility for the case is then handed over to a Crown Prosecutor who takes an independent decision; he may drop the charge or add to or vary it and is responsible for conducting the case through the courts. In Scotland, public prosecutors (procurators fiscal) decide whether or not to begin proceedings. In Northern Ireland there is a Director of Public Prosecutions. In England and Wales (and exceptionally in Scotland) a private person may institute criminal proceedings. Police may issue cautions and in Scotland the procurator fiscal may warn, instead of prosecuting.

Legislation has been passed to establish a Serious Fraud Office in England and Wales, under the Attorney General, with a wide-ranging remit to investigate and prosecute the most serious and complex frauds. In Scotland there is a Serious Fraud Unit in the Crown Office.

England and Wales

The new Crown Prosecution Service in England and Wales established by the Prosecution of Offences Act 1985 is headed by the Director of Public Prosecutions under the superintendence of the Attorney General. The Director appoints chief Crown prosecutors—for the most part covering a police force area—who deal with the vast majority of cases in consultation with the police, who investigate, and the courts, who hear the cases. The Service is responsible for providing advocates to present cases in magistrates' courts and briefs barristers to appear on its behalf in the Crown Court. While the decision to prosecute is delegated, as far as possible, to the local level, certain categories of cases are referrable to the Director of Public Prosecutions; these include large and complex fraud, obscene publications and exhibitions, and allegations affecting police officers.

While much of the prosecution work at the Central Criminal Court in London is conducted by a team of Treasury Counsel appointed by the Attorney General, experienced barristers are also nominated from time to time to lead a member of the Treasury team.

Scotland

Discharging his duties through the Crown Office, the Lord Advocate is responsible for prosecutions in the High Court of Justiciary, sheriff courts and district courts. There is no general right of private prosecution; with a few minor exceptions crimes and offences may be prosecuted only by the Lord Advocate or his deputes or by the procurators fiscal, who are the Lord Advocate's local officials. The permanent adviser to the Lord Advocate on prosecution matters is the Crown Agent, who is head of the procurator fiscal service and is assisted in the Crown Office by a staff of legally qualified civil servants, all of whom have had experience as depute procurators fiscal. Prosecutions in the High Court are prepared by procurators fiscal and Crown Office officials and prosecuted by the Lord Advocate, the Solicitor-General for Scotland (the Lord Advocate's ministerial deputy) and advocates depute who are collectively known as Crown Counsel. Crimes tried before the sheriff and district courts are prepared and prosecuted by procurators fiscal. The police and other law enforcement agencies investigate crimes and offences and report to the procurator fiscal, who decides whether or not to prosecute, subject to the directions of Crown Counsel.

Under a new system to be brought into force in Scotland a procurator fiscal will be able to make a conditional offer of fixed penalty to an alleged offender in respect of certain minor offences as an alternative to prosecution; the offender will not be obliged to accept such an offer but if he or she does so the prosecution loses the right to prosecute.

Northern Ireland The Director of Public Prosecutions for Northern Ireland, who is responsible to the Attorney General, prosecutes all offences tried on indictment, and may do so in summary cases of a serious nature. Other summary offences are prosecuted by the police.

Courts in England and Wales Magistrates' courts dispose of about 95 per cent of criminal cases in England and Wales, and conduct preliminary investigations into more serious offences, which go to the Crown Court for trial. The Crown Court, situated in a number of towns and cities, takes all criminal work above the level of magistrates' courts and trials are held before a jury.

Magistrates' courts hear and determine cases for which jury trial is not required. There are about 700 magistrates' courts in England and Wales and 27,710 magistrates ('justices of the peace', JPs). These are made up of about 60 full-time, legally qualified stipendiary magistrates, and some 27,650 unpaid lay magistrates. Magistrates are appointed by the Lord Chancellor except in Lancashire, Greater Manchester and Merseyside, where appointments are made by the Chancellor of the Duchy of Lancaster. Stipendiary magistrates may sit alone and usually preside in courts in urban areas where the workload is heavy. Otherwise a court normally consists of three lay magistrates who are advised on points of law and procedure by a legally qualified clerk who is also in charge of the court's administrative arrangements. When the clerk to the justices is not in court, the magistrates are advised by a qualified assistant.

Magistrates' courts try people charged with summary offences (the least serious offences that can only be disposed of by magistrates) and people charged with 'either way' offences where summary trial seems to the court appropriate and the defendant agrees. Courts also conduct committal proceedings in the case of people charged with indictable offences and with either way offences not tried by them.

Magistrates must as a rule sit in open court to which the public and press are admitted. They cannot impose a sentence of more than six months' imprisonment nor a fine exceeding £2,000. If an offence carries a higher maximum penalty, they may commit the defendant for sentence at the Crown Court if they consider their own power inadequate.

Cases involving people under 17 are heard in juvenile courts. These are specially constituted magistrates' courts which either sit apart from other courts or are held at a different time. Only limited categories of people may be present and press reports must not identify any juvenile appearing either as a defendant or a witness. Where a young person under 17 is charged jointly with someone of 17 or over, the case is heard in an ordinary magistrates' court or the Crown Court. If the young person is found guilty, the court may transfer the case to a juvenile court for sentence unless satisfied that it is undesirable to do so.

The Crown Court deals with trials of the more serious cases, the sentencing of offenders committed for sentence by magistrates' courts, and appeals from magistrates' courts. It sits at about 90 centres and is presided over by High Court judges, full-time 'circuit judges' and part-time recorders. All contested trials take place before a jury. Magistrates sit with a circuit judge or recorder to deal with appeals and committals for sentence.

The Government is planning to alter court procedures regarding cases of serious or complex fraud with a view to by-passing full committal proceedings in magistrates' courts at the discretion of the prosecution, but with a special procedure under which the accused would be able to apply to the Crown Court to be discharged on the ground that there was no case to answer.

The Crown Court may impose on a convicted offender a fine either limited by the statutory maximum, or where there is no statutory maximum, of unlimited amount, and, within the permitted statutory maximum, any other custodial or non-custodial penalty.

Appeals

A person convicted by a magistrates' court may appeal to the Crown Court against the sentence imposed if he has pleaded guilty; or against the conviction or sentence imposed if he has not pleaded guilty. Where the appeal is on a point of law, either the prosecutor or the defendant may appeal from the magistrates' court to the High Court (see p 127). Appeals from the Crown Court, either against conviction or against sentence, are made to the Court of Appeal (Criminal Division). A further appeal from the Court of Appeal to the House of Lords can be brought if the court certifies that a point of law of general public importance is involved and it appears to the court or the Lords that the point is one that ought to be considered by the House. A prosecutor or defendant may appeal to the Lords from a decision of the High Court in a criminal case.

The Attorney General may seek the opinion of the Court of Appeal on a point of law which has arisen in a case where a person tried on indictment is acquitted; the court has power to refer the point to the House of Lords if necessary. The acquittal in the original case is not affected, nor is the identity of the acquitted person revealed without his or her consent. Under the Criminal Justice Bill before Parliament the Attorney General would be empowered, where he considered that a sentence passed by the Crown Court raised a matter of public importance, to refer the case to the Court of Appeal and the Court would give its opinion on the principles to be observed in sentencing similar cases in the future: the sentence in the original case would not be affected.

Scotland

In Scotland the High Court of Justiciary tries such crimes as murder, treason and rape; the sheriff court is concerned with less serious offences and the district court with minor offences. Criminal cases are heard either under solemn procedure, when proceedings are taken on indictment and the judge sits with a jury of 15 members, or under summary procedure, when the judge sits without a jury. All cases in the High Court and the more serious ones in sheriff courts are tried by a judge and jury. Summary procedure is used in the less serious cases in the sheriff courts, and in all cases in the district courts. District courts are the administrative responsibility of the district and the islands local government authorities. The judges are lay justices of the peace; the local authorities may appoint up to one-quarter of their elected members to be ex-officio justices. In Glasgow there are four stipendiary magistrates who are full-time salaried lawyers and have equivalent criminal jurisdiction to a sheriff sitting under summary procedure. Children under 16 who have committed an offence or are for other reasons specified in statute considered to need compulsory care may be brought before a children's hearing comprising three members of the local community (see p 125).

Scotland's six sheriffdoms are further divided into sheriff court districts, each of which has one or more sheriffs, who are the judges of the court.

The High Court of Justiciary, Scotland's supreme criminal court, is both a trial and an appeal court. Any of the following judges is entitled to try cases in the High Court: the Lord Justice General (the head of the court), the Lord Justice Clerk (the judge next in seniority) or one of the Lord Commissioners of Justiciary. The main seat of the court is in Edinburgh, although the High Court also tries cases in other towns.

All appeals are dealt with by the High Court in Edinburgh. In both solemn and summary procedure, an appeal may be brought against conviction, or sentence, or both. The Court may authorise a retrial if it sets aside a conviction. There is no further appeal to the House of Lords. In summary proceedings the prosecutor may appeal on a point of law against acquittal or sentence. The Lord Advocate

may seek the opinion of the High Court on a point of law which has arisen in a case where a person tried on indictment is acquitted. The acquittal in the original case is not affected.

Northern Ireland

The structure of Northern Ireland courts is broadly similar to that in England and Wales. The day-to-day work of dealing summarily with minor cases is carried out by magistrates' courts presided over by a full-time, legally qualified resident magistrate. Young offenders under 17 and young people under 17 who need care, protection and control are dealt with by juvenile courts consisting of the resident magistrate and two lay members (at least one of whom must be a woman) specially qualified to deal with juveniles. Appeals from magistrates' courts are heard by the county court.

The Crown Court deals with criminal trials on indictment. It is served by High Court and county court judges. Proceedings are heard before a single judge, and all contested cases, other than those involving offences specified under emergency legislation, take place before a jury. Appeals from the Crown Court against conviction or sentence are heard by the Northern Ireland Court of Appeal. Procedures for a further appeal to the House of Lords are similar to those in England and Wales.

Trial

Criminal trials in the United Kingdom take the form of a contest between the prosecution and the defence. Since the law presumes the innocence of an accused person until guilt has been proved, the prosecution is not granted any advantage, apparent or real, over the defence. A defendant (in Scotland, called an accused) has the right to employ a legal adviser and may be granted legal aid from public funds. If remanded in custody, the person may be visited by a legal adviser to ensure a properly prepared defence. In England, Wales and Northern Ireland during the preparation of the case, the prosecution usually tells the defence of relevant documents which it is not proposed to put in evidence and discloses them if asked to do so. The prosecution should also inform the defence of witnesses whose evidence may help the accused and whom the prosecution does not propose to call. The defence or prosecution may suggest that the defendant's mental state renders him or her unfit to be tried. If the jury (or in Scotland, the judge) decides that this is so, the defendant is admitted to a specified hospital.

Criminal trials are normally in open court and rules of evidence (concerned with the proof of facts) are rigorously applied. If evidence is improperly admitted, a conviction can be quashed on appeal. During the trial the defendant has the right to hear and cross-examine witnesses for the prosecution, normally through a lawyer; to call his or her own witnesses who, if they will not attend voluntarily, may be legally compelled to attend; and to address the court in person or through a lawyer, the defence having the right to the last speech at the trial. The defendant cannot be questioned without consenting to be sworn as a witness in his or her own defence. When he or she does testify, crossexamination about character or other conduct may be made only in exceptional circumstances; generally the prosecution may not introduce such evidence.

In England, Wales and Northern Ireland the Criminal Justice Act 1987 provides that in complex fraud cases there should be a preparatory open Crown Court hearing at which the judge will be able to hear and settle points of law and to define the issues to be put to the jury.

The Jury In jury trials the judge decides questions of law, sums up the evidence for the jury and instructs it on the relevant law, and discharges the accused or passes sentence. Only the jury decides whether the defendant is guilty or not guilty. In England and Wales, if the jury cannot reach a unanimous verdict, the judge may

direct it to bring in a majority verdict provided that, in the normal jury of 12 people, there are not more than two dissentients. In Scotland, where the jury consists of 15 people, the verdict may be reached by a simple majority, but as a general rule, no person may be convicted without corroborated evidence. If the jury returns a verdict of 'not guilty' (or in Scotland 'not proven', which is an alternative verdict of acquittal), the prosecution has no right of appeal and the defendant cannot be tried again for the same offence. If 'guilty' the defendant has a right of appeal to the appropriate court. A jury is completely independent of the judiciary. Once members are sworn in, they are protected from all interference.

Although the right of the defence to challenge up to three potential members of a jury without giving any reason is to be abolished in England and Wales, it will remain open to both parties to challenge potential jurors by giving reasons where they believe that an individual juror is likely to be biased.

People between the ages of 18 and 65 whose names appear on the electoral register, with certain exceptions, are liable for jury service and their names are chosen at random. (Proposals to increase the upper age limit from 65 to 70 have been announced for England and Wales.) Ineligible persons include the judiciary, priests, people who have within the previous ten years been members of the legal profession, the Lord Chancellor's Department, or the police, prison and probation services, and certain sufferers from mental illness. Persons disqualified from jury service include those who have, within the previous ten years, served any part of a sentence of imprisonment, youth custody or detention, or been subject to a community service order, or, within the previous five years, been placed on probation. Anyone who has been sentenced to five or more years' imprisonment is disqualified for life.

Coroners' Courts

Coroners investigate violent and unnatural deaths or sudden deaths where the cause is unknown. Deaths may be reported to the local coroner (who is either medically or legally qualified, or both) by doctors, the police, the registrar, various public authorities or members of the public. If the death is sudden and the cause unknown, the coroner need not hold an inquest if, after a post-mortem examination has been made, he or she is satisfied that the death was due to natural causes. Where there is reason to believe that the deceased died a violent or unnatural death or died in prison or in other specified circumstances the coroner must hold an inquest and it is the duty of the coroner's court to establish how, when and where the deceased died. A coroner may sit alone, or in certain circumstances, with a jury. In Scotland the office of coroner does not exist. The local procurator fiscal inquires privately into all sudden and suspicious deaths and may report the findings to the Crown Office. In a minority of cases a fatal accident inquiry may be held before the sheriff. For certain categories (such as deaths in custody) a fatal accident inquiry is mandatory. In addition, the Lord Advocate has discretion to instruct an inquiry in the public interest in cases where the circumstances give rise to public concern.

TREATMENT OF OFFENDERS Sentencing The sentence passed on an offender is entirely a matter for the courts, subject to the maximum penalty enacted by Parliament for each offence. The Government ensures that the courts have available an adequate range of sentences to suit the circumstances of each case and that they are well informed about the purpose and nature of each available sentence. The Court of Appeal (see p 127) issues guidance to the lower courts on sentencing issues when points of principle have arisen on individual cases which are the subject of appeal.

In England and Wales a person may be sentenced to custodial treatment only if the court is satisfied that no other sentence will suffice. Unless that person has previously received a custodial sentence of the same kind, he or she must also have been legally represented. A person given a custodial sentence in Northern Ireland need not have been legally represented; a custodial sentence is, however, used only as a last resort where the gravity of the offence and the offender's background rule out the imposition of any other sentence. In England and Wales, extended sentences longer than the normal maximum term may be imposed on persistent offenders. In the case of murder there is a mandatory penalty of life imprisonment. This is the maximum penalty for a number of serious offences such as robbery, rape, arson and manslaughter. The death penalty has been repealed for almost all offences (including murder and the other common serious crimes) and it is no longer used.

In Scotland similar safeguards exist in relation to the imposition of custodial sentences. Unless the sentence is limited by statute, the maximum penalty is determined by the status of the court trying the accused. In trials on indictment, the High Court may impose a sentence of imprisonment for any term up to life, and the sheriff court any term up to two years (to be increased to three years) but may send any person to the High Court for sentence if the court considers its powers are insufficient. In summary cases, the sheriff may normally impose up to three months' imprisonment or six months' for some repeated offences, although his powers are extended by statute in some exceptional cases. In the district court the maximum term of imprisonment is 60 days.

The most common sentence in courts throughout the United Kingdom is a fine, which is imposed in more than 80 per cent of cases. There is no limit to the size of fine which may be imposed on indictment, but in summary procedure the maximum in England, Wales and Northern Ireland is £2,000. In Scotland it is £2,000 in the sheriff court and £1,000 in the district court.

Under legislation passed in 1986 for England and Wales, the courts may order the confiscation of the proceeds gained by a criminal from drug trafficking offences. Similar provisions for Scotland are before Parliament.

Non-custodial Treatment

The Government's policy is to maintain and develop an effective range of non-custodial sentences including fines, probation and absolute discharge. In England, Wales and Northern Ireland the court may impose conditional discharge when it considers there is no need to impose punishment; and 'binding over' where the offender pledges money, with or without sureties, to keep the peace and be of good behaviour.

Offenders aged 16 or over (17 in Northern Ireland) convicted of imprisonable offences may, with their consent, be given community service orders. The court may order between 40 and 240 hours' unpaid service (the maximum in England and Wales is 120 hours where the offender is under 17) to be completed within 12 months. (This does not apply in Northern Ireland.) Examples of work done include decorating the houses of old or disabled people and building adventure playgrounds. The number of community service orders made in England and Wales increased from 18,760 in 1981 to 23,170 in 1986, and in Scotland from 1,083 in 1981 to 2,733 in 1985. In Northern Ireland the number rose from 529 in 1981 to 730 in 1985.

Experimental schemes have been started to enable offenders to make direct reparation to their victims, either by paying financial compensation or by undertaking some service for them.

The sentence imposed on an offender in England, Wales and Northern Ireland may also, with his or her consent, be deferred for up to six months to enable a court to take into account conduct after some expected change in circumstances. In Scotland sentence may also be deferred with or without the offender's consent. There is no limit to the length of deferment.

The courts throughout Britain may order an offender to pay compensation for personal injury, loss or damage resulting from an offence. The Government

favours the courts making full use of their compensation powers. Proposals have been announced under which courts in England and Wales will be required to give reasons for not awarding compensation to a victim who has suffered loss,

injury or damage.

In England, Wales and Northern Ireland a court is free to pass a suspended sentence of not more than two years. The sentence is not served unless the offender is convicted of a further offence punishable with imprisonment; in that event the suspended sentence normally takes effect and another sentence may be imposed for the new offence. In England and Wales an offender receiving a suspended sentence of more than six months may be placed under the supervision of a probation officer for all or part of the period; courts also have the power, when passing a sentence of between three months' and two years' imprisonment, to order that part should be served and the rest held in suspense.

In certain circumstances courts may order forfeiture of property involved in the commission of crime. An offender convicted of a serious crime may be disqualified from driving if a motor vehicle was used in its commission.

In most circumstances, after a rehabilitation period of from six months to ten years depending on the nature of the sentence imposed, a person convicted of a criminal offence need not disclose it, and the offence will not be held against him or her. This does not apply to those with a prison sentence of more than two and a half years.

Probation

At present in the United Kingdom the number of offenders subject to supervision in the community considerably exceeds the number in custody. The purpose of probation is to protect society by the rehabilitation of the offender, who continues to live a normal life in the community while subject to the supervision of a probation officer. Before placing an offender on probation, which may last from six months to three years, the court must explain the order in ordinary language, ensuring that the offender consents to the requirements of the order and understands that a failure to comply with them will make him or her liable to a penalty or to be dealt with for the original offence. In England and Wales such an order can be made only for offenders aged 17 years or more. In Scotland the minimum age is 16 years and in Northern Ireland 10 years. About 10 per cent of orders in England and Wales contain a variety of additional requirements concerning place of residence, attendance at day centres or treatment for mental illness. The probation service in England and Wales also administers supervision orders, the community service scheme and parole. In addition, social work services are provided in custodial establishments.

In England and Wales the cost of the probation service is shared between central and local government and it is administered locally by probation committees of magistrates and members co-opted from the local community. In Scotland probation services are integrated with local authority social work departments and in Northern Ireland the service is administered by a probation board, whose membership is representative of the community and which is funded by central government.

Probation committees provide and maintain day centres and hostels together with schemes and programmes designed to meet the needs of a broad range of offenders, and, if possible, drawing the community into partnership in responding to offending. In Scotland and Northern Ireland these responsibilities are undertaken respectively by local authority social work departments and the probation board.

In England and Wales the services of probation officers are available to every court, of both criminal and civil jurisdiction. In Scotland, officers of the local authority social work department are similarly available. Probation officers in Northern Ireland are not available to civil courts.

Prisons

The Government aims to provide a humane, efficient and effective prison service. The daily average inmate population in 1986 in England and Wales was nearly 46,900 and is projected to rise to between 53,000 and 59,000 by 1994. In Scotland the average population in custody has remained fairly steady for the last decade at around 4,900. In 1986, however, it rose to nearly 6,000. In Northern Ireland the daily average inmate population is falling and was 1,824 in 1986.

Prisons to which offenders may be committed directly by a court are known as 'local prisons'; all are closed. Other prisons, open or closed, receive prisoners on transfer from local prisons. (Open prisons do not have physical barriers to prevent escape.) In England, Scotland and Wales sentenced prisoners are classified into groups for security purposes. There are separate prisons for women.

There are no open prisons in Northern Ireland, where the majority of offenders are serving sentences for terrorist offences.

People awaiting trial are entitled to privileges not granted to convicted prisoners and, as far as practicable, are separated from convicted prisoners. Those under 21 awaiting trial are, where possible, separated from older prisoners.

Many of the prisons in England and Wales were built in the nineteenth century, and are now in need of major repairs. Others are housed in converted premises which are expensive to maintain. In order to reduce overcrowding and to improve the standards of existing prison establishments, a major programme of building and refurbishment is now in progress. This includes the construction of 20 new prisons, three of which are already complete and in use. In Northern Ireland, there is no overcrowding in the six prison establishments, five of which have been built since 1970; two new prisons—one for men and one for women—opened in 1986.

Remission of Sentence Most prisoners in Great Britain are eligible for remission of one-third of their sentence provided it does not reduce the sentence to less than five days. Remission may be forfeited for serious misconduct. There is no remission for prisoners serving sentences under civil law and those serving sentences of unspecified length (for example, the criminally insane, whose release depends upon improvement in their mental condition).

In Northern Ireland prisoners serving a sentence of more than five days are eligible for remission of half their sentence. A prisoner serving a sentence of more than 12 months who is released from prison with remission is liable to be ordered to serve the remainder of this sentence if convicted of fresh imprisonable offences during this period.

Parole and Life Licence In England and Wales prisoners serving determinate sentences of more than ten and a half months become eligible for consideration for release on parole licence when they have served one-third of the sentence, or six months, whichever expires the later. (In Scotland they qualify after 12 months.) However, for those serving sentences of over five years for violence or drug trafficking, parole is granted only in exceptional circumstances, or otherwise for a few months at the end of the sentence. The parole licence remains in force until the date on which the prisoner would otherwise have been released from prison. It prescribes the conditions, including the maintenance of contact with a supervising officer, with which the offender must comply. In 1986 about $5\cdot 4$ per cent of prisoners granted parole in England and Wales, and about $2\cdot 7$ per cent in Scotland, were recalled to prison. Parole is not available in Northern Ireland, which has more generous remission terms.

The release of prisoners serving life sentences is at the discretion of the Home

Secretary or in Scotland the Secretary of State for Scotland, subject to a favourable recommendation by the Parole Board and after consultation with the judiciary. The Secretaries of State are not, however, bound to accept a recommendation by the Parole Board for release, nor are they bound by the views of the judiciary. At the discretion of the Home Secretary, people serving life sentences for the murder of police and prison officers, terrorist murders, murder by firearms in the course of robbery and the sexual or sadistic murder of children are normally detained for at least 20 years. At the end of 1986, there were about 2,300 life sentence prisoners detained in prisons in England and Wales of whom about 110 had been detained for over 15 years. Life sentence prisoners are released on licence for the rest of their lives and are subject to recall. In Northern Ireland the Secretary of State reviews life sentence cases on the recommendation of an internal review body in such a way as to reflect their gravity and to take account of Northern Ireland's special circumstances.

Repatriation

Selected prisoners who are nationals of countries which have ratified the Council of Europe Convention on the Transfer of Sentenced Persons may apply to be returned to their own country to serve the rest of their sentence there.

Prison
Industries,
Physical
Education
and Education

Prison industries aim to give inmates work experience which will assist them when released and to secure a return which will reduce the cost of the prison system. The main industries are clothing and textile manufacture, engineering, woodwork, laundering, farming and horticulture. Most production caters for internal needs and for other public services. A few prisoners are employed outside prison. Small payments are made for work; in some prisons, incentive schemes provide an opportunity for higher earnings on the basis of output and skill.

Education is financed by the prison service and staffed by local education authorities. In every establishment the education officer is assisted by a team of teachers. Education is compulsory, full time, for young offenders below school-leaving age. For older offenders it is voluntary. Some prisoners study for public examinations (including those of the Open University). Within the resources available there is a full adult education curriculum. Library facilities are available in all establishments. Vocational training is provided directly by the prison service. Physical education is voluntary for adult offenders but compulsory for young offenders. Some 50 per cent of prisons now have purpose-built physical education facilities while all but two of the remainder use gymnasia converted from other buildings.

Education in Northern Ireland prisons is traditionally an evening activity, but governors may and do permit prisoners who need help in basic education and those preparing for public examinations to spend part of their working week on educational pursuits. Recently, the distance-learning mode of study has been introduced in a wide range of subjects, lessening the need for evening classes. Prison education is provided by full-time and part-time staff. A wide range of educational and vocational training facilities, from remedial education to Open University level, is available.

Medical and Psychological Services The prison medical service has a general responsibility for the physical and mental health of all those in custody. Each establishment has accommodation for sick people and patients can also be transferred to National Health Service hospitals. Psychiatric care is available.

The work of psychologists includes evaluating treatment programmes, studying management practices, contributing to the management and treatment programmes of individuals and groups, taking part in advisory and

training work with staff and making assessments for treatment or allocation purposes.

Privileges and

Prisoners are entitled to write and receive letters and to be visited by relatives and friends, and those in open establishments may make telephone calls. Privileges include a personal radio, books, periodicals and newspapers, and the opportunity to make purchases from the canteen with money earned in prison. Depending on facilities prisoners may be granted the further privileges of dining and recreation in association, and watching television.

Breaches of discipline are dealt with by the prison governor, or by the boards of visitors (visiting committees in Scotland), who have power to order forfeiture of remission. Boards of visitors (and visiting committees) consist of lay people, two of whom must be magistrates.

Welfare

The welfare of prisoners is the concern of all prison staff. Much of this work is the responsibility of probation officers (in Scotland social workers) stationed in prisons who help prisoners in their relations with individuals and agencies outside and play a leading part in helping prisoners to make constructive resettlement plans before their release. Prisoners may also receive visits from specially appointed prison visitors whose work is voluntary.

Chaplains give spiritual help and advice to inmates and are increasingly involved in management decisions affecting their needs and quality of life.

Discharge and After-care

All prisons in England and Wales make pre-release preparations. Prisoners serving four years or more are considered for outside employment before release. For those selected, work is found outside the prison for about the last six months of sentence; during the period prisoners may live in a separate part of the prison or in a hostel outside. Normal wages are paid so that they can resume support for their families. (In Scotland pre-release arrangements differ from these in some respects.) Periods of home leave may be granted to those serving medium- or longer-term sentences to help them maintain family ties and to assist them with their resettlement. In Northern Ireland arrangements exist for prisoners serving fixed sentences to have short periods of leave near the end of their sentences and at Christmas; life sentence prisoners are given a ninemonth pre-release programme which includes employment outside the prison.

The aim of after-care, run by the probation service (in Scotland, the local authority social services departments), is to assist offenders on return to society. Compulsory supervision is given to most offenders under 21 when released, adult offenders released on parole, and those released on licence from a life sentence. A voluntary system is offered to others. Assistance is also provided by voluntary societies, some of which are affiliated to the National Association for the Care and Resettlement of Offenders. There is also a Scottish Association for the Care and Resettlement of Offenders. Hostels and accommodation may be provided, often with government financial help. The Northern Ireland Association for the Care and Resettlement of Offenders, also a voluntary group, is mainly concerned with assisting petty criminals and alcoholics towards rehabilitation and social awareness.

Children in Trouble England and Wales

The age of criminal responsibility in England and Wales is ten years and it is not possible to bring criminal proceedings against children below this age. Children between the ages of 10 and 17 charged with committing a criminal offence may be brought before a court, usually a juvenile court. A local authority may bring a child of any age under the age of 17 to a juvenile court in a procedure known as care proceedings if, for example, it suspects that he or she is in moral danger or beyond the control of his or her parents. Under both care and criminal proceedings a court may make a care order or a supervision order or, if the parents consent, an order requiring them to exercise proper care or control over the child. Before an order may be made in care proceedings or a care order made in criminal proceedings, it must be shown that the child is in need of care or control which he or she is unlikely to receive unless the order is made.

Under a care order a local authority becomes responsible for deciding where the child should be accommodated. It may allow him or her to remain at home under supervision or place him or her with foster parents or in a voluntary or community home. For children too severely disturbed or disruptive to be treated in local authority homes, there are two special Youth Treatment Centres run by the Department of Health and Social Security. The authority must review each care order every six months and consider whether an application should be made to the court to end it; the order normally expires when the child reaches 18 or 19. When a child who is already under a care order as a result of an offence commits a further offence (for which an adult could be punished by imprisonment) a court may attach a charge and control condition to the order. This suspends for up to six months the local authority's discretion to place the child in his or her own home, but does not oblige the authority to place the child in a community home. The local authority may, for example, place the child with foster parents.

Under a supervision order (which may remain in force for not more than three years) a child normally lives at home under the supervision of a social worker or a probation officer, though the court may require him or her to live with a specified person. The court has power to require that the child comply with directions given by his or her supervisor or, in criminal proceedings, with requirements made by the court itself. By either of these means, the supervision order can be used to provide for a programme of 'intermediate treatment', consisting of participation, under a supervisor, in a variety of constructive and remedial activities through a short residential course or, more usually, attendance at a day or evening centre.

In criminal proceedings, the courts may order payment of compensation, or impose a fine or grant a conditional or absolute discharge. Payment of fines, compensation or costs incurred by juvenile offenders is normally the responsibility of their parents or guardians. Offenders, both boys and girls, may be ordered to spend a total of up to 24 hours of their Saturday leisure time (up to three hours on any one occasion) at an attendance centre. The centres, which provide physical education and instruction in practical subjects, are for those found guilty of offences for which older people could be sent to prison. Offenders aged 16 may be ordered to perform up to 120 hours of community service. Boys aged 14 to 16, for whom a non-custodial penalty would not be appropriate, may be sent to a junior detention centre for a term of three weeks to four months. The regime is similar to that in senior detention centres (see p 126). Youth custody, usually for periods in excess of four months, is available for boys and girls aged 15 or 16. The maximum sentence is 12 months. In the case of a very serious crime, detention in a place approved by the Home Secretary may be ordered, and must be ordered in the case of homicide.

Scotland

In Scotland the age of criminal responsibility is eight years but prosecution of children under the age of 16 years in court is rare and can take place only as instructed by the Lord Advocate; court proceedings normally take place only where the offence is of a serious nature, or where a child is prosecuted together with an adult. Instead, children under 16 (or in certain circumstances those aged between 16 and 18 if subject to a supervision requirement) who have committed an offence or are considered to be in need of care and protection may be brought before a children's hearing. The hearing, which consists of three lay

people drawn from a panel for each region or islands area, determines in an informal setting whether compulsory measures of care are required and, if so, the form they should take. An official 'reporter' decides whether a child should come before a hearing. If the grounds for referral are not accepted by the child or parents, or if for any reason the child is not capable of understanding the explanation of the grounds, the case goes to the sheriff for proof. If he finds the grounds established, the sheriff remits the case to the reporter to arrange a hearing. The sheriff also decides appeals against any decision of a children's hearing.

Northern Ireland The age of criminal responsibility in Northern Ireland is ten. Children under the age of 17 charged with committing a criminal offence may be brought before a juvenile court. If the child is found guilty of an offence punishable by imprisonment when committed by an adult, he or she may be sent to a training school, placed in the care of a 'fit person', possibly the area health and social services board, or put under supervision or on probation. Alternatively the court can order a period at an attendance centre or a remand home, or impose a fine or compensation. A conditional or absolute discharge or deferred sentence is also possible. Whatever other order it makes, a juvenile court can also make an order requiring parents to ensure the child's good behaviour. Children brought before the courts in need of care and protection may be placed in welfare homes or, in special circumstances, in training schools.

Young Adult Offenders Offenders aged 17 to 20 years (16 to 21 years in Scotland) form a separate category from juvenile and adult offenders. In England and Wales, the penalties for young adults are fines and compensation, attendance centre orders and probation orders; offenders may also be sentenced to up to 240 hours of community service. As in the case of juvenile offenders, a custodial sentence may be imposed only when no other measure would be appropriate. The custodial sentences for offenders of this age are the detention centre order (for young men sentenced to a term of four months or less) and the youth custody sentence (for both sexes). For the most serious offences young adults may be sentenced to custody for life. Detention centres, which receive offenders directly from the courts, operate a consistent regime which is geared to the short sentences involved. This inculcates a high standard of discipline and effort; in senior centres it includes a full working week; younger offenders receive at least 15 hours of education a week. Both junior and senior centres provide one hour of physical training each day. The youth custody centre regime is designed for offenders who are usually serving a minimum sentence of over four months, and for those allocated from a local prison. The aim is to provide flexible but coherent programmes of activities which are as constructive as possible and can include an element of vocational training. Some young offenders sentenced to youth custody are held in local prisons and remand centres in special accommodation where as full a regime as possible is provided. Legislation before Parliament would permit young offenders sentenced to terms of youth custody of over four but not more than six months to be placed in detention centres. Young offenders are eligible for parole on the same terms as adults and all are supervised after release.

In Scotland young offenders sentenced to detention serve their sentences either in a detention centre (in the case of males only) or a young offenders' institution, depending on the length of the sentence. Remission of part of the sentence for good conduct, release on parole, and supervision after release are available. In Northern Ireland, offenders aged between 17 and 21 who are sentenced to three years or less are sent to a young offenders' centre.

Civil Justice

The Civil Law

The main sub-divisions of the civil law of England, Wales and Northern Ireland are: family law, the law of property, the law of contract and the law of torts (covering injuries suffered by one person at the hands of another irrespective of any contract between them and including concepts such as negligence, defamation and trespass). Other branches of the civil law include constitutional and administrative (particularly concerned with the use of executive power), industrial, maritime and ecclesiastical law. Scottish civil law has its own, often analogous, branches.

An inquiry into the system of civil justice in England and Wales was set up in early 1985. Its aim is to improve the machinery of civil justice through reforms in jurisdiction, procedure and court administration, and in particular to reduce delay, cost and complexity.

CIVIL COURTS England and Wales The limited civil jurisdiction of magistrates' courts extends to matrimonial proceedings for custody and maintenance orders, adoption orders and affiliation and guardianship orders. The courts also have jurisdiction regarding nuisances under the public health legislation and the recovery of rates. Committees of magistrates license public houses, betting shops and clubs.

The jurisdiction of the 300 or so county courts covers actions founded upon contract and tort (with minor exceptions); trust and mortgage cases; and actions for the recovery of land. Cases involving claims exceeding set limits may be tried in the county court by consent of the parties, or in certain circumstances on transfer from the High Court.

Other matters dealt with by the county courts include hire purchase, the Rent Acts, landlord and tenant, and adoption cases. Divorce cases are determined in those courts designated as divorce county courts and outside London bankruptcies are dealt with in certain county courts. The courts also deal with complaints of race and sex discrimination. Where small claims are concerned (especially those involving consumers), there are special arbitration facilities and simplified procedures.

All judges of the Supreme Court (comprising the Court of Appeal, the Crown Court and the High Court) and all circuit judges and recorders have power to sit in the county courts, but each court has one or more circuit judges assigned to it by the Lord Chancellor, and the regular sittings of the court are mostly taken by them. The judge normally sits alone, although on request the court may, exceptionally, order a trial with a jury.

The High Court of Justice is divided into the Chancery Division, the Queen's Bench Division and the Family Division. Its jurisdiction is both original and appellate and covers all civil and some criminal cases. In general, particular types of work are assigned to a particular division. The Family Division, for instance, is concerned with all jurisdiction affecting the family, including that relating to adoption and guardianship. The Chancery Division deals with the interpretation of wills and the administration of estates. Maritime and commercial law is the responsibility of admiralty and commercial courts of the Queen's Bench Division. A consultative paper examining the issues involved in setting up a unified jurisdiction in family and domestic matters—a single 'family court'—was published in mid-1986.

Each of the 80 or so judges of the High Court is attached to one division on appointment but may be transferred to any other division while in office. The Lord Chancellor is president of the Chancery Division, administered by the vice-president, the Vice-Chancellor. The Queen's Bench Division is presided over by the Lord Chief Justice of England, who ranks next to the Lord Chancellor in the legal hierarchy, and the Family Division is headed by the President. Outside

London (where the High Court sits at the Royal Courts of Justice) sittings are held at 25 Crown Court centres. For the hearing of cases at first instance, High Court judges sit alone. Appeals in civil matters from lower courts are heard by courts of two (or sometimes three) judges, or by single judges of the appropriate division, nominated by the Lord Chancellor.

Appeals

Appeals in matrimonial, adoption and guardianship proceedings heard by magistrates' courts go to a divisional court of the Family Division of the High Court. Affiliation appeals are heard by the Crown Court, as are appeals from decisions of the licensing committees of magistrates. Appeals from the High Court and county courts are heard in the Court of Appeal (Civil Division) and may go on to the House of Lords, the final court of appeal in civil cases.

The ex-officio members of the Court of Appeal are the Lord Chancellor, the Lord Chief Justice, the President of the Family Division and the Master of the Rolls; the ordinary members are 23 Lords Justices of Appeal.

The judges in the House of Lords are the nine Lords of Appeal in Ordinary, who must have a quorum of three, but usually sit as a group of five, and sometimes even of seven. Lay peers do not attend the hearing of appeals (which normally take place in a committee room and not in the legislative chamber), but peers who hold or have held high judicial office may also sit. The president of the House in its judicial capacity is the Lord Chancellor.

Scotland

The main civil courts are the sheriff courts and the Court of Session. The civil jurisdiction of the sheriff court extends to most kinds of action and is normally unlimited by the value of the case. Much of the work is done by the sheriff, against whose decisions an appeal may be made to the sheriff-principal or directly to the Court of Session.

The Court of Session sits only in Edinburgh, and in general has jurisdiction to deal with all kinds of action. The main exception is an action exclusive to the sheriff court, where the value claimed is less than a set amount. It is divided into two parts: the Outer House, a court of first instance, and the Inner House, mainly an appeal court. The Inner House is divided into two divisions of equal status, each consisting of four judges—the first division being presided over by the Lord President and the second division by the Lord Justice Clerk. Appeals to the Inner House may be made from the Outer House and from the sheriff court. From the Inner House an appeal may go to the House of Lords. The judges of the Court of Session are the same as those of the High Court of Justiciary. The Lord President of the Court of Session holds the office of Lord Justice General in the High Court of Justiciary (see p 117).

The Scottish Land Court is a special court which deals exclusively with matters concerning agriculture. Its chairman has the status and tenure of a judge of the Court of Session and its other members are lay specialists in agriculture.

Northern Ireland Minor civil cases in Northern Ireland are dealt with in county courts, though magistrates' courts also deal with certain classes of civil case. The superior civil law court is the High Court of Justice from which an appeal may be made to the Court of Appeal. These two courts, together with the Crown Court, comprise the Supreme Court of Judicature of Northern Ireland and their practice and procedure are similar to those in England. The House of Lords is the final civil appeal court.

Civil Proceedings In England and Wales civil proceedings are instituted by the aggrieved person; no preliminary inquiry on the authenticity of the grievance is required. Actions in the High Court are usually begun by a writ of summons served on the

defendant by the plaintiff, stating the nature of the claim. A defendant intending to contest the claim informs the court. Documents setting out the precise question in dispute (the pleadings) are then delivered to the court. County court proceedings are initiated by a summons served on the defendant by the court; subsequent procedure is simpler than in the High Court.

A decree of divorce must be pronounced in open court, but a procedure for most undefended cases dispenses with the need to give evidence in court and

permits written evidence to be considered by the registrar.

Civil proceedings, as a private matter, can usually be abandoned or ended by compromise at any time. Actions brought to court are usually tried without a jury, except in defamation, false imprisonment, or malicious prosecution cases, when either party may, except in certain special circumstances, insist on trial by jury, or a fraud case, when the defendant may claim this right. The jury decides questions of fact and damages awarded to the injured party; majority verdicts may be accepted.

An action in a magistrates' court is begun by a complaint on which the court may serve the defendant with a summons. This contains details of the complaint and the date on which it will be heard. Parties and witnesses give their evidence at the court hearing. Domestic proceedings are normally heard by not more than three lay justices including, where praeticable, a woman; members of the public are not allowed to be present. The court may order provision for custody, access and supervision of children, as well as maintenance payments for spouses and children.

Judgments in civil cases are enforceable through the authority of the court. Most are for sums of money and may be enforced, in cases of default, by seizure of the debtor's goods or by attachment of earnings (a court order requiring an employer to make periodic payments to the court by deduction from the debtor's wages). Other judgments can take the form of an injunction restraining someone from performing an illegal act. Refusal to obey a judgment may result in imprisonment for contempt of court. Arrest under an order of committal may be effected only on a warrant.

The general rule is that the costs of the action (lawyers' charges, court fees and other payments) are within the discretion of the court. Normally, the court orders them to be paid by the party losing the action, but in the case of family law maintenance proceedings a magistrates' court can order either party to pay the whole or part of the other's costs.

In Scotland proceedings in the Court of Session or ordinary actions in the sheriff court are initiated by serving the defender with a summons (an initial writ in the sheriff court). In Court of Session actions the next step is the publication of the action in the court lists. A defender who intends to contest the action must inform the court; if he or she does not appear, the court grants a decree in absence in favour of the pursuer. In ordinary actions in the sheriff court the defender is simply required to give notice of intention to defend within a certain number of days after service of the initial writ, and this is followed by a formal appearance in court by the parties to the dispute or their solicitors.

In summary causes (involving small sums) in the sheriff court the procedure is less formal. The statement of claim is incorporated in the summons. The procedure is designed to enable most actions to be carried through without the parties involved having to appear in court. Normally they (or their representatives) need appear only when an action is defended.

Proceedings in Northern Ireland are similar to those in England and Wales. County court proceedings are commenced by a civil bill served on the defendant; there are no pleadings in the county court. Judgments of civil courts are enforceable through a centralised procedure administered by the Enforcement of Judgments Office.

Restrictive Practices Court

The Restrictive Practices Court is a specialised United Kingdom court which deals with monopolies and restrictive trade practices. It comprises five judges and up to ten other people with expertise in industry, commerce or public life.

Administrative Tribunals

Administrative tribunals consist of people or bodies exercising judicial functions outside the ordinary hierarchy of the courts. As a rule, they are set up under statutory powers which also govern their constitution, functions and procedure. Their composition and procedures vary greatly. Compared with the courts, they tend to be less expensive, less formal and more accessible; they also have expert knowledge of their particular subjects. The expansion of the tribunal system is comparatively recent, most tribunals having been set up since 1945. Independently of the executive, tribunals decide the rights and obligations of private citizens towards one another or towards a government department or other public authority. A number of important tribunals (notably the rent and industrial tribunals) decide disputes between private citizens. Some (such as those concerned with social security) resolve claims by private citizens against public authorities. A further group (including tax tribunals) decide disputed claims by public authorities against private citizens, and still others decide issues in dispute which do not directly affect financial rights or liabilities, such as entitlements to licences or the right to enter the United Kingdom. Tribunals usually consist of an uneven number of people so that a majority decision can be reached; some consist of one person sitting alone. Members are normally appointed by the minister concerned with the subject but other authorities have the power of appointment in appropriate cases. The Lord Chancellor (or the Lord President of the Court of Session in Scotland) makes most appointments where a lawyer chairman or member is required.

Appeals on a point of law from all the more important tribunals may be made in England and Wales to the High Court, in Scotland to the Court of Session and in Northern Ireland to the Court of Appeal. In some cases an appeal may be made to a specially constituted appeal tribunal, to a government minister or to an independent referee. The Employment Appeal Tribunal, which hears appeals on questions of law from decisions of industrial tribunals, has High Court and Court of Session status in Great Britain. The Council on Tribunals (an independent body, established in 1958) exercises general supervision over many tribunals, advising on draft legislation and rules of procedure, monitoring their activities and reporting on particular matters; those peculiar to Scotland are dealt with by the Scottish Committee of the Council. The Council has a similar responsibility with regard to public inquiries.

Administration of the Law

GOVERNMENT RESPONSI-BILITIES

The United Kingdom judiciary is entirely independent of the Government and is not subject to ministerial direction or control. There is no minister of justice. Responsibility for the administration of justice rests with the Lord Chancellor, the Home Secretary and the Secretaries of State for Scotland and Northern Ireland. Also concerned is the Prime Minister, who recommends the highest judicial appointments to the Crown.

England and Wales

The Lord Chancellor is the head of the judiciary (and sometimes sits as a judge in the House of Lords); he is concerned with court procedure and is responsible for the administration of all courts other than magistrates' and coroners' courts, and for a number of administrative tribunals. He appoints magistrates, and has general responsibility for the legal aid and advice schemes. He is also responsible for the administration of civil law reform.

The Home Secretary is concerned with the criminal law (including law reform), the police service, prisons, and the probation and after-care service; and has general supervision over magistrates' courts, together with some specific responsibilities (such as approving the appointment of justices' clerks). Prison policy and the administration of custodial centres are functions of the Home Office Prison Department, and the Home Secretary appoints to each prison establishment a Board of Visitors representing the local community who need to satisfy themselves as to the state of prison premises, administration and treatment of inmates. They are required to report to the Home Secretary any abuse or matter of concern which comes to their attention. Boards have disciplinary powers in relation to serious breaches of discipline and hear applications or complaints from inmates. The Home Secretary is advised by a special Parole Board on the release of prisoners on licence.

Responsibility for the treatment of offenders under 17 is shared between the Home Office and the Department of Health and Social Security. The Home Secretary is also responsible for advising the Queen on the exercise of the royal prerogative of mercy to pardon a person convicted of a crime or to cancel all or

part of a penalty imposed by a court.

The Attorney General and the Solicitor General (the Law Officers of the Crown for England and Wales) are the Government's principal advisers on English law, and represent the Crown in appropriate domestic and international cases. They are senior barristers, elected members of the House of Commons and hold ministerial posts. The Attorney General is also Attorney General for Northern Ireland. As well as exercising various civil law functions, the Attorney General has final responsibility for enforcing the criminal law; the Director of Public Prosecutions is subject to the Attorney General's superintendence. The Attorney General is concerned with instituting and prosecuting certain types of criminal proceedings, but must exercise an independent discretion, and must not be influenced by government colleagues. The Solicitor General is, in effect, the deputy of the Attorney General.

Scotland

The Secretary of State for Scotland recommends the appointment of all judges other than the most senior ones, appoints the staff of the High Court of Justiciary and the Court of Session and is responsible for the composition, staffing and organisation of the sheriff courts. District courts are staffed and administered by the district and islands local authorities. The Secretary of State is also responsible for the criminal law of Scotland, crime prevention, and the police and the penal system, and is advised on parole matters by the Parole Board for Scotland. The Secretary of State is also responsible for legal aid in Scotland and for the legal advice and assistance schemes.

The Lord Advocate and the Solicitor General for Scotland are the chief legal advisers to the Government on Scottish questions and the principal representatives of the Crown for the purposes of litigation in Scotland. Both are government ministers. The Lord Advocate is closely concerned with questions of legal policy and administration and is also responsible for the Scottish parliamentary draftsmen. He has overall responsibility for the prosecution of crime in Scotland and, although he holds a ministerial post, he must exercise an independent discretion in carrying out this responsibility.

Northern Ireland In Northern Ireland the judiciary is appointed by the Queen on the advice of the Lord Chancellor. The administration of all courts is the responsibility of the Lord Chancellor, while the Northern Ireland Office, under the Secretary of State, deals with the police and the penal system. The Lord Chancellor has general responsibility for the legal aid and advice scheme in Northern Ireland.

THE PERSONNEL OF THE LAW

The courts of the United Kingdom are the Queen's Courts since the Crown is the historic source of all judicial power. The Queen, acting on the advice of ministers, is responsible for all appointments to the judiciary.

Judges

Full-time judges do not engage in politics, except for the Lord Chancellor, who is head of the judiciary, speaker of the House of Lords and a Cabinet minister. With the exception of lay magistrates, judges are normally appointed from practising barristers, advocates (in Scotland) or solicitors (see below). The judiciary is not a career service as in many other countries. Lay magistrates in England and Wales need no legal qualifications but on appointment undergo basic training to give them sufficient knowledge of the law, including the rules of evidence, and to enable them to understand the nature and purpose of sentencing. The Scottish district court justices of the peace likewise need no legal qualifications. In Northern Ireland members of a lay panel who serve in juvenile courts undertake training courses; resident magistrates are drawn from practising solicitors or barristers. In certain circumstances (for instance, in cases of misconduct or proven incapacity) judges of the inferior courts may be removed from their positions but, in order to safeguard the independence of the judiciary from the executive, superior judges in England and Wales and Northern Ireland (other than the Lord Chancellor who changes with the Government) are subject to removal only by the Queen on an address presented by both Houses of Parliament; in Scotland there is no statutory provision for removing judges of the Court of Session or High Court of Justiciary from office and special legislation would probably be needed to secure a dismissal.

The Legal Profession The legal profession is divided into two branches: barristers (advocates in Scotland) and solicitors. Barristers are known collectively as the 'Bar', and collectively and individually as 'counsel'. Solicitors undertake legal business for individual and corporate clients, while barristers advise on legal problems submitted through solicitors and present cases in the higher courts; certain functions are common to both. Although people are free to conduct their own cases, most people prefer to be legally represented in the more serious cases.

The professional organisations for barristers are: the General Council of the Bar (in England and Wales), the Faculty of Advocates (in Scotland) and the General Council of the Bar of Northern Ireland and the Executive Council of the Inn of Court of Northern Ireland. For solicitors they are: the Law Society, the Law Society of Scotland and the Law Society of Northern Ireland.

LEGAL AID, ADVICE AND ASSISTANCE A person in need of legal advice or legal representation in court may qualify for help with the costs out of public funds, either free or with a contribution according to his or her means, under the legal aid and advice and assistance schemes.

People whose income and savings are within certain limits are entitled to help from a solicitor on any legal matter as it affects the applicant's particular circumstances. Such help includes advice on the relevant law, writing letters on the client's behalf, and taking the opinion of a barrister or advocate. In England and Wales it may be extended to cover representation in civil proceedings in the magistrates' court, Mental Review Tribunal hearings and certain disciplinary proceedings before prisons' Boards of Visitors.

The scheme provides for initial work to be done up to a cost of £50 (£90 where the client is the petitioner for a divorce or judicial separation in England and Wales); thereafter the approval of the Law Society or the Scottish Legal Aid Board is required before further costs can be incurred.

Law Centres In a number of urban areas law centres provide free advice to people of limited means. Most law centres (organisations financed from various sources, including the local authority) have at least two full-time salaried lawyers and many employ community workers. Much of their time is devoted to tenant-landlord disputes and other housing problems. Free legal advice is also available in Citizens Advice Bureaux, consumer and housing advice centres and in specialist advice centres run by various voluntary organisations.

Aid in Civil Proceedings

Legal aid, which covers representation before the court, may be available for most civil proceedings to those who satisfy the financial eligibility conditions. An applicant for legal aid must also show not only that he or she has reasonable grounds for taking or defending proceedings but also that it is reasonable in all the circumstances of the case that he or she should receive, or continue to receive, legal aid. If legal aid is granted the case is conducted in the normal way except that no money passes between the client and the solicitor; all payments are made through the legal aid fund.

In certain limited circumstances the successful unassisted opponent of a legally aided party may recover his or her costs in the case from the legal aid fund. Where the assisted person recovers or preserves money or property in the proceedings the legal aid fund may have a first charge on that money or property to recover the sums it has expended on the assisted person's behalf.

The civil legal aid schemes are administered by the Law Society, the Law Society of Northern Ireland and the Scottish Legal Aid Board while ministerial responsibility for the schemes rests with the Lord Chancellor and, in the case of Scotland, the Secretary of State for Scotland.

Aid in Criminal **Proceedings**

In criminal proceedings in England and Wales a legal aid order may be made by the court concerned if it appears to be in the interests of justice and if a defendant qualifies for financial help. An order must be made (subject to means) when a person is committed for trial on a murder charge or where the prosecutor appeals or applies for leave to appeal from the Court of Appeal (Criminal Division) to the House of Lords. No person who is unrepresented can be given a custodial sentence for the first time unless given the opportunity to apply for legal aid.

The criminal legal aid scheme in England and Wales is administered by the courts, under the overall responsibility of the Lord Chancellor. Committees of the Law Society provide a right of recourse against the refusal of legal aid in some cases by a magistrates' court.

Under the Police and Criminal Evidence Act the Law Society makes arrangements for duty solicitors to be available at magistrates' courts to provide initial advice and representation to unrepresented defendants, and also for duty solicitors to be available, on a 24-hour basis, to give advice and assistance to suspects at police stations. The services of a duty solicitor are free.

The arrangements for aid in criminal proceedings in Northern Ireland are broadly similar. In Scotland there is a duty solicitor scheme for accused people in custody in sheriff, and district, court cases and the 'interests of justice' test applies only in summary cases, where decisions on applications for legal aid are taken by the Scottish Legal Aid Board. In Northern Ireland a duty solicitor scheme has been introduced at the principal magistrates' court in Belfast. Legal aid for criminal cases in Scotland and Northern Ireland is free; the assisted person is not required to make any contributions towards the cost of his or her legal representation.

Changes in the System

In a White Paper published in March 1987 the Government announced its intention to make some changes in the way in which the legal aid system in England and Wales is operated. Under the proposals a new Legal Aid Board would be established which would initially take over responsibility for those parts of the scheme currently administered by the Law Society. Following the Legal Aid (Scotland) Act 1986, a new non-departmental public body, the Scottish Legal Aid Board, assumed responsibility for the administration of most legal aid functions in Scotland on 1 April 1987. Legal aid in solemn criminal cases (see p 117) will continue to be awarded by the courts.

LAW REFORM

While changes in the law are matters for Parliament, the duty of keeping the law under review lies with the Law Reform Committee, the Criminal Law Revision Committee and the Law Commission in England and Wales, and with the Scottish Law Commission in Scotland. The Law Reform Committee and the Criminal Law Revision Committee comprise judges and practising and academic lawyers, appointed respectively by the Lord Chancellor and the Home Secretary, to examine aspects of the civil and criminal law in England and Wales.

The Law Commission, a permanent body reporting to the Lord Chancellor and consisting of a High Court judge and four other members who are required to be practising or academic lawyers, scrutinises the law with a view to its systematic development and reform, and its simplification and modernisation. The Scottish Law Commission is similar, and reports to the Lord Advocate. Law reform in Northern Ireland is a matter for the Law Commission and the Office of Law Reform.

6 Social Welfare

The British social welfare system comprises the National Health Service, the personal social services and social security. The National Health Service provides a comprehensive range of medical services which are available to all residents, irrespective of means. Local authority personal social services and voluntary organisations provide help and advice to elderly people, disabled people and children in need of care. The social security system is designed to secure a basic standard of living for people in financial need by providing income during periods of inability to earn, help for families and assistance with costs arising from disablement.

Central government is directly responsible for the National Health Service, administered by health authorities and boards acting as its agents, and for the social security system. It has an indirect responsibility for the personal social services administered by local authorities. Joint finance and planning between health and local authorities aims to prevent overlapping of services and to encourage the development of community services.

Planned spending on social welfare in 1987–88 is: health £21,314 million and personal social services £4,312 million (together representing 14 per cent of general government expenditure); and social security nearly £46,000 million (26·5 per cent).

Expenditure on the health service has increased substantially in real terms since 1980, and current spending is planned to grow further over the next two years. More patients are now being treated than ever before. Spending on social security is rising because of increased numbers of beneficiaries, especially retirement pensioners and the unemployed, and the value of retirement and most other long-term benefits has been increased in real terms since 1980. Major reforms to the social security system have been introduced under the Social Security Act 1986; these are designed to provide a clearer, simpler system more capable of meeting genuine need (see p 155). Spending on the personal social services is determined by local authorities, and while constraints are placed by central government on the total expenditure of individual local authorities, spending has risen subtantially in real terms since the late 1970s, thus reflecting the priority given to this sector.

National Health Service

The National Health Service (NHS) is based upon the principle that there should be a comprehensive range of publicly provided services designed to help the individual to stay healthy and to provide effective and appropriate treatment and care where necessary. All taxpayers, employers and employees contribute to its cost so that those members of the community who do not require health care help to pay for those who do. Some forms of treatment, such as hospital care, are provided free of charge; others (see p 137) may be charged for.

Growth in real spending on the health service is being used to meet the needs of increasing numbers of elderly people (over 45 per cent of health authority

expenditure on hospital and community services is spent on care of the elderly); to take full advantage of advances in medical technology and to remedy shortfalls in such areas as renal services; to provide more appropriate types of care, often in the community rather than in hospital, for priority groups such as the elderly, mentally ill and mentally handicapped people; to combat the growing health problems arising from alcohol and drug misuse; and to remedy disparities in provision between the regions of Britain.

The Government emphasises the importance of preventive health services, and the responsibility of individuals for their own health. While great progress has been made in eliminating infectious diseases such as poliomyelitis and tuberculosis, there has been less success in controlling the major causes of early death and disability—heart disease, cancer and stroke. Most recently the threat of AIDS (Acquired Immune Deficiency Syndrome, see p 145) has proved a serious problem to public health. Because of the close link between such diseases and individual life-styles or social habits, emphasis is placed on helping people to adopt healthier ways of living through education and other policies. A £2·5 million campaign was launched in 1987 to inform the public of the main risks of heart disease.

The Government stresses the need for a partnership between the public and private health sectors and for improving efficiency in order to secure the best value for money and the maximum patient care. In order to secure more effective management of resources in the National Health Service, general managers drawn from inside and outside the Service have been appointed at all levels. Further measures have included improving the accountability of health authorities for the way in which they plan and manage their resources, increasing the proportion of total staff who provide direct patient care, such as doctors and nurses, and the introduction of a range of programmes to provide existing services at lower cost. Considerable savings—some £86 million in 1986—have been made in many areas through a policy of competitive tendering for hospital ancillary services such as cleaning, catering and laundry. Economies are also made in prescribing by restricting the use of expensive branded products in favour of cheaper but equally effective generic equivalents.

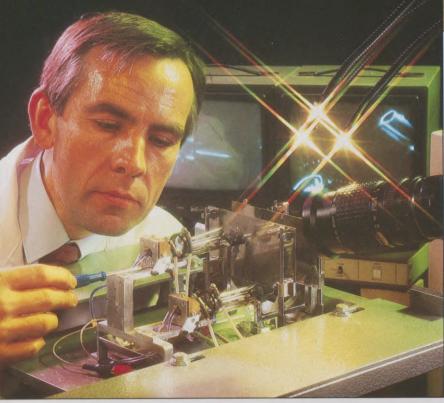
ADMINIS-TRATION The health ministers (the Secretary of State for Social Services in England and the Secretaries of State for Scotland, Wales and Northern Ireland) are responsible for all aspects of the health services in their respective countries. The health departments (the Department of Health and Social Security in England, the Scottish Home and Health Department, the Welsh Office and the Department of Health and Social Services in Northern Ireland) are responsible for national strategic planning. District health authorities in England and Wales and health boards in Scotland are responsible for planning and operational control of all health services in their areas. England, because of its greater size and population, has a tier of regional authorities responsible for regional planning, resource allocation, major capital building work and certain specialised hospital services best administered on a regional basis. The authorities and boards co-operate closely with local authorities responsible for social work, environmental health, education and other services. Family practitioner committees (health boards in Scotland), accountable to the Secretary of State, arrange for the provision of services by doctors, dentists, pharmacists and opticians. Community health councils represent local opinion on the health services provided. (In Scotland this function is exercised by local health councils.)

In Northern Ireland health and social services boards are responsible for all health and personal social services in their areas. The representation of public opinion on these services is provided for by district committees.

POST OFFICE

Some
2 million
letters are
transported
by air within
Britain each
night.





Post Office engineer testing the ink jet printer which codes letters with phosphorescent ink dots.

BRITISH DESIGN AWARDS

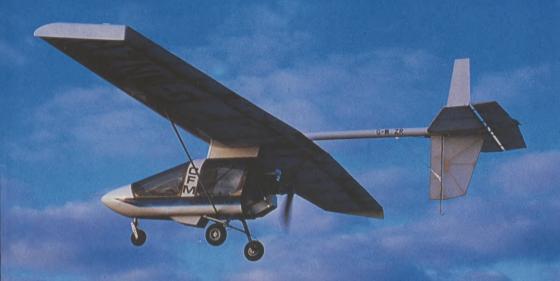
The Design Council has given its British Design Award to 24 companies in 1987, for exceptional design and innovation of their products.



Super Snorkel emergency/high access platform, with double the previous 30-m maximum reach.

Buddy Sea King Deluxe adjustable buoyancy lifejackets.

Shadow mini-aircraft, for aerial survey and surveillance work.



Below, Elgastat UHQ water purifier, for laboratory use.



TRANSPORT



The first prototype of the EH101 multi-purpose helicopter, produced by collaboration of Westland Helicopters and the Italian company, Agusta.

One of four locomotives which will work with drilling machines on the construction of the Channel Tunnel.

Health Service Commissioners

There are three Health Service Commissioner posts (for England, Scotland and Wales) for dealing with complaints from members of the public about the health service. All three posts are held by the Parliamentary Commissioner for Administration (Ombudsman). The jurisdiction of the Health Service Commissioner covers the failure of a health authority or family practitioner committee to carry out its statutory duties, a failure in a service provided, or maladministration causing injustice or hardship, but not actions taken solely in the exercise of clinical judgment or the actions of family practitioners, for which separate complaints procedures exist. The Commissioner reports annually to ministers who lay the reports before Parliament, and may make other reports when necessary. In Northern Ireland the Commissioner for Complaints has a similar role.

Finance

About 86 per cent of the cost of the health service is paid for through general taxation; the rest is met from the National Health Service contribution paid with the National Insurance contribution and from the charges towards the cost of certain items such as drugs prescribed by a family doctor, and dental treatment. Health authorities may raise funds from voluntary sources. Certain hospitals increase their revenue by taking private patients who pay the full cost of their accommodation and treatment.

The charges for medical prescriptions do not apply to children under 16 years, expectant mothers and women who have had a baby in the last 12 months, women aged 60 and over and men aged 65 and over, patients suffering from certain medical conditions, war and armed forces disablement pensioners (for treatment of their disability), and families with low incomes. Some 75 per cent of prescription items are supplied free of charge. No charges for dental treatment are made for dental examinations and denture repairs. Some groups of patients receive entirely free dental treatment, for example, women who are pregnant or who have had a baby in the last year, anyone under the age of 18, or 19 if in full-time education, and people receiving supplementary benefit or family income supplement (see p 160). Patients with low incomes may have their charges remitted. Some groups also receive grants towards the cost of spectacles.

Hospital medical staffs are salaried and may be employed full time or part time. Hospital doctors may accept private patients. Family practitioners (doctors, dentists, opticians and pharmacists) are self-employed contractors. Family doctors (also known as general practitioners) are paid by a system of fees and allowances designed to reflect responsibilities, workload and practice expenses. Dentists providing treatment in their own surgeries are paid on a prescribed scale of fees. Pharmacists dispensing on their own premises are reimbursed for the cost of the items supplied together with professional fees. Ophthalmic medical practitioners and ophthalmic opticians taking part in the general ophthalmic service receive approved fees for each sight test made.

PRIMARY HEALTH CARE

Primary health care is offered by doctors, dentists, opticians and pharmacists working within the Service as independent practitioners, and by health visitors, district nurses and midwives employed by the health authorities. A wide range of other services is also available, including the school health service and the chiropody service. The remedial professions of physiotherapy, occupational therapy and speech therapy are making an increasingly important contribution to primary care.

There have been substantial increases in primary health care staff in recent years; for example, in England between 1979 and 1986 the number of family doctors increased by 15 per cent (and by a similar percentage in Wales), with 30 per cent more support staff in general practice; dentists increased by 20 per cent

(24 per cent in Wales) and opticians by nearly 21 per cent (27 per cent in Wales). Nursing and midwifery staff in primary care now stand at 43,000 with 133 per cent more nurses specialising in mental illness. The trend in Scotland has been similar.

Special funds have been earmarked by the Government for improving the quality of primary health care in inner city areas.

The first comprehensive review of primary health care services has recently been completed. Following a period of consultation, the Government intends to propose reforms to raise standards of care and make services more responsive to the needs of the public.

Family Practitioner Services

The family practitioner services are those given to patients by doctors, dentists, opticians and pharmacists of their own choice. Family doctors provide the first diagnosis in the case of illness and either prescribe a suitable course of treatment or refer a patient to the more specialised services and hospital consultants. Only ophthalmic medical practitioners and ophthalmic opticians may test sight; patients requiring treatment for a defect in sight or an eye disease are dealt with through the Hospital Eye Service. Spectacles are supplied by registered ophthalmic and dispensing opticians but unregistered opticians may also sell spectacles to adults under carefully prescribed conditions. Children, those on low incomes and people requiring complex lenses are provided with vouchers which may be exchanged for low-priced spectacles or put towards the cost of higher-priced frames.

Health Visitors, District Nurses and Midwives

Health visitors are responsible for the preventive care and health education of all families, particularly those with young children. They work closely with general practitioners, district nurses and other professions. District nurses give skilled nursing care to people at home or elsewhere outside hospital; they also play an important role in preventive care and health education. Although almost all babies are born in hospital, some antenatal care and most postnatal care is given in the community by midwives and general practitioners, who also care for women having their babies at home. All midwives are responsible for educating and supporting women and their families during the childbearing period.

Group Practices and Health Centres

About four-fifths of family doctors in Britain work in partnerships or group practices, often as members of primary health-care teams which also include health visitors and district nurses and sometimes midwives, social workers and other professional staff. About a quarter in Great Britain and over a half in Northern Ireland work in modern and well-equipped health centres, where medical and nursing services are provided. Health centres may also have facilities for health education, family planning, speech therapy, chiropody, assessment of hearing, physiotherapy and remedial exercises. Dental, pharmaceutical and ophthalmic services, hospital out-patient and supporting social work services may also be provided.

HOSPITALS AND SPECIALIST SERVICES

A full range of hospital services is provided by district general hospitals, including treatment and diagnostic facilities for in-patients, day-patients and out-patients, maternity departments, infectious disease units, psychiatric and geriatric facilities, rehabilitation facilities, convalescent homes and all forms of specialised treatment. There are also specialist hospitals or units for children, mentally ill, mentally handicapped and elderly people, and for the treatment of specific diseases; examples include the world-famous Hospital for Sick Children, Great Ormond Street, and the Brompton Heart and Chest Hospital in London. Hospitals designated as teaching hospitals combine treatment facilities with training medical and other students, and research work.

Many of the hospitals in the NHS were built in the nineteenth century; some trace their origins to much earlier charitable foundations, such as the famous St Bartholomew's and St Thomas' hospitals in London. Much has been done to improve and extend existing buildings and many new hospitals have been or are being opened. Since 1979 in England over 180 health building schemes, each costing £1 million or more, have been started and completed. Nearly 500 schemes, worth over £3,200 million, are at various stages of planning, design and construction. Of these, about 120 schemes costing a total of some £700 million are planned for completion over the next three years. In Scotland 48 major health building schemes, providing over 5,600 beds, have been completed since 1979. A further 34 schemes are at various stages of development. Costing some £290 million, these will provide a further 4,500 beds.

Recent policy in England and Wales has been to provide a well-balanced hospital service centred around a district general hospital complemented as

necessary by smaller, locally based hospitals and facilities.

The latest development in hospital planning is the nucleus hospital designed to accommodate a comprehensive range of district general hospital facilities and capable of being built and commissioned in self-contained phases or as an extension to an existing hospital. Many nucleus hospitals are being developed and those already open have proved economical to build and are providing high-quality and cost-effective services to patients. The world's first low-energy nucleus hospital, which is expected to use less than half the energy of a conventional nucleus hospital, is under construction on the Isle of Wight. A similar hospital is planned for Northumberland.

National Health Service hospitals provide nearly half a million beds and have over 480,000 medical, nursing and midwifery staff. The hospital service is now treating more patients a year than ever before: in England between 1978 and 1985 the number of in-patient cases treated rose by 983,000 (18.3 per cent); the number of day case attendances by 401,000 (71·3 per cent); and there were 3·5 million (10·3 per cent) more out-patient attendances. Newer forms of treatment and diagnosis, such as kidney dialysis, hip replacements, laser treatment for certain eye conditions, and body scanning, are being made more widely available.

In mid-1986 the Government launched a three-year drive to reduce hospital waiting lists and times and has set up a fund of £50 million over two years to finance a variety of projects, including mobile operating theatres and the purchase of equipment, to improve waiting times for patients.

Community services such as the psychiatric nursing service, day hospitals, and local authority day centres have expanded so that more patients remain in

the community and others are discharged sooner from hospital.

Private Medical Treatment

It is the Government's policy to encourage the private sector to meet a larger share of the nation's health needs in the belief that this will benefit the National Health Service by relieving pressure on it. Some health authorities share expensive facilities and equipment with private hospitals, and NHS patients are sometimes treated (at public expense) in the private sector to reduce waiting lists. The scale of private practice in relation to the NHS is, however, small. Six per cent of acute hospital beds are in private hospitals and nursing homes, and over 3,000 bcds in health service hospitals in Britain are occupied by private patients. It is estimated that about half of those receiving acute treatment in private hospitals or hospital pay-beds are covered by provident schemes which make provision for private health care in return for annual subscriptions. In 1986 there were over 5.5 million subscribers to such schemes of whom the majority were involved in group schemes, some arranged by firms on behalf of employees. Subscriptions often cover more than one person (for example, members of a family). Private practice is also undertaken by family doctors and dentists. Many overseas patients come to Britain for treatment in private hospitals and clinics, and Harley Street in London is an internationally recognised centre for medical consultancy.

There is growing interest in alternative therapies such as homeopathy, osteopathy and acupuncture, which are mainly practised outside the NHS.

Organ **Transplants**

Over the past 25 years there have been significant developments in transplant surgery in Britain. Since 1972 the United Kingdom Transplant Service has provided a centralised kidney matching and distribution service. At the end of 1986 about 6,500 people were living with functioning kidney transplants and during the same year just under 1,500 kidney transplants were performed. In 1983 a similar service was initiated for corneas, about 1,200 being transplanted each year. Heart transplant operations have been conducted at Papworth Hospital in Cambridgeshire since 1979 and at Harefield Hospital, West London, since 1980. A third heart transplant centre was opened at the Freeman Hospital in Newcastle upon Tyne in 1986 and a fourth centre is planned for 1989. By March 1987, some 600 transplants had been performed; a study published in 1985 indicated that one-year survival was about 70 per cent and the three-year survival rate about 55 per cent. A programme of combined heart and lung transplants is also in progress at Harefield, about 60 having been performed by the end of March 1987, while the world's first combined heart, lungs and liver transplant operation was carried out at Papworth in early 1987. Other organs and tissues which are now successfully being transplanted include the pancreas and bone marrow. A voluntary organ donor card system enables people to indicate their willingness to become organ donors in the event of their death. Several million people now participate in the scheme.

Transfusion

The blood transfusion service collects over 2 million donations of blood and over 44,000 donations of plasma each year from voluntary unpaid donors. Regional transfusion centres recruit donors and organise donor sessions in towns and villages, factories and offices, and within the armed forces. Donors must be between the ages of 18 and 65. The centres are also responsible for blood grouping and testing, maintaining blood banks, providing a consultancy service to hospitals, teaching in medical schools, and instructing doctors, nurses and technicians. Central laboratories manufacture blood products and undertake research. While the use of whole blood for transfusions remains an important part of the Service's work, there is increasing emphasis on the most efficient and effective use of blood and in particular its separation into components such as plasma for specific uses. A new blood products laboratory at Elstree, Hertfordshire, was opened in 1987 with the aim of making England and Wales self-sufficient by 1989.

Ambulance Services

Where necessary on medical grounds free transport by ambulance is provided by the health authorities. The ambulance service performs emergency work, dealing with sudden illness, urgent maternity cases, and accidents of all kinds; and non-urgent work, providing transport for people needing out-patient treatment at hospitals, clinics and day hospitals. In some areas the service for non-urgent cases is augmented by voluntary organisations using their own vehicles or by volunteers using their own cars. In Scotland an air ambulance service is available in the islands and in the remoter parts of the mainland.

Rehabilitation Rehabilitation begins at the onset of illness or injury and continues throughout with the aim of helping people to adjust to changes in life-style and to live as normally as possible. It is especially important for elderly, young, disabled, mentally ill and mentally handicapped people who need such help to resume life

141

in the community. Rehabilitation activities are carried out in hospitals, centres in the community and in people's own homes through co-ordinated work by a range of professional workers including doctors, nurses, physiotherapists, occupational therapists, speech therapists, hearing therapists, clinical psychologists, dietitians and social workers. These staff may also work closely with the disablement resettlement service of the Manpower Services Commission (the Department of Economic Development in Northern Ireland), housing, education and social services departments of local authorities and with the voluntary sector.

Medical services may provide, free of charge, artificial limbs and eyes, hearing aids, surgical supports, wheelchairs, and other appliances. Following assessment, very severely physically handicapped patients may be provided with environmental control equipment which enables them to operate devices such as alarm bells, radio and television, a telephone, and heating appliances. Nursing aids may be provided on loan for use in the home.

Local authorities may provide a range of facilities to assist patients in the transition from hospital to their own homes, including the provision of aids and adaptations, domiciliary care from home helps, and professional help from occupational therapists and social workers. Voluntary organisations also provide valuable help in complementing the work of the statutory agencies and in widening the range of available services.

Hospices

A number of hospices provide care for the dying (including children) either directly in residential homes or through nursing and other assistance in the patient's own home. Control of symptoms and psychological support for patients and their families form the central features of the modern hospice movement, which originated in Britain and is now world-wide. Some hospices are administered entirely by the NHS; the remainder, some of which receive support from public funds, are run by independent charities. The Government is encouraging a greater co-operation between the voluntary sector and health authorities in this field.

Parents and Children Special preventive services are provided under the health service to safeguard the health of expectant mothers and mothers with young children. Services include free dental treatment, dried milk and vitamins; vaccination and immunisation against certain diseases (see p 146); and health education, which is available to parents before and after childbirth through talks, discussion groups and demonstrations. Pregnant women are given antenatal care by their family doctor and hospital clinics, and working women have the right to visit the clinics during working hours. Some 98 per cent of women have their babies in hospital, returning home shortly afterwards to be attended by the family doctor, a midwife and a health visitor. The Government attaches great importance to improving the quality of maternity services, and to making them more sensitive to the needs and wishes of mothers and their families; it is advised by the Maternity Services Advisory Committee. In Wales, for example, a special two-year initiative to identify significant causes of perinatal mortality and to stimulate improvements in maternity and neonatal care has resulted in over 50 recommendations for action which the NHS in Wales has been asked to implement. The perinatal mortality rate (the number of stillbirths and deaths in the first week of life) has fallen in recent years and in 1985 stood at 9.8 per thousand births in England and Wales, compared with 15.5 per thousand in

A network of child health clinics run by district health authorities, and also available in some general practices, provides facilities for surveillance by doctors, dentists and health visitors of the physical and mental health and

development of pre-school children. Information on preventive services is given and welfare foods are distributed. About 95 per cent of babies under one year are taken to the clinics. The school health service offers health care and advice for schoolchildren, including medical surveillance and dental inspection and treatment where necessary.

Child guidance and child psychiatric services provide help and advice for children with psychological or emotional problems.

In recent years special efforts have been made to improve co-operation between the community-based child health services and local authority social services for children, particularly to prevent child abuse and to benefit the health and welfare of children in care.

Human **Fertilisation** and **Embryology**

The birth of the world's first 'test-tube baby' in Britain in 1978, using the technique of in vitro fertilisation, opened up new horizons for the alleviation of infertility and for the science of embryology, but also gave rise to unease at the apparently uncontrolled advances of science and the new possibilities of manipulating the early stages of human development. In view of this public concern, a committee of inquiry was established in 1982 under Baroness Warnock to examine the social, ethical and legal implications of developments in this field. Reporting in 1984, the committee concluded that certain specialised forms of infertility treatment, including artificial insemination by donor and in vitro fertilisation, were ethically acceptable, but that surrogate motherhood (the practice whereby one woman bears a child for another) organised by agencies should be prohibited; that research on human embryos was acceptable, but only up to the fourteenth day after fertilisation; and that a licensing authority should be established to regulate infertility services and research. Following the first birth to be arranged by a commercial surrogacy agency in Britain in January 1985, legislation to ban commercial surrogacy agencies, and advertising of or for surrogacy services, was passed later that year. The Government has made clear its intention to introduce comprehensive legislation as soon as possible on the issues dealt with by the Warnock Committee and in December 1986 published a consultation document, Legislation on Human Infertility Services and Embryo Research, on which it has invited views.

Family Planning Free family planning facilities are available through family planning clinics, hospitals and a domiciliary service. Most family doctors provide a similar service for women only.

Abortion

The Abortion Act 1967 allows the termination of pregnancy by a registered doctor if two registered doctors consider that its continuance would involve a greater risk to the life of the pregnant woman (or of injury to her physical or mental health or that of any existing children in the family) than if the pregnancy were ended. Termination may also be allowed if two doctors consider that there is a substantial risk that if the child were born it would suffer from such physical or mental abnormalities as to be seriously handicapped. Abortions are carried out in NHS hospitals or in private premises approved for the purpose by the Secretary of State. Over half of the 147,600 legal abortions to women resident in England and Wales in 1986 were performed in private hospitals and clinics; in Scotland, 98 per cent of abortions take place in NHS hospitals. The Act does not apply in Northern Ireland.

Drug The growing misuse of dangerous drugs such as heroin and cocaine has emerged as a serious social and health problem and the Government has made the fight against such misuse a major priority. Its strategy comprises action to SOCIAL WELFARE 143

reduce the supply of illicit drugs from abroad and to tighten controls on drugs produced and supplied in Britain; to provide even more effective law enforcement by the police and customs services; to increase the deterrent effects of the law; to support effective programmes to treat and rehabilitate misusers; and to discourage young people from experimenting with drugs. An interdepartmental ministerial group on the misuse of drugs was established in 1984 to oversee, develop and review the implementation of this strategy. As part of its prevention policy, the Government opened a major publicity campaign in 1985 to dissuade young people from drug-taking and to advise parents, teachers and other professional staff on how to recognise and combat the problem. Over £17.5 million has been provided for local treatment and rehabilitation projects for up to six years and an additional £6 million has been made available in 1987-88 through the health authorities in England for the further expansion of services for drug misusers. Similar projects are in progress in Wales where £1.6 million has been provided for voluntary groups and health authorities since 1985. A number of trial schemes—subject to careful safeguards and monitoring—are in progress involving the counselling of drug misusers and the exchange of clean for used injecting equipment, since the sharing of equipment is one of the major ways by which the AIDS virus (see p 145) is spread among drug misusers and from them to the general population. The Government has set up a drugs advisory service to advise district health authorities on the development of facilities in their areas, and has made funds available for local education authorities in England and Wales to appoint staff to promote and co-ordinate preventive work in their areas. Separate programmes and campaigns are in progress in Scotland.

The Government is advised on a wide range of matters relating to drug misuse and connected social problems by the Advisory Council on the Misuse of Drugs.

Treatment for drug dependence is mainly provided on an out-patient basis. Many hospitals provide specialist treatment for drug misusers, mainly in psychiatric units, or have special drug treatment units. Some drug misusers have a period of in-patient treatment when necessary. An increasing number of family doctors also treat drug misusers but only certain specialist doctors are licensed to prescribe heroin, cocaine and dipipanone (Diconal). All doctors have a duty to notify the authorities of any patient they consider to be addicted to certain controlled drugs, and guidelines on good medical practice in the treatment of drug misuse have been issued to all doctors in Great Britain. The Home Secretary has statutory powers for dealing with doctors found to have prescribed irresponsibly.

A number of non-statutory agencies work with and complement the health service provision; advice and rehabilitation services including residential facilities, for example, are mainly provided by voluntary organisations. Support in the community is provided by the probation service and local social services departments.

Research on various aspects of drug misuse is funded by several government departments.

Solvent Misuse

Action is also being taken by the Government to curb the incidence of solvent abuse (the inhaling of vapour from glue, lighter fuel and other solvents) by young people. Voluntary guidelines were drawn up in 1983 in co-operation with retailers to curb the sale of solvents, and legislation passed in Scotland added solvent misuse to the list of grounds on which a child may be considered to need compulsory care. In 1985 legislation was passed making it an offence in England and Wales to supply such substances to children under 18 knowing or having reason to believe they are to be used to cause intoxication. (Such sales have been prosecuted successfully under common law in Scotland.) In 1987 a campaign

aimed at retailers was launched, with government support, to explain the legislation and give advice on the sale of solvent-based products. Information and guidance material have been distributed to parents, teachers and other professional workers to help them to educate young people on the dangers of the habit and to dissuade them from experimenting.

Smoking

Cigarette smoking is the greatest preventable cause of illness and death in Britain. It accounts for no fewer than 100,000 premature deaths each year and costs the NHS an estimated £370 million a year for the treatment of diseases attributable to smoking (for example, heart disease, lung cancer and bronchitis). Concerned at these harmful effects, the Government is following an active health education policy based on advice and education, supported by voluntary agreements with the tobacco industry aimed at reducing the level of smoking.

National publicity and media campaigns form the main thrust of official efforts to discourage smoking. In 1986 the Government launched a £1 million media campaign directed at young people in two test areas in England. The results are now being evaluated. The Government also supports the work of the voluntary organisation Action on Smoking and Health (ASH), and supports the voluntary restriction on smoking in trains, buses, theatres and other public places. Health authorities have been encouraged to promote non-smoking as the normal practice on health service premises and to give help and advice to people who want to give up smoking.

Voluntary agreements between the Government and the tobacco industry regulate the advertising and promotion of tobacco products, tobacco product modification and sports sponsorship by the industry. A new agreement on tobacco advertising came into effect in 1986. This provides for the use of six different health warnings about the dangers of smoking. It also contains measures to protect particularly vulnerable groups, such as children, young people and young women in early childbearing years, and provide a mechanism for monitoring implementation of the agreement. Cigarette advertising is banned on television and radio by law. The 1986 Protection of Children (Tobacco) Act makes the sale of any type of tobacco product to children illegal. In 1987 a new voluntary agreement on sports sponsorship came into force. This covers levels of overall expenditure, restrictions on sponsorship of events principally for spectators under 18 years and controls over the siting of signs at televised events.

The proportion of adults in Great Britain who smoke cigarettes continues to fall. Among men this fell from 46 per cent in 1976 to 36 per cent in 1984; among women it fell from 38 per cent in 1976 to 32 per cent in 1984.

Healthier Eating

There has been a growing public awareness in recent years of the importance of a healthy diet. In 1984 a report on diet and cardiovascular disease produced by the government Committee on Medical Aspects of Food Policy advised that a reduction of fat in the diet could help to reduce the incidence or delay the onset of cardiovascular disease. To help people to reduce their fat intake, the Government plans to introduce statutory requirements for the labelling of food to indicate fat content. Full nutritional labelling indicating the energy, protein and carbohydrate content of food is being encouraged on a voluntary basis. Some supermarket chains have already introduced voluntary labelling schemes. In addition, the former Health Education Council (see p 145) and the British Nutrition Foundation have produced practical dietary advice based on the Committee's report. The Committee is at present examining the role of dietary sugars in human disease. The Scottish Health Education Group (see p 145) has also produced a guide to healthier eating.

Alcohol The far-reaching effects of alcohol misuse in terms of illness, family disruption, Misuse inefficiency at work, loss of earnings, accidents and crime are widely acknowledged. The Government considers that the reduction of such abuse requires a range of action by central and local government, voluntary and community bodies, the health professions, business and trade unions. Of great importance is the need for individuals to recognise and accept responsibility for their own health, while attempts to influence the minority who misuse alcohol must, to be realistic, respect the freedom of the majority who use alcohol responsibly.

The Government believes that emphasis should be placed on policies to prevent alcohol misuse and continues to seek better information about the causes of problem drinking, to encourage healthier life-styles and to provide

carlier identification and help for the problem drinker.

Treatment and rehabilitation include in-patient and out-patient services in general and mental hospitals and specialised alcoholism treatment units. Primary care teams (general practitioners, nurses and social workers) and voluntary organisations providing hostels, day centres and counselling services also play an important role. There is close co-operation between statutory and voluntary organisations, and the national voluntary agency, Alcohol Concern, which received a government grant of £500,000 in 1986–87, plays a prominent role in prevention of misuse, training for professional and voluntary workers and improving the network of local voluntary agencies and their collaboration with statutory bodies. The Scottish Council on Alcohol undertakes similar activities in Scotland. Research and surveys on various aspects of alcohol misuse are funded by several government departments.

Health

Health education in England is promoted by the Health Education Authority which, in April 1987, replaced the Health Education Council and became an integral part of the National Health Service; it has the major executive responsibility and appropriate budget for public education in Britain about the disease AIDS (see below). In addition, in England the new Health Education Authority will carry forward and develop the work of the former Council, its functions being to advise the Government on health education, plan and carry out national, regional or local programmes in co-operation with health authorities and other bodies concerned with health education, sponsor research and evaluation, assist the provision of training, publish and distribute material and provide a national centre of information and advice on health education. In Wales these functions are undertaken by the Welsh Health Promotion Authority, which was established in April 1987. Health education in Scotland is promoted by the Scottish Health Education Group. New arrangements for health education support services in Northern Ireland are being considered.

Almost all health authorities now have their own health education service, which works closely with health professionals, health visitors, community groups, local employers and others to determine the most suitable local programmes. Increased resources in the health service are being directed

towards health education and preventive measures.

AIDS Government measures to limit the spread of the disease AIDS (Acquired Immune Deficiency Syndrome) have included steps to improve the safety of blood and blood products through the screening of blood donations and the heat treatment of blood and blood products, and the launch in late 1986 of a £20 million public education campaign involving national press, television, radio, cinema and poster advertising, a national telephone advisory service and the delivery of leaflets to all households in Britain. Additional funding for health authorities has been made available for treatment and counselling services. Pilot schemes have been introduced to check the spread of the disease in drug misusers (see p 143). In early 1987 the launch of a new £14.5 million research programme was announced; this will aim both to develop a vaccine to prevent infection and new anti-viral drugs to treat people already infected. Approval has been given for the use of the drug Retrovir (zidovudine—AZT), which was developed by a British pharmaceutical company, in the treatment of AIDS sufferers. A number of voluntary agencies, among them the Terrence Higgins Trust, are active in promoting knowledge about the disease and counselling sufferers. The voluntary sector receives financial support from the Government.

Britain also plays an active role in international efforts to combat the spread of AIDS. Following a British initiative at the European Council in London in December 1986, the European Community decided to exchange information about the spread of the disease, its prevention and treatment, and to consider what further co-operative measures should be taken by member states and the scope for further co-operation in research. Britain fully supports the work of the World Health Organisation (WHO) in leading and co-ordinating international efforts to prevent and control the disease, and in 1987 gave £3 million to the WHO's Special Programme on AIDS to assist developing countries. Britain will also be giving about £1.6 million over three years to the International Planned Parenthood Federation to help it develop its capability to combat the disease. Britain also co-operates with other countries on a bilateral basis.

Diseases

Infectious District health authorities (health boards in Scotland) carry out programmes of immunisation against diphtheria, measles, rubella (women and girls only), poliomyelitis, tetanus, tuberculosis and whooping cough.

Immunisation is voluntary. Parents are encouraged to protect their children since the benefits of immunisation far outweigh the small risk of adverse reactions. The proportion of children being vaccinated has been increasing since the end of 1978 following an earlier decline. A three-year campaign to increase the take-up of rubella immunisation among girls aged 10 to 14 and women who were not immune was launched in 1983.

The Public Health Laboratory Service provides a network of bacteriological and virological laboratories throughout England and Wales which conduct research and assist in the diagnosis, prevention and control of communicable diseases. Its largest establishment is the recently rebuilt Central Public Health Laboratory at Colindale, in north-west London, which includes the National Collection of Type Cultures, the Food Hygiene Laboratory, and reference laboratories specialising in the identification of infective micro-organisms. Two surveillance centres, one in England and one in Scotland, investigate and monitor human communicable diseases. Microbiological work in Scotland and Northern Ireland is conducted mainly in hospital laboratories.

Cancer The cervical screening programme aims to reduce deaths from cancer of the **Screening** cervix by inviting women at risk to be screened regularly to identify the early signs of the disease. All health authorities are to have computerised call and recall systems for women from the age of 20 for cervical cancer screening by March 1988. The Government is to set up a national breast cancer screening service for all women aged between 50 and 64. Funds are being made available for each region to have at least one centre in operation by 1988.

ENVIRON- Environmental health officers employed by local authorities are responsible for MENTAL the control of air pollution and noise, food hygiene and safety, occupational **HEALTH** health and safety aspects of a variety of premises including offices and shops, the investigation of unfit housing, and in some instances for refuse collection and home safety. Doctors who specialise in community medicine and are employed by the health authorities advise local authorities on the medical aspects of environmental health, infectious diseases and food poisoning. They may also co-operate with the authorities responsible for water supply and sewerage. Environmental health officers at ports and airports carry out duties concerned with shipping, inspection of imported foods and disease control. In Northern Ireland district councils are responsible for noise control, collection and disposal of refuse, clean air, and food composition, labelling and hygiene.

Safety of Food

It is illegal to sell food unfit for human consumption or to apply any treatment, process or additive to food which makes it injurious to health. Premises where food or drink is prepared, handled, stored or sold must conform to certain hygiene standards. Environmental health officers may take for analysis or for bacteriological or other examination samples of any food on sale or in the distribution chain. Special regulations control the safety of particular foods such as milk, meat, ice-cream and shellfish. The Department of Health and Social Security, the Ministry of Agriculture, Fisheries and Food, the Scottish Office, the Welsh Office and the Department of Health and Social Services in Northern Ireland are the central departments responsible for giving advice and making regulations.

SAFETY OF MEDICINES

Under the Medicines Act 1968 the health and agriculture ministers are responsible for licensing the manufacture, marketing and importation of medicines for human and veterinary use. The Medicines Commission advises the ministers on policy regarding medicinal products. The Committees on Safety of Medicines, on Dental and Surgical Materials and on the Review of Medicines advise on the safety, quality and efficacy of medicinal products. The Committee on Safety of Medicines also monitors adverse drug reactions. The Act also controls the advertising, labelling, packaging, distribution, sale and supply of medicinal products.

RESEARCH

In 1986–87 the health departments spent about £25 million on research and development, in addition to expenditure by the Medical Research Council (the main government agency for the support of biomedical research). Priority areas include primary carc, mental health and handicap, physical handicap and rehabilitation, care of the elderly and children, and dental and nursing research. For England and Wales the Chief Scientist of the Department of Health and Social Security advises health ministers on the scientific validity of the Department's directly funded research programmes. He is supported by a number of advisers from a wide range of disciplines. In Scotland the directly funded programme is administered by the Chief Scientist of the Scottish Home and Health Department. Health departments are involved in international research and development, and all participate in the European Community's medical and public health research programme.

THE HEALTH PROFESSIONS

Only people whose names are on the medical or dentists' registers may practise as doctors or dentists in the National Health Service. University medical and dental schools are responsible for teaching; the National Health Service provides hospital clinical facilities for training. Full registration as a doctor requires five or six years' training in medical school and hospital, with an additional year's experience in a hospital; for a dentist, four or more years' training at a dental school is required. The regulating body for the medical profession is the General Medical Council and for dentists, the General Dental Council. The main professional associations are the British Medical Association and the British Dental Association.

The minimum period of training required to qualify for registration as a first level nurse in general, mental or mental handicapped nursing (and sick

children's nursing in Scotland) is normally three years. Registration as a nurse at second level (enrolled nurse) takes two years (in Scotland 18 months). Midwifery training for registered general nurses takes 18 months, and for other student midwives in England three years. Health visitors are registered general nurses with midwifery or approved obstetric experience who have successfully completed a one-year course in health visiting. District nurses are registered general nurses who have successfully completed a six-month course followed by a period of supervised practice in district nursing. The examining bodies for all nurses, midwives and health visitors are the National Boards for Nursing, Midwifery and Health Visiting established in England, Scotland, Wales and Northern Ireland. The regulation and registration of these professions is the responsibility of the United Kingdom Central Council for Nursing, Midwifery and Health Visiting.

Pharmacists in general practice and in hospital must be registered with the Pharmaceutical Society of Great Britain or the Pharmaceutical Society of Northern Ireland. A three-year degree course approved by the Pharmaceutical Society followed by a year's approved training is necessary before registration. The majority of medicines can be sold or dispensed only by, or under the supervision of, a registered pharmacist.

The General Optical Council regulates the professions of ophthalmic optician and dispensing optician; only registered ophthalmic opticians (or registered medical practitioners) may test sight. Training of ophthalmic opticians takes four years including a year of practical experience under supervision. Dispensing opticians take a two-year full-time course with a year's practical experience or a part-time day-release course while employed with an optician.

State registration may be obtained by chiropodists, dietitians, medical laboratory scientific officers, occupational therapists, orthoptists, physiotherapists and radiographers. The governing bodies are seven boards, corresponding to the professions, under the general supervision of the Council for Professions Supplementary to Medicine. Training lasts one to four years and only those who are state registered may be employed in the National Health Service and some other public services.

Dental therapists (who have undergone a two-year training course) and dental hygienists (who have undergone a training course of about a year) may carry out some simple dental work under the direction of a registered dentist.

ARRANGE-MENTS WITH OTHER COUNTRIES The member states of the European Community have special health arrangements under which Community nationals resident in a member state are entitled to receive any immediately necessary treatment, either free or at a reduced cost, during visits to other Community countries. There are also arrangements to cover people who go to work or live in other Community countries. In addition, there are reciprocal arrangements with some other countries under which immediately necessary medical treatment is available to visitors. Visitors are generally expected to pay if the purpose of their visit is to seek medical treatment. Visitors to or from countries with whom reciprocal arrangements have not been made are obliged to pay for any medical treatment they receive.

Personal Social Services

Responsibility for personal social services rests with the social services authorities (local authority social services departments in England and Wales, social work departments in Scotland and health and social services boards in Northern Ireland). Their services are directed towards elderly people, children

and young people, families, people with mental illness or with physical or mental handicap, young offenders and other disadvantaged individuals and their carers. The major services include residential care, day care, community care and various forms of social work. Close co-operation is maintained between local authority social services departments and health authorities (and other agencies), and funding for joint schemes is being increased. In Scotland local authorities also undertake duties similar to those of the separate probation and prison after-care service in England and Wales.

Much of the care given to elderly and disabled people is provided in the community itself, by their families, self-help groups and through voluntary agencies. The statutory sector offers the skilled care needed in particular services. The importance of the contribution made by the voluntary organisations is recognised especially when economies are being made in public

expenditure and the demand on the statutory services is heavy.

The demand for personal social services is expected to rise over the next few years, owing to the increasing number of elderly people and the changing pattern of care for mentally ill and mentally handicapped people and the chronically sick. The Government's policy, embodied in a 'Care in the Community' programme, is to speed up the transfer from hospital to care in the community of patients who do not specifically need hospital care. It believes that groups such as the elderly, the disabled, and mentally ill or handicapped people can lead more normal lives in the community, given appropriate support and facilities.

A review of the way in which public funds are used to support community care policy is in progress.

The Elderly

Services for elderly people are provided by statutory and voluntary bodies to help them to live at home whenever possible. (Only about 5 per cent of the elderly over 65 live in institutional accommodation.) These services may include advice and help given by social workers, domestic help, the provision of meals in the home, sitters-in, night attendants and laundry services as well as day centres, luncheon clubs and recreational facilities. Appropriate adaptations to the home can overcome problems of restricted mobility, and there is a wide range of environmental aids to help people with impaired hearing or vision. Dispersed alarm systems have been developed to help elderly housebound people obtain assistance in an emergency. In some areas 'good neighbour' and friendly visiting services are arranged by the local authority or a voluntary organisation. Many local authorities provide free or subsidised travel to elderly people within their areas. Social services authorities also provide residential home care for the elderly and infirm and register and inspect homes run by voluntary organisations or privately.

As part of their responsibility for public housing, local authorities provide accommodation specially designed for elderly people; some of these developments have resident wardens. Housing associations and private builders also build this type of accommodation.

Disabled People

Local social services authorities provide a wide range of personal social services for disabled people to help with social rehabilitation and adjustment to disability. They are also required to establish the number of disabled people in their area and to publicise services, which may include counselling on personal and social problems arising from disability; occupational, educational, social and recreational facilities, either at day centres or elsewhere; adaptations to homes (such as ramps for wheelchairs, and ground-floor toilets); aids to daily living; the delivery of cooked meals; and domestic or care attendant help. In cases of special need, assistance may be given with the installation of a

telephone or a television set. For severely disabled people residential accommodation or respite care may be provided by local authorities and voluntary organisations, and specially designed housing may be available for those able to look after themselves. Some authorities provide free or subsidised travel for disabled people on public transport, and they are encouraged to provide special access facilities to public buildings.

Mentally Ill and Mentally Handicapped People

Social services authorities make arrangements for the provision of preventive care for mentally ill people and after-care for both mentally ill and mentally handicapped people in the community. Services include training centres for mentally handicapped people and day centres for mentally ill people, as well as social centres and a variety of residential care for mentally ill and mentally handicapped people of all ages. Social workers help patients and their families to deal with social and family problems arising from mental illness or mental handicap and in certain circumstances can make an application for a mentally disordered person's compulsory admission to and detention in hospital. The rights of compulsorily detained patients were extended by legislation in 1983, and a Mental Health Act Commission was set up to provide better safeguards. Corresponding legislation was introduced for Scotland in 1984, although the Mental Welfare Commission for Scotland was first established in 1962.

Two recent priorities have been to transfer mentally handicapped children from long-stay hospitals to community care, and, through a number of special projects, to improve care for elderly mentally ill people.

An important role in provision of services is played by the many voluntary organisations concerned with mental illness and mental handicap.

Help to Families

The Government believes in the central importance of the family to the well-being of society and considers that stable adult relationships are necessary to support and enhance family life. Social services authorities, through their own social workers and other workers, give help of various kinds to families facing special problems. This help includes services for children at risk of injury or neglect who require care away from their own families, and support for family carers who look after elderly and other family members in order to give them a respite. They also help lone parents, including unmarried mothers. There are now many refuges run by local authorities or voluntary organisations for women, often with young children, whose home conditions have become intolerable. The refuges provide short-term accommodation and support while attempts are made to alleviate the women's problems. Many authorities also contribute to the cost of social work with families (such as marriage guidance) carried out by voluntary organisations.

An initiative launched by the Government in 1983 with funds to run until 1988 seeks to increase voluntary sector provision in England for disadvantaged families with children under five. A similar initiative was launched in Wales in 1985. In 1983 the Family Policy Studies Centre was established with official funding to review the impact of public policies on the family and to bring together research findings. The Self-help and Families Project provides funding for nine voluntary agencies to develop the capacities of groups of families to help themselves.

Child Care

Day care facilities for children under five are provided by local authorities, by voluntary agencies and privately. In allocating places in the day nurseries and other facilities they themselves provide, local authorities give priority to children with special social or health needs for day care. They also register, and provide support and advice services for, childminders, private day nurseries and playgroups operating in their areas.

SOCIAL WELFARE 151

The authorities are empowered to offer advice, guidance and assistance to families in difficulties to promote the welfare of children. The aim is to intervene at an early stage to reduce the need to receive children into care or bring them before a court.

The recognition, prevention and management of cases of child abuse are the joint concern of many authorities, agencies and professions, and local review committees provide a forum for discussion and co-ordination and draw up policies and procedures for handling these cases.

Authorities must receive into their care any child under the age of 17 who has no parent or guardian, who has been abandoned, or whose parents are unable to provide for him or her, if they are satisfied that such intervention is in the best interests of the child. The child remains in care until the age of 18 unless discharged to the care of parents, other relatives or friends. The local authority may find it necessary to assume the rights and duties of one or both parents. The parents must be notified and if they object the matter is decided in a court of law. When taking a decision concerning a child in care, the authorities have to give first consideration to the need to safeguard and promote the welfare of the child. Where children are in care, every effort is made to work with their families in order, where appropriate, to enable the children to return home.

Children in England and Wales may be brought before a juvenile court if they are neglected or ill-treated, exposed to moral danger, are beyond the control of parents, not attending school or (if ten years or over) have committed an offence other than homicide. At the same time it must be shown that the children need care or control which they are unlikely to receive unless a care order or other relevant order is made by the court. Local authorities are responsible for undertaking inquiries through social workers and consultation with parents, schools and the police. Children may be committed to the care of a local authority under a care order if the court considers this appropriate. As an alternative the court may order supervision by a social worker or a probation officer for up to three years.

Legislation is proposed to reform the law on child care in England and Wales so as to provide a clearer and fairer framework for the provision of services for families and for protecting children at risk.

Increasing use is being made of intermediate treatment, especially for young offenders. This is a community-based service which provides supervised activities, groupwork and individual counselling; a short, residential period may sometimes be included. A requirement to attend a programme of intermediate treatment may be added to a supervision order by the court.

In Northern Ireland the court may send children to a training school, commit them to the care of a fit person (which includes a health and social services board), or make a supervision order. The law relating to children is being reviewed and the intention is to make a distinction between young offenders and children in need of care and protection. Strong emphasis is placed on preventive work.

In Scotland children in trouble or in need may be brought before a children's hearing, which can impose a supervision requirement on a child if it thinks that compulsory measures of care are appropriate. Under these requirements most children are allowed to remain at home under the supervision of a social worker but some may live with foster parents or in a residential establishment while under supervision. Supervision requirements are reviewed at intervals of not more than one year until terminated by a children's hearing or by the Secretary of State.

When appropriate, children in care are boarded out with foster parents, who receive an allowance to cover the cost of maintenance. If a foster home is not considered appropriate or cannot be found, the child may be placed in a

children's home, voluntary home or other suitable residential accommodation.

Community homes for children in care in England and Wales comprise local authority and some voluntary children's homes, and include community homes with education on the premises which provide long-term care usually for the more difficult children. In Scotland local authorities are responsible for placing children in their care in foster homes, in local authority or voluntary homes, or in residential schools. In Northern Ireland there are residential homes for children in the care of the health and social services boards; training schools and remand homes are administered separately. Regulations concerning registered voluntary homes and the boarding out of children in care are made by central government.

Adoption

It is generally accepted that adoption is an appropriate way to find a new family for a very wide range of children of all age groups, including those with physical and mental handicaps. About 20 per cent of the 8,000 or so children adopted each year were previously in the care of a local authority. Agencies may offer prospective adoptive parents an allowance if this would help to find a family for a child. Adoption is strictly regulated by legislation, and adoption societies must be approved by the respective social services minister. Local authorities must establish and maintain an adoption service within their area, either by providing the facilities themselves or by seeing that they are provided by approved adoption societies. The Registrars-General keep confidential registers of adopted children. Adopted people may be given details of their original birth record on reaching the age of 18, and counselling is provided to help them understand the circumstances of their adoption. In Northern Ireland the law on adoption is being reviewed to bring it broadly into line with the rest of the United Kingdom.

Custodianship

A person who has cared for a child for some time (for example, a foster parent, step-parent or relative) may apply to a court for a custodianship order giving him or her the legal custody of the child. On the making of such an order the custodian will have most of the parental rights and duties of a natural parent and will be able to make decisions about a child's day-to-day care and upbringing, in the same way as a parent. Unlike an adoption order, a custodianship order may be revoked. In Northern Ireland the law is being reviewed to introduce custodianship provisions similar to those in the rest of the United Kingdom.

Social Workers

The effective operation of the social services largely depends on the appointment of professionally qualified social workers trained in the methods of social work. Training courses in social work are provided by universities, polytechnics (in Scotland, central institutions) and colleges of further education; their length depends upon educational qualifications and previous experience and can extend from one to four years. However, the Central Council for Education and Training in Social Work, which recognises social work courses and offers advice to people considering entry to the profession, has proposed that qualifying training courses be extended to a normal period of three years from 1991.

Professional social workers (including those working in the NHS) are mainly employed by the social services departments of local authorities. Others work in the probation service, the education welfare service, or in voluntary organisations.

A review of the role of residential care and the changes required to enable services to respond more effectively to changing social needs is in progress.

153

Voluntary Social Services

There is a long tradition in Britain of voluntary service to the community, and the partnership between the voluntary and statutory sectors is encouraged by the Government. It has been estimated that nearly a third of all adults take part in some form of voluntary work during the course of a year. Local and health authorities plan and carry out their duties taking account of the work of voluntary organisations, and include them in the planning process. Voluntary provision enables these authorities to continue the trend towards local community care rather than institutional care for the elderly, and mentally ill and mentally handicapped people.

An Opportunities for Volunteering Scheme, together with an Unemployed Voluntary Action Fund in Scotland and a Community Volunteering Scheme in Northern Ireland, has provided support for some 2,000 schemes by voluntary agencies to enable unemployed volunteers to help disadvantaged groups in the community. Voluntary organisations also participate in several other government schemes, including the Community Programme, the Voluntary Projects

Programme and the Youth Training Scheme.

Voluntary organisations derive their income from several sources including voluntary contributions, central and local government grants, and earnings from commercial activities and investments. Some 500 bodies receive direct grants from government health and social services departments; in 1985–86 these amounted to some £32 million out of a total government funding of £267.9 million to voluntary organisations. Tax changes in recent budgets have helped the voluntary movement to secure a larger flow of funds from industry and individuals.

Many voluntary organisations are charities, and in England and Wales the Charity Commission gives advice to trustees of charities, initiating schemes to modernise their purposes or facilitate their administration where necessary. The Commission also maintains a register of charities, gives consent to land transactions by charities and holds investments for them. Voluntary organisations may qualify for charitable status if they are established for such purposes as the relief of poverty, the advancement of education or religion or the promotion of certain other purposes of public benefit including good community relations, the prevention of racial discrimination, protection of health and the promotion of equal opportunity. The Charities Aid Foundation, an independent body, aids the flow of funds to charity from individuals, companies and grant-making trusts.

Co-ordination of government interests in the voluntary sector throughout Britain is the responsibility of the Home Office Voluntary Services Unit.

Voluntary Organisations There are thousands of voluntary organisations concerned with health and social welfare, ranging from national bodies to small individual local groups. 'Self-help' groups have been the most rapidly expanding part of the voluntary sector over the last 20 or so years—examples include bodies which provide playgroups for pre-school children, or help their members to cope with a particular disability. Groups representing ethnic minorities and women's interests have also developed significantly in recent years. Many organisations belong to larger associations or are represented on local or national coordinating councils or committees. Some are chiefly concerned with giving personal service, others with the formation of public opinion and exchange of information. Some carry out both functions. They may be staffed by both professional and voluntary workers. While a majority of voluntary organisations are concerned with social welfare in the ways described, there is a growing interest among voluntary groups in cultural and environmental issues and in participating in schemes to promote employment.

The main co-ordinating body in England, which aims to provide central links between voluntary organisations and official bodies, is the National Council for Voluntary Organisations; this acts as a resource, representative and development agency for the voluntary sector. It works to extend the involvement of voluntary organisations in dealing with a broad range of social issues, to protect the interests and independence of voluntary agencies, and to provide them with a range of advice, information and other services. The Scottish Council for Community and Voluntary Organisations, the Wales Council for Voluntary Action and the Northern Ireland Council for Voluntary Action perform similar functions.

Councils for Voluntary Service—National Association is another resource network, with over 200 local councils for voluntary service throughout England encouraging the development of local voluntary action in urban areas. The rural equivalent is Action with Rural Communities in England, representing 38 rural community councils.

The Volunteer Centre is a national voluntary organisation and centre for information and research on voluntary work. There are many full-time and part-time local volunteer bureaux which direct volunteers to opportunities for voluntary service in both the voluntary and statutory sectors.

Specialist voluntary organisations concerned with personal and family problems include the family casework agencies like the Family Welfare Association, Family Service Units and the National Society for the Prevention of Cruelty to Children; marriage guidance centres affiliated to the National Marriage Guidance Council; the National Council of Voluntary Child Care Organisations; the National Council for One Parent Families; Child Poverty Action Group and the Claimants' Union, both of which provide expert advice on social security benefits; and the Samaritans, which helps the lonely, the depressed and the suicidal.

Community service of many kinds is given by young people; this is often channelled through national and local organisations such as Community Service Volunteers, Scouts and Girl Guides, and the 'Time for God' scheme run by a group of churches.

Voluntary service to both sick and disabled people is given by—among others—the British Red Cross Society, St John Ambulance, the Women's Royal Voluntary Service and the Leagues of Hospital Friends. Societies which help people with particular disabilities and difficulties include the Royal National Institute for the Blind, the Royal National Institute for the Deaf, the Royal Association for Disability and Rehabilitation, the Disabled Living Foundation, the Disablement Income Group, MIND (National Association for Mental Health), MENCAP (Royal Society for Mentally Handicapped Children and Adults), the Spastics Society, Alcoholics Anonymous, Age Concern, Help the Aged and their equivalents in Wales, Scotland and Northern Ireland.

National organisations whose work is specifically religious in inspiration include the Salvation Army, the Church Army, Toc H, the Committee on Social Service of the Church of Scotland, the Church of England Children's Society, the Church of England Council for Social Aid, the Young Men's Christian Association, the Young Women's Christian Association, the Catholic Marriage Advisory Council, the Jewish Welfare Board and the Church's Urban Fund.

A wide range of voluntary personal service is given by the Women's Royal Voluntary Service, which brings 'meals on wheels' to housebound invalids and old people, provides flats and residential clubs for the elderly, helps with family problems, and assists in hospitals and clinics and during emergencies.

Over 900 Citizens Advice Bureaux give explanation and advice to people who are in doubt about their rights or who do not know about the state or voluntary services available. Some areas have law centres and housing advisory centres.

Social Security

The general aim of the social security programme is to provide an efficient and responsive system of financial help for people who are elderly, sick, disabled, unemployed, widowed or bringing up children. Certain benefits provide an income for people who have little or no earnings because they are retired, unemployed or sick. Others provide income for widows; assistance with extra expenses arising from disablement; compensation for injury or disease caused at work or while in the armed forces; and help with the cost of bringing up children. Alongside these benefits there are certain means-tested benefits for people who have insufficient means of support.

Social security benefits fall into two broad categories—contributory and non-contributory. Contributory benefits are paid from the National Insurance Fund, which consists of contributions from employed people and their employers, self-employed people and the Government. Non-contributory benefits are financed from general taxation revenue. Some are income-related—for example, supplementary benefit and housing benefit—but others, for example, child benefit, are not, and entitlement depends solely on meeting the qualifying conditions. Appeals relating to claims for the various benefits are decided by independent tribunals.

Expenditure on social security has nearly doubled in real terms since 1970.

Part of the increase has been due to the rising numbers of the elderly, and part to the growth in unemployment; much, however, has been due to real improvement in the level of benefits, the creation of new benefits and increased family

support.

The Department of Health and Social Security administers the services in Great Britain; in Northern Ireland they are administered by the Department of Health and Social Services. Pensions and welfare services for war pensioners and their dependants are the responsibility of the Department of Health and Social Security throughout the United Kingdom. Advice on social security is given to the Government by the Social Security Advisory Committee.

Major New Reforms Over the 40 years since the basic structure of the present social security system was established there have been many piecemeal changes and developments, and the system has become very complex. As spending on the system accounts for nearly one-third of all public expenditure, and pressures for improvements and increased expenditure are bound to continue, the Government considered that a re-examination of the system was required, and following a series of reviews and the publication in 1985 of a consultative paper and a White Paper, Reform of Social Security: Programme for Action, government proposals for a wide-ranging reform of the structure of the system became law under the Social Security Act 1986. The main reforms, to be introduced by April 1988, include the modification of the State Earnings-related Pension Scheme, which is additional to the basic state pension, and new arrangements to encourage personal and occupational pension schemes; and the introduction of a new range of income-related benefits to replace family income supplement, supplementary benefit and housing benefit. Entitlement to all income-related benefits will be assessed using the same basic rules. Family income supplement will be replaced by family credit; this will consist of an adult credit plus a credit for each child payable in full where income does not exceed a set figure, but reduced where it does. Supplementary benefit will be replaced by income support through which people will get a basic rate of benefit, with additions, or premiums, for particular groups-families, lone parents, pensioners, and long-term sick and disabled people. Help from the new social fund in the form of loans or grants will be available to people on low incomes who have special or

emergency needs. These will include budgeting loans to help meet important intermittent expenses, crisis loans for help in an emergency or as a result of a disaster, and community care grants to help people to re-establish themselves or remain in the community and to ease exceptional pressure on families. Maternity and funeral expenses from the social fund were introduced in April 1987.

As part of its plans to improve the management of the social security system and the quality of its service to the public, the Department of Health and Social Security is embarking on the biggest computerisation programme in Europe, which aims to link all of its local and central offices and the local offices of the unemployment benefit service into a single network.

CONTRI-BUTIONS

Entitlement to National Insurance benefits such as retirement pension, sickness and invalidity benefit, unemployment benefit, maternity allowance and widow's benefit is dependent upon the payment of contributions. Industrial injuries benefits are non-contributory, but are also payable from the National Insurance Fund. There are four classes of contributions. Class 1 contributions, which are related to earnings, are paid by employees and employers. The contribution is lower if the employer operates a 'contracted-out' occupational pension scheme (see p 157). Self-employed people pay a flat rate Class 2 contribution and a Class 4 contribution which is assessed as a percentage of profits or gains within certain limits; they are not eligible for unemployment and industrial injuries benefits. Voluntary Class 3 contributions are made by people wanting to safeguard rights to some benefits.

Employees who continue working after pensionable age (60 for women and 65 for men) do not pay contributions but the employer continues to be liable. People earning less than the lower earnings limit are not liable for contributions; neither are their employers. Self-employed people with earnings below a set annual amount may apply for exemption and those over pensionable age are excused payment of contributions.

BENEFITS

For most benefits there are two contribution conditions. First, before benefit can be paid at all, a certain number of contributions has to be paid; secondly, the full rate of benefit cannot be paid unless contributions have been made or credited up to a specific level over a specified period. Benefits are increased annually, the uprating being linked to increases in retail prices. The main benefits (payable weekly) are summarised below. The rates shown in Tables 5 and 6 are those effective from April 1987 until April 1988.

Retirement Pension

A state retirement pension is payable on retirement to women at the age of 60 and to men at the age of 65. The Sex Discrimination Act 1986 protects employees of different sexes in a particular occupation from being required to retire compulsorily at different ages. (This, however, has not affected the payment of state retirement pensions at different ages for men and women.) The state pension scheme consists of a basic pension together with an additional earnings-related pension. Pensioners are permitted to earn up to \$75 a week before the amount of their pension is reduced; those still at work who have put off or cancelled their retirement during the five years after minimum pension age may earn extra pension. A non-contributory retirement pension is payable to people over the age of 80 who meet certain residence conditions, and who have not qualified for a contributory pension. People whose pensions do not give them sufficient resources to live on may be entitled to supplementary pension, which is calculated on the same basis as supplementary benefit (see p 160).

SOCIAL WELFARE 157

Rights to basic pension are safeguarded for mothers who are away from work looking after children or for people giving up work to care for severely disabled relatives. Women contributors receive the same pension as men with the same earnings. From April 1988 the earnings-related pension scheme will be based on a lifetime's earnings instead of on the best 20 years and will be calculated as 20 per cent rather than 25 per cent of earnings. The pensions of people retiring this century will be unaffected.

Employers are free to 'contract-out' their employees from the state scheme for the additional earnings-related pension and to provide their own occupational pension in its place, provided that the latter is at least as good as the state additional pension. The State remains responsible for the basic pension. There are at present around 90,000 occupational schemes, with some 11 million members—about half the working population. As part of a programme to reform the occupational pensions system, the Government has introduced measures to protect against inflation the pension rights of people who change jobs before pension age; to give workers the right on leaving a scheme to a fair transfer value; and to require pension funds and other pension schemes to provide access to more information about their schemes. The Social Security Act 1986 gives all employees the right to choose a personal pension rather than staying fully in the State Earnings-related Pension Scheme or in an employer's scheme. Such pensions will qualify for contracting out of the State Earnings-related Pension Scheme and will enable people to choose from a wide range of schemes available from banks, building societies and trusts. The new regulations will be introduced in January 1988.

Mothers and Children

Under the new statutory maternity pay scheme, which took effect in April 1987, women who leave work to have a baby receive their maternity pay directly from their employer and have more choice than previously about the time they have off work. To qualify, a woman must have worked for the same employer for at least six months up to and including the twenty-sixth week of pregnancy and have had average weekly earnings in the last eight weeks of that period which are not less than the lower earnings limit for National Insurance contributions. Maternity pay is normally paid for 18 weeks. There are two rates: where a woman has been working for the same employer for at least two years, she is entitled to 90 per cent of her average weekly earnings for the first six weeks and to the lower rate of £32·85 for the remaining 12 weeks; where a woman has been employed for between six months and two years, she is entitled to payments for the full 18 weeks at the lower rate.

Women unable to qualify, because, for example, they are self-employed, have recently changed jobs or given up their job, may qualify for the new maternity allowance which is payable at a flat rate for 18 weeks. To qualify for this, a woman must have paid standard rate National Insurance contributions for at least 26 weeks of the pregnancy.

A payment of £80 from the social fund is available for each living child born or for a stillborn child if the pregnancy lasts for at least 28 weeks or for an adopted baby if the mother or her partner are receiving supplementary benefit or family income supplement.

Non-contributory child benefit is the main social security benefit for children. Tax free and normally paid to the mother, it is payable for children up to the age of 16 and for those up to the age of 19 if they continue in full-time non-advanced education. A sum in addition to child benefit, called one-parent benefit, is payable to certain people, whether parents or not, bringing up one or more children on their own. A non-contributory guardian's allowance for an orphaned child is payable to a person who is entitled to child benefit for that child. In certain circumstances it can be paid on the death of only one parent.

Widows

At present, a widow's allowance may be payable for the first 26 weeks of widowhood, and an additional sum is often payable for each child. After this a widowed mother with a young family receives a widowed mother's allowance with an addition for each child. Widow's pension is payable to a widow who is 40 years or over when her husband dies or when her entitlement to widowed mother's allowance ends. Payment continues until the widow remarries or begins drawing retirement pension. Widows also benefit under the industrial injuries scheme. From April 1988 all widows will receive a tax-free lump sum payment of £1,000 on bereavement in place of a widow's allowance, together with widowed mother's allowance or widow's pension, and widow's pension will be payable at 45.

> A man whose wife dies when both are over pension age inherits his wife's pension rights just as a widow inherits her husband's rights.

Sick and Disabled People

There is a large variety of benefits for people unable to work because of sickness or disablement. Statutory sick pay with additions for a wife or other adult dependants is payable by an employer for the first 28 weeks of an employee's illness. Employees not covered for statutory sick pay can claim sickness benefit instead, as can self-employed people.

An invalidity pension with additions for a wife and children is payable when statutory sick pay or sickness benefit ends if the beneficiary is still incapable of work. An invalidity allowance may be paid with the pension to those people who become sick more than five years before minimum retirement age. An additional earnings-related pension may also be payable. A severe disablement allowance may be payable to people of working age, including housewives, who are unable to work and do not qualify for the National Insurance invalidity pension.

Various benefits are payable for disablement caused by an accident at work or a prescribed disease. Disablement benefit is usually paid after a qualifying period of 15 weeks if, as a result of an industrial accident or a prescribed disease, there is a loss of physical or mental faculty. (During the qualifying period sick pay or sickness benefit may be payable.) The degree of disablement is assessed by an adjudicating medical authority and the amount paid depends on the extent of the disablement. Disablement of 14 per cent or more attracts a weekly pension; except for certain progressive respiratory diseases, disablement of less than 14 per cent does not attract basic benefit. In certain circumstances disablement benefits may be supplemented by constant attendance allowance and an additional allowance payable in certain cases of exceptionally severe disablement. A reduced earnings allowance is payable in certain circumstances to people who, as a result of disablement assessed at 1 per cent or more, are unable to follow their regular job or one with equivalent earnings.

A non-contributory, tax-free attendance allowance may be payable to severely disabled people at either a higher or a lower rate depending upon the amount of care and attention they require. It is payable from the age of two and there is no upper age limit. A non-contributory invalid care allowance may be payable to men and women aged between 16 and pension age who cannot go to work because they are caring for a severely disabled person receiving an attendance allowance.

Physically disabled people unable or virtually unable to walk may be entitled to a tax-free mobility allowance to help to pay their transport costs. People aged between 5 and 66 may claim and payment can continue up to the age of 75.

An independent organisation called Motability assists disabled drivers and passengers wanting to use their mobility allowance to obtain a vehicle.

Benefit

Unemployment Unemployment benefit is payable for up to a year in any one spell of unemployment. Periods covered by unemployment or sickness benefit, maternity

£

Table 5: Benefit Rates

Category	Weekly rate from April 1987
Retirement and widow's pensions and widowed mother's allow	wance
Single person	39.50
Spouse or person caring for claimant's child	23.75
Child	8.05
Non-contributory retirement pension for people over 80	23.75
Statutory maternity pay	
2	f average earnings
Lower rate	32.85
Maternity allowance	30.05
Spouse or person caring for claimant's child	18.60
Child benefit	7.25
One-parent benefit (for the first or only child)	4.70
Guardian's allowance	8.05
Widow's allowance (first 26 weeks of widowhood)	55.35
Unemployment benefit	
For beneficiary under pension age	
Single person	31.45
Spouse or person caring for claimant's child	19.40
For beneficiary over pension age	
Single person	39.50
Spouse or person caring for claimant's child	23.75
Child	8.05
Statutory sick pay (depending on level of earnings)	32·85 to 47·20
Sickness benefit	
For beneficiary under pension age	30.05
Single person Spouse or person caring for claimant's child	18.60
For beneficiary over pension age	10 00
Single person	37.85
Spouse or person caring for claimant's child	22.70
Child	8.05
Invalidity pension	
Single person	39.50
Spouse or person caring for claimant's child	23.75
Child	8.05
Invalidity allowance payable with retirement or invalidity	0.051.0.00
pension	2.65 to 8.30
Disablement benefit (100 per cent assessment)	64.50
Unemployability supplement	TIME
Single person	39.50
Spouse or person caring for claimant's child	23.75
Special hardship allowance (maximum)	25.80
Constant attendance allowance (normal maximum)	25.80

Table 5: Benefit Rates (continued)

	84	
Category	Weekly rate from April 1987	
Exceptionally severe disablement allowance	25.80	
Industrial death benefit Widow's pension (first 26 weeks of widowhood) Widow's pension (higher permanent rate) Widow's pension (lower permanent rate) Increase for each child	55·35 40·05 11·85 8·05	
Attendance allowance Higher rate Lower rate	31·60 21·10	
Severe disablement allowance Spouse or person caring for claimant's child Child	23·75 14·20 8·05	
Invalid care allowance Spouse or person caring for claimant's child Child	23·75 14·20 8·05	
Mobility allowance	22.10	

allowance or some training allowances, which are eight weeks or less apart, are linked to form one period of interruption of employment. Everyone claiming unemployment benefit has to be available for employment, but unemployed people wishing to do voluntary work in the community may do so in certain circumstances without loss of entitlement to benefit.

INCOME SUPPORT

From April 1988 a new income support scheme will be payable to families who are not in work and whose financial resources fall below certain levels. It will consist of a basic allowance with additional premiums for families, lone parents, pensioners and long-term sick and disabled people. Income support will replace the present system of supplementary benefit under which the benefit payable amounts to the difference between a person's existing resources and certain specified weekly levels.

FAMILY CREDIT

From April 1988 a new benefit—family credit—will be payable to low-income working families with children. Family credit, which will be additional to child benefit, will be related to net income, and to the number and age of children in the family. It will replace the existing system of family income supplement which is payable when the gross weekly income of a family falls below a prescribed amount, varying according to the number and ages of children in the family.

HOUSING BENEFIT

From April 1988, the present housing benefit scheme, which offers help with the cost of rents and rates (local property taxes) to people with low incomes, will be restructured. The new scheme will use the same general assessment rules and benefit levels as the income support scheme. This means that for the first time help with rent and rates will be made through a single system instead of the present two (one for those who get supplementary benefit and one for those who do not).

The major new scheme will introduce a limit to the amount of capital a person may have and still be entitled, and income will be taken into account net of income tax and National Insurance contributions.

WAR
PENSIONS
AND
RELATED
SERVICES

Pensions are payable to people disabled as a result of service in the armed forces or by certain injuries received in the merchant navy or civil defence during war-time, or to civilians injured by enemy action. The amount varies according to the degree of disablement and rank; an allowance is paid for dependants.

There is a range of supplementary allowances, the main ones being for unemployability, the need for constant attendance, the provision of extra comforts, and as compensation for a lower standard of occupation. An age allowance is payable to disabled pensioners aged 65 or over whose assessment is 40 per cent or more. Pensions are also paid to war widows and orphans.

The Department of Health and Social Security maintains a welfare service for war pensioners, war widows and war orphans. It works closely with the many voluntary and ex-Service organisations which give financial aid and personal help to disabled ex-Service men and women and their families.

TAXATION

Social security benefits, other than child, maternity, sickness, invalidity and disablement benefit, are regarded as taxable income. Various income tax reliefs and exemptions are allowed on account of age or liability for the support of

Table 6: War Pensions	£
Category	Weekly rate from April 1987
Disablement benefits	64:50
Pension for a private at 100 per cent rate	04.30
Unemployability allowances	41.95
Personal allowance Wife or other adult dependant	23.75
Addition for each child	8.05
Comforts allowance	5·55 to 11·10
Allowance for lowered standard of occupation (maximum)	25.80
Constant attendance allowance	
(depending on attention needed)	12.90 to 51.60
Age allowance (depending on degree of disability)	4·50 to 14·00
Exceptionally severe disablement allowance	25.80
Severe disablement occupational allowance	12.90
Clothing allowance (per year)	56.00 to 88.00
Death benefits	
Widow's pension (private's widow)	51.35
Childless widow under 40	11.85
Rent allowance (maximum)	19.55
Age allowance for elderly widows	
Aged 65–69	5.50
Aged 70–79	11·00 13·85
Aged 80 and over	13.93

dependants. The following benefits are not taxable: income support, family credit, attendance allowance, mobility allowance, severe disablement allowance, war disability pensions and allowances including supplementary allowances, and war widow's pension and allowances.

BENEFITS

OTHER Other benefits for which unemployed people and those on low incomes may be eligible include exemption from health service charges (see p 137), grants towards the cost of spectacles, free school meals and free legal aid. Reduced charges are often made to the unemployed, for example, for adult education and exhibitions, and pensioners usually enjoy concessionary transport fares.

MENTS WITH OTHER COUNTRIES

ARRANGE- As part of the European Community's efforts to promote the free movement of labour, there are regulations providing for equality of treatment and the protection of social security rights for employed and self-employed people working in another member state. The regulations also cover retirement pensioners and other beneficiaries who have been employed, or self-employed, as well as dependants. Benefits affected include child benefit and those for sickness and maternity, unemployment, retirement, invalidity, accidents at work and occupational diseases.

Britain also has reciprocal social security agreements with a number of other countries. Their scope and the benefits they cover vary, but the majority cover most National Insurance benefits and family benefits.

7 Education

British education aims to develop fully the abilities of individuals, both young and old, for their own benefit and that of society as a whole. Compulsory schooling takes place between the ages of 5 and 16, although provision is made for children under 5, and many pupils remain at school beyond the minimum leaving age. Post-school education (mainly at universities, polytechnics and colleges of further and higher education) is organised flexibly to provide a wide range of opportunities for academic and vocational education and continuing study throughout life. For many years the education service has been characterised by change, and much of the post-1945 period has also been marked by growth: large increases in the number of pupils, the expansion of higher educational opportunities, and increased expenditure. Although the process of change continues, recent years have seen increasing reassessment and consolidation with a view to making the best use of resources in the light of a substantial drop in the birth rate and the need to control public expenditure.

Policies

The overriding objectives of the Government's education policies are to raise standards and to achieve the best possible return from the resources invested in the education service. In schools, standards of achievement are being raised by improving school management, securing a broader and more balanced curriculum for all pupils so that they can develop the qualities and skills required for adult life and work in a technological age, encouraging schools to be more responsive to the needs of a multi-ethnic society, reforming the public examination system and improving the quality of teaching through better teacher selection, training and deployment. Parental preference as to school and the need for increased parental involvement in school organisation receive close consideration while gifted children from less well-off homes are given the opportunity to attend certain independent schools.

Special attention is paid both to the provision of better pre-vocational education and training in schools and colleges for the 14- to 18-year-old age-group, and to the 40 per cent of lower-attaining pupils in the final years of compulsory education. It is recognised that co-operation between the education system and industry can help young people to acquire the skills necessary to maintain Britain's position as a leading industrial and trading nation. Many organisations already work to improve such links, and further contacts are being encouraged. An important objective has been to extend the knowledge and

use of microcomputers in schools.

Among a number of measures designed to raise educational standards in schools in England and Wales, the Education (No 2) Act 1986 (which was foreshadowed in a White Paper, Better Schools, published in 1985) aims to reform the composition of school governing bodies and reallocate functions between school governors, local education authorities and head teachers; provide for the appraisal of the performance of teachers; and make in-service training of teachers more effective. In response to the report of an inquiry into the education of ethnic minority groups the Government has described its policies for encouraging children from the ethnic minorities to achieve their full potential. It has also announced its intention to introduce a national curriculum in all schools in England and Wales.

A network of city technology colleges sponsored by industry and commerce is to be set up in disadvantaged urban areas to provide broadly based secondary education with a strong technological and business element. The colleges are to be state-aided but independent of local education authorities.

A White Paper, Higher Education: Meeting the Challenge, incorporating proposals for the higher education sector, was published in April 1987. A continuing aim is to encourage institutions to improve their management and planning, and become more flexible and responsive to the economic and social needs of the country. It is planned to reform the University Grants Committee and the system of university funding and to remove polytechnics and other higher education colleges from local authority control. In line with the concern to maintain British expertise in science, engineering and technology, a shift in provision from the arts and social sciences towards these subjects and towards directly vocational courses is occurring, while higher education institutions and industry are being encouraged to collaborate more closely for their mutual benefit. A number of science parks have been set up by higher education institutions in conjunction with industrial scientists and technologists to encourage the use of advanced technology.

The already strong vocational element in many courses in the non-advanced sector of further education (which comprises courses whose level is at or below General Certificate of Education Advanced level or its equivalent) is also being increased. The role played by further education institutions in providing training and continuing education is of great importance, especially at a time of increasing technological change and high unemployment.

Administration One of the distinctive features of the education service is the large degree to which responsibility for provision is decentralised. Overall responsibility for all aspects of education in England, and for the Government's relations with and support for universities throughout Britain, rests with the Secretary of State for Education and Science. The Secretaries of State for Wales, Scotland and Northern Ireland have responsibility in their respective countries for nonuniversity education, and are consulted about education in universities.

The main concerns of the education departments (the Department of Education and Science in England, the Welsh Office, the Scottish Education Department, and the Department of Education for Northern Ireland) are formulating national education policies, allocating resources and influencing the other partners in the education service (the local education authorities, governing bodies of educational institutions, the teaching profession, the churches and voluntary organisations). The departments are also responsible for the supply and training of all teachers.

The provision of maintained, that is, publicly financed, school education and most post-school education outside universities is the responsibility of local education authorities which are funded by central government and (except in Northern Ireland) through rates (local property taxes). They employ teachers and other staff, provide and maintain buildings, supply equipment and materials and, in England and Wales, provide grants to students proceeding to further and higher education. Universities are self-governing institutions receiving most of their income from central government grants. In Scotland the central institutions, which provide most vocational higher education to degree level, and colleges of education, which provide teacher training, are administered by independent governing bodies. In Northern Ireland colleges of education are controlled by the Department of Education or by voluntary agencies.

Finance Planned spending on education and science in 1987–88 is some £20,000 million, more than 10 per cent of public expenditure. About four-fifths of this

expenditure will be incurred by local authorities who make their own expenditure decisions according to local needs and circumstances. Factors affecting the deployment of resources include changes in the number of school-age children, the removal of surplus school places and savings made in such areas as the provision of school meals and milk.

Local education authorities are also directly responsible for the funding of most non-advanced further education courses. The Government's expenditure plans allow authorities and colleges to respond to the needs of employers and

students with a wide range of full-time and part-time courses.

An education support grant scheme in England and Wales enables the Government to support local authority expenditure on educational activities of national priority. In 1987–88 it is intended to provide £64 million out of total expenditure of £92 million on 20 schemes including books and equipment for school courses leading to the new General Certificate of Secondary Education; information technology in non-advanced further education; and the supervision of pupils at midday. The balance of the programme is aimed at improving the efficiency of the education service through work on the curriculum, teacher assessment, records of achievement and other aspects of the service.

Support for the universities and certain other higher education institutions, and grants to students, account for most of the direct expenditure by central government. About 79 per cent of universities' income comes from public funds, the major part being recurrent grant paid by the Government to the University Grants Committee, which allocates the funds to individual universities and certain other institutions. The Committee also advises the Government on the future development of the universities. The independent University of Buckingham receives no assistance from public funds although its students can apply for mandatory grants.

Funds for advanced courses in polytechnics and other colleges of further education maintained by local authorities are allocated centrally. The National Advisory Body for Public Sector Higher Education advises the Government at present on how these resources should be allocated in England; the Wales Advisory Body has a similar function. There is no equivalent organisation in

Scotland.

Many universities, polytechnics and other higher education institutions undertake training, research or consultancy for commercial firms, and the Government is encouraging them to secure a larger flow of funds from these sources. Universities are now authorised to market inventions arising from their research work. A number of establishments have endowments or receive grants or gifts from foundations and benefactors. Local education authorities, through their further education institutions, are empowered to sell goods and services arising as by-products of educational activities.

SCHOOLS

Parents are required by law to see that their children receive efficient full-time education, at school or elsewhere, between the ages of 5 and 16.

Some 9.5 million children attend Britain's 36,000 schools (of which 26,000 are primary or nursery and 5,000 secondary schools in the state sector). Most pupils receive free education financed from public funds, but a small proportion (roughly 7 per cent) attend schools wholly independent of direct public financial support.

Boys and girls are taught together in most primary schools, and 87 per cent of pupils in maintained secondary schools in England and Wales and 65 per cent in Northern Ireland attend mixed schools. In Scotland nearly all secondary schools are mixed. Most independent schools for younger children are co-educational; the majority providing secondary education are single-sex, although the number of mixed schools is growing.

No fees are charged to parents of children at maintained schools, and books and equipment are free, although in Northern Ireland a small proportion of grammar school pupils is admitted on a fee-paying basis.

Management

Schools supported from public funds are of two main kinds in England and Wales: county schools and voluntary schools. County schools are provided and maintained by local education authorities wholly out of public funds. Voluntary schools, mostly established by religious denominations, are also wholly maintained from public funds but the governors of some types of voluntary school contribute to capital costs. About a third of the 26,000 primary and secondary schools supported by public funds in England and Wales are voluntary schools, most of them Anglican or Roman Catholic. Each publicly maintained school has a governing body, which includes governors appointed by the local education authority and teacher and parent representatives. The Education (No 2) Act 1986 provides for equal numbers of parent and local authority governors, so that no single interest predominates. Governing bodies now have responsibility for the main policies of their schools, and for the preparation of a statement of their schools' curricular aims and objectives. They also have ultimate responsibility for school discipline and a larger say in the appointment and dismissal of staff.

In Scotland most of the schools supported from public funds are provided by education authorities and are known as public schools (in England this term is used for a type of independent school, see p 167). There is a statutory requirement to establish school councils whose membership includes teachers, parents, people interested in religious education, and in certain cases representatives of further education and of the community at large.

In Northern Ireland there are three main categories of grant-aided school: controlled schools, owned and managed by the area education and library boards and having all their expenditure met from public funds; voluntary schools, mainly under Roman Catholic management and also maintained largely by public funds; and voluntary grammar schools, which may be under either Roman Catholic or non-denominational management and receive grants from the Department of Education. Since the end of 1985 all grant-aided schools have included elected parents and teachers on their boards of governors. It is government policy to encourage integrated education, providing for both Protestant and Roman Catholic pupils, where there is a local desire for it; a small number of integrated schools have been opened with assistance from charitable trusts.

In England, Wales and Scotland parents have a statutory right to express a preference for a particular school for their children, and have an effective channel of appeal at local level. Schools also have to publish basic information about themselves and their public examination results.

Nursery and Although there is no statutory requirement to provide education for the Primary under-fives, successive governments have expanded nursery education. Current **Schools** expenditure plans allow for the maintenance of existing levels of provision or a small increase, mainly by converting surplus primary school accommodation to nursery use. In England 43 per cent (and in Scotland 38 per cent and in Northern Ireland 46 per cent) of three- and four-year-olds receive education in nursery schools or classes or in infants' classes in primary schools. In addition, many children (at least 40 per cent of three- and four-year-olds) attend informal pre-school playgroups organised by parents and voluntary bodies such as the Pre-School Playgroups Association.

Compulsory education begins at five when children go to infant schools or departments; at seven many go on to junior schools or departments. The usual

age for transfer from primary to secondary schools is 11 in England, Wales and Northern Ireland, but a number of local authorities in England have established 'first' schools for pupils aged 5 to 8, 9 or 10 and 'middle' schools covering various age-ranges between 8 and 14. In Scotland the primary schools take children from 5 to 12.

Secondary Schools

The publicly maintained system of education aims to give all children an education suited to their particular abilities. Over 90 per cent of the maintained secondary school population in England and Wales attend comprehensive schools, which take pupils without reference to ability or aptitude and provide a wide range of secondary education for all or most of the children of a district. The schools can be organised in a number of ways, including those that take the full secondary school age-range from 11 to 18; middle schools whose pupils move on to senior comprehensive schools at 12, 13 or 14, leaving at 16 or 18; and schools with an age-range of 11 or 12 to 16 combined with a sixth-form or a tertiary college for pupils over 16. Tertiary colleges provide a full range of vocational courses for students over 16, as well as academic courses. Most other children receive secondary education in 'grammar' or 'secondary modern' schools to which they are allocated after selection procedures at the age of 11.

Scottish secondary education is almost completely non-selective; the majority of schools are six-year comprehensives. Because of local circumstances there are some comprehensive schools at which courses may last only four years or less; pupils may transfer at the end of their second or fourth years to a six-year comprehensive.

In Northern Ireland secondary education is organised largely along selective lines, based on a system of testing. There are, however, certain areas where secondary schools operate on a non-selective basis.

Independent Schools

Independent schools are outside the publicly maintained sector, but they must register with the appropriate education department and are open to inspection. They can be required to remedy serious shortcomings in their premises, accommodation or instruction and to exclude anyone regarded as unsuitable to teach in or to be the proprietor of a school.

There are about 2,300 independent schools educating 580,000 pupils of all ages. They charge fees, varying from about £100 a term for day pupils at nursery age to £2,000 a term for senior boarding pupils. Many offer bursaries to help pupils from less well-off families. Such pupils may also be helped by local education authorities—particularly if the authorities' own schools cannot meet the needs of individual children—or by the Government's assisted places scheme, under which assistance is given in relation to parental income (over 275 schools participate in the scheme). The Government also gives incomerelated help with fees to pupils at certain specialist music and ballet schools.

There is great variety of provision within the independent sector, ranging from small kindergarten to large day and boarding schools and from new and in some cases experimental schools to ancient foundations. A number of independent schools have also been established by religious and ethnic minorities. The 550 boys', girls' and mixed preparatory schools are so called because they prepare children for the Common Entrance Examination to senior schools. The normal age range is from seven-plus to 11, 12 or 13, but many of the schools now have pre-preparatory departments for younger children.

Independent schools for older pupils—from 11, 12 or 13 to 18 or 19—include about 500 which are sometimes referred to as 'public schools'. Today the term is becoming less frequently used but refers to the mainly boys' schools (which are increasingly admitting girls) belonging to the Headmasters' Conference and/or the Governing Bodies Association and to schools in membership of the

Governing Bodies of Girls' Schools Association. They should not be confused with the state-supported public schools in Scotland.

Special Educational Needs

Special educational needs embrace learning difficulties arising from emotional or behavioural disorders as well as physical or mental handicap. Local education authorities in England, Wales and Northern Ireland must ensure that children with special needs are educated in ordinary schools provided that the parents' wishes have been taken into account and that this is compatible with meeting the needs of the child, with the provision of efficient education for the other children in the school, and with the best use of resources. In Scotland, school placing is a matter for agreement between education authorities and individual parents.

> There are almost 2,000 special schools (both day and boarding), including those run by voluntary organisations, which cater for a wide variety of handicap.

Teachers in publicly maintained schools are appointed by local education authorities or school governing bodies. There are about 540,000 teachers in maintained and independent schools, and the overall pupil-teacher ratio in maintained primary and secondary schools is about 18.5 to 1. Teachers in maintained schools must hold qualifications approved by the appropriate education department (see p 176).

Curriculum

Under provisions contained in the Education (No 2) Act 1986, head teachers in England and Wales are now responsible for determining and organising the curriculum within their schools, taking into consideration the policy of their local education authority and that of their governing body. The Government is in favour of widening educational opportunities as much as possible through a broad and balanced curriculum which is differentiated to meet the individual needs of pupils and is relevant to the requirements of the modern world. To this end the Government intends to proceed quickly towards the introduction of a national curriculum which, during the compulsory period, will include the foundation subjects of mathematics, English, science, foreign languages, history, geography, technology, music, art and physical education. For each foundation subject there will be clear attainment targets, allowing for variations in ability for the key ages of 7, 11 and 14, together with nationally specified programmes of study leading to those targets.

In Wales, the Welsh language is taught and is used as either the main or secondary medium of teaching in some schools and in Scotland provision is made for teaching in Gaelic in Gaelic-speaking areas. The content and management of the curriculum in Scotland is the responsibility of education authorities and individual head teachers though guidance is issued by the Scottish Education Department, and the Department has advised that the curriculum for 14- to 16-year-olds should include the compulsory study of English, mathematics and science. As part of a development programme for 16to 18-year-olds, a flexible system of vocational courses based on modules or short units of study has been introduced in schools and colleges in disciplines ranging from business and administration to engineering and industrial production. Though designed primarily to improve the preparation of young people for working life, the courses are also intended to meet the needs of many adults entering training or returning to education. The courses lead to the award of a National Certificate.

In Northern Ireland major programmes of curriculum review and development are in progress in both primary and secondary schools. The objective in the secondary sector is to improve the quality and relevance of education for all pupils in the 11-to-16 age-range, with more emphasis on economic and political awareness, technological understanding, personal development and the encouragement of study skills. At the same time teaching methods are being reconsidered.

Over the last 20 years or so much has been done by the education authorities to meet the special needs of ethnic minority children. English language teaching has received priority, but attention has been increasingly directed at the use of mother tongues, especially in the early years. Emphasis has been placed on the need for schools to take account of the ethnic and cultural backgrounds of pupils. Measures are being taken not only to improve the achievement of ethnic minority pupils but also to prepare all children, not just those of ethnic minority origin, for living in a multi-ethnic society.

In England and Wales curriculum development is promoted by the School Curriculum Development Committee. At some 500 teachers' centres in England and Wales, teachers meet for curriculum development work, discussion and in-service training. In Scotland such development work is undertaken by the Consultative Committee on the Curriculum and in Northern Ireland by the Council for Educational Development.

Technical and Vocational Education Initiative

Recognising the need to equip pupils of all abilities with the skills needed by modern commerce and industry, the Government launched the Technical and Vocational Education Initiative in England and Wales in 1983 and in Scotland in 1984. Originally a series of pilot projects, it is being extended into a national scheme in September 1987. The scheme is funded and administered by the Manpower Services Commission, working in close co-operation with government education departments and Her Majesty's Inspectorate of Schools. Projects provide general, technical and vocational education for 14- to 18-year-old pupils leading to nationally recognised qualifications; the extension of the scheme will make it available to all young people in this age group in maintained schools and colleges.

Computers

Great importance is attached to the acquisition and use of computers by schools. As a result of the Government's Micros in Schools and Micros in Primaries schemes, virtually all schools in Britain possess at least one microcomputer (maintained schools in England and Scotland have an average of two microcomputers each, while secondary schools have an average of 14 each). A six-year Microelectronics Education Programme (MEP) in England, Wales and Northern Ireland which began in 1980 investigated and promoted the use of new technology across the curriculum. With the ending of the MEP in 1986 the Microelectronics Education Support Unit was set up to assist the work of local education authorities in England, Wales and Northern Ireland. Priority is being given to curriculum development, including the production of more and better computer software; the development of teaching materials; in-service teacher training; and the provision of information.

Under the 'Software in Schools' scheme funds are being made available to promote the use of educational software in schools. Britain has developed a world lead in several aspects of computer education and a large number of countries have bought British educational software.

Scotland has its own microelectronics development programme mainly through the Scottish Council for Educational Technology.

British School Technology

British School Technology, an independent education centre to promote the teaching of technology in secondary schools and colleges, has been developed with funding from the Department of Trade and Industry and the Manpower Services Commission. The centre provides help to local education authorities wanting to introduce courses into their schools, assists in training teachers,

co-operates with examination boards to assess new courses, and assists new firms planning to produce equipment for British schools and for export.

Schools

Religious In England and Wales county and voluntary schools are required to give religious Education in instruction and pupils to take part in a daily corporate act of worship unless their parents choose otherwise. In county schools, and sometimes in voluntary schools, non-denominational religious instruction is given in accordance with a locally agreed syllabus which may include the study of comparative religions. Syllabuses have been revised in many areas to take account of the faiths of the local population. In all kinds of voluntary schools there is the opportunity for denominational instruction. In Scotland religious instruction must be given, the content being determined by education authorities and schools in accordance with the wishes of the local community. Certain schools provide for Roman Catholic children but in all schools there are safeguards for the individual conscience. In controlled schools in Northern Ireland clergy have a right of access which may be used for denominational instruction; in voluntary schools corporate worship and religious education are controlled by the management authorities.

Examinations

The principal examinations to be taken by secondary school pupils in England, Wales and Northern Ireland around the age of 16 from the summer of 1988 are those leading to the General Certificate of Secondary Education (GCSE), which replaces the General Certificate of Education (GCE) Ordinary (O) level and the Certificate of Secondary Education (CSE). The GCSE will normally be taken after five years of secondary education and will have a seven-point scale of grades denoted by the letters A to G. Grades A to C will have standards at least as high as O-level grades A to C and CSE grade 1, which are usually the qualifying grades for entry to further education or training.

The GCE Advanced (A) level is normally taken after a further two years of study. New examinations, Advanced Supplementary (AS) levels, are being introduced alongside them and will be examined for the first time in the summer of 1989. The A-level examination is the standard for entrance to university and other higher education and to many forms of professional training. These institutions and many major employers and professional bodies have welcomed AS levels and are adapting their requirements to recognise them.

GCSE courses were introduced in 1986 with a view to improving the examination syllabus and raising standards of performance. Syllabuses and assessment procedures comply with nationally agreed guidelines, known as national criteria. The main objective of this and other policies is to bring 80 to 90 per cent of all pupils at least to the level achieved by pupils of average ability in individual subjects (CSE grade 4), and to do this over a broad range of skills and competence in a number of subjects. The AS level, the first courses for which began in 1987, provides an opportunity for sixth-form pupils to study a wider range of subjects than hitherto; students specialising in the arts and humanities, for example, will be able to continue the study of mathematics and technological subjects at the new level.

The Certificate of Pre-Vocational Education, awarded for the first time in 1986, is intended for those at school or college who wish to continue in full-time education for a year after the age of 16 to prepare either for work or for vocational courses. It is being devised by the Business & Technician Education Council and the City and Guilds of London Institute (see p 176).

The Secondary Examinations Council has been established to co-ordinate and supervise systems of examination and assessment in England and Wales designed principally for pupils in secondary education.

The public examination system in Scotland is different from that in other

parts of Britain. Scottish pupils take the Scottish Certificate of Education (SCE) at Ordinary grade at the end of their fourth year of secondary education (equivalent to the fifth year in England and Wales). Pupils in the fifth and sixth years sit the SCE Higher grade, and passes at this grade are the basis for entry to university, college of education or professional training. For those who have completed their main studies at the Higher grade but wish to continue their studies in particular subjects there is the Certificate of Sixth Year Studies (CSYS).

New Standard grade courses and examinations are being introduced to replace the Ordinary grade. These will cater for the whole ability range and all pupils will be assessed in examinations against nationally determined standards of performance. The Higher and CSYS examinations are also being revised to ensure compatibility with the new Standard grade.

Under the Government's plan for the reform of non-advanced further education in Scotland, the National Certificate was introduced in 1984–85 for students over 16 who had successfully completed a programme of vocational

courses based on study units known as modules (see p 168).

Records of Achievement

The Government has decided that all pupils in England and Wales should, by the end of the decade, be issued with a written record of their school achievements and performance when they leave school; this would reflect achievements across the whole educational programme of the school going beyond examination results. There is a similar commitment in Northern Ireland.

Educational Standards

Her Majesty's Inspectors report to ministers on the quality of education provided in all schools (and in most further education establishments outside the universities) and advise local education authorities, schools and the Government; their reports on individual establishments are published (except in Northern Ireland). Local education authorities also employ inspectors or advisers to guide them on maintained schools.

The Assessment of Performance Unit of the Department of Education and Science promotes the development of methods of assessment and monitors the achievement of schoolchildren. Programmes of monitoring have been undertaken in English language and mathematics at the ages of 11 and 15, in science at the ages of 11, 13 and 15, and in the first foreign language at the age of 13. A survey of performance at the age of 15 in design and technology is to be undertaken in 1988.

The second second

Educational Aids

Teachers and pupils use a range of aids to assist the processes of teaching and learning. The government-funded National Educational Resources Information Service enables schools to find out about a wide range of teaching aids. Most schools have audio-visual equipment such as slide projectors and overhead projectors, and educational broadcasting is of major importance. Each year more than 600 hours of school radio and 1,000 hours of television are transmitted by the BBC and the independent broadcasting companies. Teachers' notes, pupils' pamphlets and computer software accompany many broadcast series. Virtually all primary and secondary schools now have microcomputers which are used for computer-assisted learning (see p 169).

The autonomous Council for Educational Technology for the United Kingdom is the central organisation for promoting the application of audio-visual, technological and other aids to education and training.

Careers
Education and
Guidance

Increasing importance is being attached by schools (and by further education establishments) to careers education to increase young people's awareness of further education and careers opportunities and generally help them to prepare for post-school life. The work of careers officers at local level is supported by

careers information material produced by the Government's Careers and Occupational Information Centre. The Government is sponsoring the development of a computer-assisted careers guidance system for students in universities, polytechnics and colleges.

Schoolchildren

Health and Physical education, including organised games, is part of the core curriculum of Welfare of all maintained schools, and playing fields must be available for pupils over the age of eight. Most secondary schools have a gymnasium.

The government health departments are responsible for the medical inspection of schoolchildren and for advice on, and treatment of, specific medical and dental problems associated with children of school age. The Government believes that the education service has a role to play in preventing and dealing with juvenile drug misuse and in helping to prevent the spread of Acquired Immune Deficiency Syndrome (AIDS), and it is encouraging teachers to help to tackle these problems.

Local education authorities are free to decide what milk, meals or other refreshment to provide at their schools, and what charges to make. (In Northern Ireland, school meals must be provided.) Provision has to be made free of charge. however, for pupils from families receiving certain social security benefits. Under certain conditions the authorities must provide free school transport. and they have discretionary powers to assist with the cost of travel to school.

POST-SCHOOL EDUCATION

More than a third of young people receive some form of post-school education, compared with a fifth in 1965, while some 14 per cent of young people in the 18to 19-year-old age-group entered full-time higher education courses (that is, first degree, postgraduate and other advanced courses of a standard higher than GCE A level) in 1986. The number of degrees awarded per age-group is comparable with that of other developed countries and the proportion of people in all further and higher education also compares well, taking into account the large proportion of part-time students and the large group of students receiving professional training in firms rather than in educational institutions.

Post-school education is provided at universities, polytechnics, the Scottish central institutions and other publicly maintained or assisted colleges; the latter have a variety of titles including colleges of higher or further education, colleges of technology, colleges of art, agricultural colleges and adult education centres. There are also many independent specialist establishments, such as secretarial and correspondence colleges and colleges for teaching English as a foreign language. A number of voluntary and public bodies provide cultural and general education, sometimes with assistance from local education authorities and central government, and many education and training schemes are run by public or private organisations, or firms.

The Government is seeking to improve awareness of the opportunities for further education and training through the development of national information services, such as the Educational Counselling and Credit Transfer Information Service funded by the Department of Education and Science.

Higher education, in the form of degree and other post-A-level advanced courses, is provided by universities, polytechnics, the Scottish central institutions and institutions of further and higher education, some concerned wholly with teacher training. The Government considers that access to higher education courses should be available to all those who can benefit from them and who have the necessary intellectual competence, motivation and maturity. In 1985–86 there were 78,000 more full-time home students in higher education than in 1979–80. One of the Government's main objectives in higher education is to bring about a change in the balance of provision in favour of scientific, technological and directly vocational courses.

In order to maintain British expertise in information technology and related fields, a three-year initiative was launched in 1982 to expand higher education and research in electronics, engineering and computer science by providing 5,000 extra student places, and additional staff and research fellowships in universities, polytechnics and Scottish central institutions. Under a separate scheme, some 950 researchers and lecturers were appointed, mostly in the natural sciences and technology. The Engineering and Technology Programme announced in 1985 will, by 1989-90, provide a further 5,000 student places in engineering, information technology and related scientific disciplines.

The term 'further education' is generally used to define all post-school education other than higher education, and comprises non-advanced courses (of A-level standard or below). Non-advanced and some advanced courses are provided by 740 colleges of further education, almost all of them controlled by local education authorities. Non-advanced courses are also provided by adult education centres. In Scotland the new modular courses at the non-advanced level (see p 168) can be taken in schools, further education colleges or as part of

government training schemes.

Much of the provision outside the universities is broadly vocational in purpose; it extends from lower-level technical and commercial courses to advanced courses for those aiming at higher-level posts in commerce, industry and administration, or taking up a variety of professions (for example, town planning or estate management). The system is flexible and permits the student to acquire whatever qualifications his or her capabilities and time allow.

A large proportion of students on non-advanced courses attend part time, either by day release or block release from employment or during the evenings. A particular feature of the further education system is its strong ties with commerce and industry: some two-thirds of spending in the non-advanced sector, for example, is devoted to work-related studies. Co-operation with the business world is encouraged by the Government and its agencies, and employers are often involved in designing courses. In England and Wales a series of College-Employer Links Projects, launched in 1984, help colleges to meet the education and training needs of local firms by identifying the particular skills and qualifications required by employers and developing ways of providing them. In Scotland the 16+ Programme has similar aims. Further education colleges provide much of the education element in industrial training programmes like the Youth Training Scheme and the Training Opportunities Scheme, both sponsored by the Manpower Services Commission. The former scheme offers the opportunity of two years' planned work experience and training to 16-year-old school-leavers and one year's to 17-year-old schoolleavers; the latter provides people aged 19 and over with the opportunity to acquire new skills. The Further Education Unit is an advisory and development body for further education.

Students Some 1,019,000 students were taking full-time courses in 1985–86, including sandwich courses (where substantial periods of full-time study alternate with periods of supervised experience on a relevant job), at universities and major establishments of further education in Britain. Of these about 310,000 were at universities while another 290,000 were following advanced courses outside universities, at colleges of further and higher education, polytechnics and Scottish central institutions. More than 419,000 take non-advanced courses, most of them studying for recognised vocational or educational qualifications.

There were also about 3.2 million part-time students, over 530,000 of whom are released by their employers for further education during working hours. Many of the remainder take part in adult education classes.

Over 90 per cent of full-time students on advanced courses are helped by grants from public funds, which are mandatory for those students taking first degree and other comparable courses who qualify under national rules. (Grants for other courses may be given at the discretion of a local education authority.) Grants cover tuition fees and maintenance, but parents contribute to maintenance costs according to their income. They are awarded by local education authorities in England and Wales up to first degree level; equivalent schemes are administered in Scotland by the Scottish Education Department, and in Northern Ireland mainly by the education and library boards. For postgraduate study and research, grants are offered by the education departments and the research councils. Some scholarships are available from endowments and from particular industries or companies.

Universities There are 47 universities in Britain, including the Open University, compared with 17 in 1945. They are governed by royal charters or in some cases by Act of Parliament, and enjoy complete academic freedom, appointing their own staff and deciding which students to admit, what and how to teach, and which degrees to award. The English universities are: Aston (Birmingham), Bath, Birmingham, Bradford, Bristol, Brunel (London), Cambridge, City (London), Durham, East Anglia, Essex, Exeter, Hull, Keele, Kent at Canterbury, Lancaster, Leeds, Leicester, Liverpool, London, Loughborough, Manchester, University of Manchester Institute of Science and Technology, Newcastle upon Tyne, Nottingham, Oxford, Reading, Salford, Sheffield, Southampton, Surrey, Sussex, Warwick, York and the independent University of Buckingham. The Royal College of Art, the Cranfield Institute of Technology, the London Graduate School of Business Studies and the Manchester Business School also have university status. The federated University of Wales comprises six constituent institutions. The Scottish universities are: Aberdeen, Dundee, Edinburgh, Glasgow, Heriot-Watt (Edinburgh), St Andrews, Stirling and Strathclyde (Glasgow). In Northern Ireland there are the Queen's University of Belfast and the University of Ulster.

The universities of Oxford and Cambridge date from the twelfth and thirteenth centuries, and the Scottish universities of St Andrews, Glasgow, Aberdeen and Edinburgh from the fifteenth and sixteenth centuries. All the other universities were founded in the nineteenth and twentieth centuries.

Admission to universities is by examination or selection. Of the 310,000 full-time university students in 1985–86 (excluding those at the Open University and the University of Buckingham), about 54,000 were postgraduate. About half lived in colleges, halls of residence and other accommodation owned by universities.

There are some 31,000 full-time university teachers paid wholly from university funds. The ratio of staff to students is about one to ten, one of the most favourable in the world.

Except at the Open University, first degree courses are mainly full time and usually last three or four years, though medical and veterinary courses usually require five or six years. Degree titles vary according to the practice of each university; in England, Wales and Northern Ireland the most common titles for a first degree are Bachelor of Arts (BA) or Bachelor of Science (BSc) and for a second degree Master of Arts (MA), Master of Science (MSc), and Doctor of Philosophy (PhD); in the older Scottish universities Master is used for a first degree in arts subjects. Uniformity of standards between universities is promoted by employing external examiners for all university examinations, and the general pattern of teaching is fairly similar throughout Britain.

Research is an important feature of university work; many staff combine research with their teaching duties and about half of postgraduate students are

175

engaged on research projects. The Government is encouraging universities to co-operate closely with industry on research projects. In June 1987 a new information technology institute, sponsored jointly by industry and the Cranfield Institute of Technology, was opened to link academic and commercial interests.

The Open University The Open University is a non-residential university which provides part-time degree and other courses, using mainly a combination of correspondence courses, television and radio broadcasts, and summer schools, together with a network of study centres for contact with part-time tutors and counsellors and with fellow students. No formal academic qualifications are required to register for these courses, but the standards of the University's degrees are the same as those of other universities. Its first degree, for which courses began in 1971, is the BA (Open), a general degree awarded on a system of credits for each course completed. The University also has a programme of higher degrees, BPhil, MPhil and PhD, available through research, and MA and MSc through taught courses. Whereas students must normally be resident in the United Kingdom, courses are also available to English-speakers in Belgium and Luxembourg. The University has advised many other countries on the setting-up of similar institutions. A Continuing Education Programme, including short courses of community education, in-service training for teachers, health and social welfare workers and other professional staff, and up-dating courses for managers, scientists and technologists, is the fastest-growing aspect of the University's work. In 1987 some 146,000 students were following Open University courses, more than half at degree level.

Polytechnics and Other Institutions A major contribution to post-school education in England and Wales is made by the 30 polytechnics which have been established since 1967. They provide courses in a wide range of subjects at all levels, though the trend is towards a concentration on advanced work. Courses may lead to first and higher degrees, certain graduate-equivalent qualifications, the examinations of the main professional bodies, and to qualifications such as those of the Business & Technician Education Council (see p 176). One-year 'access' courses provide a foundation and an appropriate test before enrolment on a course of higher education for prospective students who lack the standard entry qualifications. Polytechnics have close links with commerce and industry, and many polytechnic students have jobs and attend on a part-time basis. Similar provision is made in Scotland in the 16 central institutions and a number of further education colleges, and in Northern Ireland by the University of Ulstern

Institutes and colleges of higher education, formed by the integration of teacher training with the rest of higher education, also account for a significant proportion of higher education students, and other further education colleges run some, usually specialised, higher education courses.

Council for National Academic Awards An increasing proportion of students on advanced courses in Great Britain outside the universities are taking courses leading to the qualifications of the Council for National Academic Awards (CNAA). The Council awards degrees and other academic qualifications comparable in standard with those granted by the universities. The courses range from science and technology to the arts, social studies, business studies and law, but the proportion of technological, business or other broadly vocational courses is much higher than in universities. In 1987 the CNAA instructed institutions running CNAA-approved courses that they could apply to have delegated to them responsibility for approving and reviewing their own courses.

for Vocational Qualifications

National Council A National Council for Vocational Qualifications (NCVQ) was established in 1986 to reform the existing vocational qualifications system in England and Wales. The Council will introduce a system of accreditation for qualifications awarded for various levels of occupational competence by approved bodies. It will design and implement a new framework - to be called the National Vocational Qualification (NVQ) - which will incorporate qualifications which meet agreed criteria within a simple structure of levels. The first accreditations within the NVQ framework were made in the summer of 1987 and the first four levels should be operating by 1991. In Scotland the new system of non-advanced further education has already brought into operation a new vocational qualification structure.

Examining Bodies

The Business & Technician Education Council (BTEC) plans and administers a unified national system of courses at technician or equivalent level for students in industry, commerce and public administration in England, Wales and Northern Ireland. Courses leading to BTEC awards are available at polytechnics, colleges of further and higher education, and in some schools. The Scottish Vocational Education Council (SCOTVEC) is the principal examining and awarding body in the field of further education in Scotland. SCOTVEC is responsible for the administration and development of the non-advanced SCOTVEC National Certificate.

Qualifications in a wide range of craft skills are offered by the City and Guilds of London Institute, and a variety of qualifications in commercial and office practice are awarded by the Royal Society of Arts.

Teacher Training

All entrants to school teaching must have taken a recognised course of teacher training. In England and Wales courses are offered by institutes of higher education, many universities and polytechnics and by certain other colleges. Non-graduates usually qualify by way of three- or four-year courses leading to the Bachelor of Education (BEd) degree; graduates take a one-year Postgraduate Certificate of Education.

In Scotland all teachers in education authority schools must be registered with the General Teaching Council for Scotland. It is government policy that all entrants to the teaching profession in Scotland should be graduates. New primary teachers qualify either through a four-year BEd course or a one-year postgraduate course of teacher training at a college of education. Teachers of academic subjects at secondary schools must hold a degree containing two passes in the subject which they wish to teach. In certain non-academic subjects, a relevant specialist diploma has been acceptable in place of a degree, but this provision is being phased out.

In Northern Ireland teacher training is provided by the two universities and the two colleges of education. The principal courses are BEd (three- or four-year honours), BA and BSc with education (three, four or five years) and the one-year Certificate of Education for graduates.

The number of teachers to be trained to teach in primary schools is being greatly increased in order to meet the anticipated rise in the number of primary schoolchildren over the next few years. There will also be more admissions to undergraduate courses of initial training for teachers of certain subjects in secondary schools, including those subjects (like mathematics and physics) where there have been long-standing shortages. Admissions to postgraduate training courses for secondary teachers, the route by which about threequarters of all newly trained secondary teachers qualify, are due to remain at the present level until 1990.

The Government is taking steps to improve the quality of teaching by revising selection, training and placement procedures for new teachers, and by providing

more in-service training opportunities. Management training courses for head teachers are also being provided. The Government believes that more systematic planning is required by schools and local education authorities to match in-service training to both the career needs of teachers and to the curricular needs of schools. A major new in-service training programme to improve the quality of teaching in schools and institutions of further education, particularly of the new technologies, was introduced under the Education (No 2) Act 1986. The programme will cost £200 million in 1987–88, of which £70 million is being allocated to projects of national priority, including training in the teaching of mathematics, science, and craft, design and technology.

Measures taken to strengthen initial teacher training in England, Wales and Northern Ireland have included the issuing of criteria which courses must meet and the establishment of the Council for the Accreditation of Teacher Education to review courses against the criteria. The Education (No 2) Act 1986 gives the Government powers to require local education authorities in England and Wales to appraise the performance of teachers. In Scotland, following recommendations of working parties on teacher training, postgraduate courses are being revised. All new pre-service and major in-service courses provided by colleges of education must be approved both by the Scottish Education Department and by a validating body.

Adult and Continuing Education

It is becoming increasingly recognised that education is a process which continues throughout adult life. The scope of adult and continuing education has widened in recent years and now includes, in addition to the development of the individual through cultural, physical and craft pursuits, such subjects as basic education (for example, in literacy and numeracy); education for disadvantaged groups and those with special needs such as ethnic minorities or the disabled; consumer education; health education; and pre-retirement education. Continuing education also includes training for those in employment to enable them to keep pace with technological change. The Government has taken a number of initiatives to improve opportunities for both adult and continuing education. In 1982 it launched a Professional, Industrial and Commercial Updating Programme (PICKUP), designed to help colleges, polytechnics and universities to meet the need to up-date and broaden the skills of those in mid-career in industry, commerce and the professions. A programme to encourage the expansion of educational opportunities for the adult unemployed, called REPLAN, was launched in 1984. The first courses of the Open College, bringing together broadcasters, educationists and sponsors and providing vocational education and training courses below degree level, are to be transmitted in the autumn of 1987.

Apart from provision for mature students at universities, courses are provided by the Open University, further education colleges, adult education centres, residential colleges, extra-mural departments of universities and various other bodies including a number of voluntary organisations. Most of the provision is made by the local education authorities in a wide variety of establishments, including schools used for adult evening classes and 'community schools' which provide educational, social and cultural opportunities for the wider community. Most courses are part time. Local authorities also maintain or aid many of the short-term residential colleges or centres which provide courses lasting between a weekend and a fortnight. Long-term residential colleges, grant-aided by central government departments, provide courses of one or two years and aim to provide a liberal education without academic entry tests. Most students admitted are entitled to full maintenance grants.

University extra-mural departments and the Workers' Educational Association, the largest recognised voluntary body, provide extended part-time courses

of liberal studies; they also run short courses for special (including vocational) interests. Various kinds of education and training are provided by a wide range of other organisations, for example, the National Federation of Women's Institutes, the Young Men's Christian Association and the Pre-Retirement Association.

The National Institute of Adult Continuing Education is a centre of information, research, development work and publication for adult and continuing education, as well as a channel of co-operation and consultation for the many interested organisations in England and Wales. The Institute also administers with government funding the Unit for the Development of Adult Continuing Education which undertakes research and development work; the Adult Literacy and Basic Skills Unit, covering proficiency in literacy, numeracy and communications skills; and a large part of the REPLAN programme. The Institute's counterpart in Scotland is the Scottish Institute of Adult and Continuing Education.

In Scotland the Scottish Community Education Council advises the Government and promotes all community education matters including adult literacy and basic education and the youth service.

In Northern Ireland the Council for Continuing Education advises the Department of Education on adult and continuing education matters.

Teaching Methods

The general pattern of teaching and learning on full-time courses of higher education remains a mixture of lectures, prescribed or suggested reading, seminars and tutorials, exercises and tests, and, where appropriate, practical work or work experience. Educational aids are widely used.

Radio and television programmes, both specifically educational and general, are important media for continuing education and are often linked to a range of supplementary publications, courses and activities. The BBC, the independent television companies and Channel 4 provide programmes which range from basic education and progressive vocational training to domestic, social and craft skills. The BBC also works with the Open University (see p 175), producing and broadcasting radio and television programmes as part of the University's courses.

EDUCATIONAL RESEARCH

Research into the theory and practice of education and the organisation of educational services is supported financially by central and local government, the Economic and Social Research Council, philanthropic organisations, universities and other higher education institutions, teachers' associations and certain independent bodies.

The major research institute outside the universities is the autonomous National Foundation for Educational Research in England and Wales, with income mainly from funds received from research projects and from corporate members, including local education authorities, teachers' organisations and universities; it also receives a small government grant. The Scottish Council for Research in Education and the Northern Ireland Council for Educational Research have similar functions.

EDUCATIONAL LINKS OVERSEAS

Schoolchildren, students, teachers and others concerned with education come to Britain from overseas to study, and British people work and train overseas. Many opportunities for such movement are the result of international cooperation at government level within the European Community and within the Commonwealth, and of educational schemes, courses and professional contacts organised in Britain by officially funded and voluntary organisations. The

British aid programme encourages links between educational institutions in Britain and developing countries.

British membership of the European Community is creating closer ties with other member countries. Both in schools and in the colleges and universities there has been an expansion of interest in European studies and languages, and exchanges of teachers, schoolchildren and students take place. Britain has adhered to the Statute of the European Schools (nine of which have been established throughout the Community including one at Culham, Oxfordshire) to provide education for children of people employed in Community institutions.

Overseas Students in Britain

Students come to Britain from countries throughout the world to study at universities or other educational institutions or for professional training. British universities, polytechnics and other further education establishments have built up their reputation overseas by offering tuition of the highest standards, maintaining low student-to-staff ratios, and providing courses and qualifications to meet present-day and possible future needs. First degree courses tend to be shorter and more intensive than in many other countries (three years is the normal length in England, Wales and Northern Ireland; three or four years in Scotland).

In the academic year 1985–86 there were about 39,000 overseas students at universities and 24,000 at polytechnics and other establishments of further and higher education. In addition, many thousands of people from abroad were training for such occupations as nursing, law, banking and accountancy, and service and other industries. About half of all overseas students were from the Commonwealth and Britain's dependencies. Many come to Britain for advanced training: some 33 per cent of students enrolled for full-time postgraduate study or research in Britain in 1985–86 came from overseas.

Most overseas students pay their own fees and expenses or hold awards from their own governments. Those following courses of higher or further education are charged fees which cover the full cost of their courses. Nationals of other member countries of the European Community are generally charged the lower level of fees that applies to British students.

The Government continues, however, to make considerable provision for students and trainees from overseas under its overseas aid programme and other schemes. At present about 17,000 overseas students are supported annually (including some studying overseas) at a cost of about £80 million. Three-quarters of this number are from developing countries, most of them from the Commonwealth, and financed from the aid programme at a cost of some £65 million. Under a new Overseas Development Administration Shared Scholarship Scheme, launched in 1986–87, 750 awards over five years are available mainly at postgraduate level for students from the developing countries of the Commonwealth, with costs being shared between the Government and the educational institutions.

Outside the aid programme, the Overseas Research Students Awards Scheme, funded by the Department of Education and Science, provides assistance for overseas research students of high ability to attend British universities while the Foreign and Commonwealth Office Scholarships and Awards Scheme, which operates in some 90 countries, is designed to benefit individuals likely to hold positions of responsibility in their future careers.

Many public and private scholarships and fellowships are available to students from overseas (and to British students who want to study overseas). Among the best known are the British Council Scholarships, the Commonwealth Scholarship and Fellowship Plan, the Fulbright Scholarship Scheme, the Marshall Scholarships, the Rhodes Scholarships, and the Churchill Scholarships for men

and women in all walks of life. Most British universities and colleges offer scholarships for which graduates of any nationality are eligible.

A number of British colleges of further education have entered into arrangements with British universities to provide 'bridging' courses for overseas students before they enter university.

English as a Foreign

The continuing increase in interest in English as a foreign language is reflected in the growth of the number of private language schools in Britain and the larger Language proportion of these recognised by the British Council. At the same time the British Council has expanded the volume of its own teaching of English overseas by opening several new centres and extending existing ones, and runs a programme for teaching English related to specific jobs and skills. Publications and other material relating to English language teaching have also increased in number and are now a large component in many publishers' lists, constituting a major export.

The BBC's English by Radio and English by Television services provide a world-wide facility for the individual learner at home.

Educational Exchanges

The promotion of cultural and educational relations with other countries is a major concern of the British Council, which plays an important part in the management of the aid programme to education. It recruits teachers for work overseas, organises short visits overseas by British experts, and encourages cultural exchange visits. It also runs schemes to promote academic interchange between universities and higher education institutions in Britain and other countries, and exchange schemes in other scientific, educational and cultural areas. Co-operation between universities in Britain and developing countries is promoted by means of recruiting staff for overseas universities, the secondment of staff from British universities, interdepartmental faculty link schemes, local staff development, short-term teaching and advisory visits, and general consultancy services.

The Central Bureau, a charity financed by the Government, makes available information and advice on all forms of educational visits and exchanges. It develops and administers a wide range of exchange programmes such as teacher exchanges with West European countries and the United States; short courses in Europe for teachers; international visits for education specialists; and the European Community Young Worker Exchange Scheme. It is responsible for the linking of educational establishments and local education authorities with counterparts abroad and the organisation of meetings and conferences. It publishes a series of guides for people of all ages seeking advice on work, study and travel abroad. In 1985 the Central Bureau and the British Council set up, at the Government's request, the Youth Exchange Council which develops, implements and evaluates policy on youth exchanges between Britain and other countries.

The Association of Commonwealth Universities promotes contact and cooperation between more than 300 member universities in 29 Commonwealth countries. It assists student and staff mobility by administering various award schemes including, for Britain, the Commonwealth Scholarship and Fellowship Plan, and by providing an academic appointments service; it publishes information about Commonwealth universities, courses and scholarships; and organises meetings in different parts of the world.

The Commonwealth Education Liaison Committee supplements normal direct dealings on education between the countries of the Commonwealth. The United Kingdom Council for Overseas Student Affairs is an independent body serving overseas students, and organisations and individuals concerned in student affairs.

The Youth Service

The youth service forms part of the education system and is concerned with promoting the personal development and social education of young people by providing opportunities for them to participate in a wide range of leisure-time activities. Young people take part in the youth service on a voluntary basis. Extending the range of experiences open to young people and giving them opportunities to participate in the running of their organisations are seen as key elements in the provision.

The youth service is a partnership between central government, local authorities and voluntary youth organisations; at local level the youth service is provided by voluntary organisations and local education authorities. Government education departments formulate broad policy objectives and encourage their achievement through financial assistance and advice. The need to achieve better planning, management and co-ordination of the youth service in England, which was emphasised in an official review published in 1982, has been endorsed by the Government. In 1985 the Government established the National Advisory Council for the Youth Service for England and Wales to advise ministers and others on the scale and direction of youth service activity and has indicated those groups of young people to whom special attention should be given. In Wales the Youth Work Partnership was set up in 1985 to promote the co-ordination and development of services there.

National voluntary youth organisations promote the major share of youth activities through local groups which raise most of their day-to-day expenses by their own efforts. Many receive financial and other assistance from local education authorities, which also provide facilities in many areas. The voluntary organisations vary greatly in character and include the uniformed and church organisations. Many local authorities and voluntary youth organisations have responded to new needs in society by making provision, for example, for the young unemployed, young people from the ethnic minorities, young people in inner cities or rural areas and those in trouble or especially vulnerable. Other areas of concern are homelessness, work with girls, and provision for handicapped young people. Among the largest of the voluntary youth organisations are the Scout and Girl Guides Associations (with about 535,000 and 743,000 members), the National Association of Youth Clubs (about 506,000), the National Association of Boys' Clubs (some 165,000), the Young Men's Christian Association (905,000) and clubs run by the churches. The Young Farmers' Clubs are distinguished as a movement in which decisions are taken by the members themselves. There are also organisations like the Outward Bound Trust providing opportunities for adventurous outdoor pursuits. The three pre-service organisations (the Sea Cadet Corps, Army Cadet Force and Air Training Corps), with a membership of some 113,000, undertake activities related to the work of the armed forces. Many authorities have youth committees on which official and voluntary bodies are represented, and employ youth officers to co-ordinate youth work and to arrange in-service training. There are also youth councils which are representative bodies of young people from local youth organisations. At national level many voluntary organisations belong to the National Council for Voluntary Youth Services, a representative and consultative body which aims to develop the partnership between voluntary and statutory bodies in England. Similar councils exist in Wales, Scotland and Northern Ireland. The British Youth Council is a national forum for young people, youth organisations and youth councils, including the youth wings of the major political parties, and represents young people at an international level. The youth service in England and Wales can draw on information, advice, training and research services provided by the National Youth Bureau, which is funded primarily by central government and issues a range of publications.

Youth Workers In England and Wales a basic two-year training course at certain universities and higher education colleges leads to the status of qualified youth and community worker. A number of Bachelor of Education degree courses include a youth and community option and there are courses for graduates who wish to become youth workers. In Scotland one-, two- and three-year courses are provided at certain colleges of education and in Northern Ireland courses are provided by the University of Ulster. All school teachers who qualify before the end of 1988 are recognised as qualified youth workers.

Full-time youth workers are supported by some 500,000 part-time workers, many of them unpaid, both qualified and unqualified. Short courses and conferences on youth and community work are held. There are also in-service courses for serving youth workers and officers. Both initial and in-service courses are validated by the Council for Education and Training in Youth and Community Work.

Other A substantial sum of money is awarded by the many grant-giving foundations Organisations and trusts each year for activities involving young people. The Royal Jubilee Concerned with Trusts, formed in 1978 from King George's Jubilce Trust (started in 1935 at the Young People time of the Silver Jubilee of King George V) and The Queen's Silver Jubilee Trust, which arose from the 1977 Queen's Silver Jubilee Appeal, support work involving young people aged 8 to 25 (King George's Jubilee Trust) and young people up to the age of 25 involved in voluntary community service work (The Queen's Silver Jubilee Trust). King George's Jubilee Trust has distributed nearly £6 million since 1935 and The Queen's Silver Jubilee Trust over £10 million since 1978. In addition, The Prince's Trust, which was set up in 1976 to help disadvantaged young people aged 14 to 25, has disbursed some £2 million to individuals and small ad hoc groups.

The Duke of Edinburgh's Award Scheme, which operates through bodies such as local authorities, schools, youth organisations and industrial firms, enables young people from Britain and other Commonwealth countries to take part, with the voluntary assistance of adults, in a variety of challenging activities in four areas: community service, expeditions, the development of personal interests and social and practical skills, and physical recreation.

Voluntary Thousands of young people voluntarily take part in community service designed Service by to assist those in need, including the elderly and the disabled, and many others Young People work on environmental projects. Organisations providing opportunities for community service, such as Community Service Volunteers, International Voluntary Service and the British Trust for Conservation Volunteers, receive grants from the Government. Many schools also organise community service activities as part of the curriculum, and voluntary work in the community is sponsored by a number of churches.

8 The Environment

By comprehensive land-use planning and development control Britain has had considerable success in resolving the conflicting demands of industry, commerce, housing, transport, agriculture and recreation and in reducing environmental pollution. The underlying approach is to promote efficiency, economy and amenity in the use and development of land, respecting both the needs of development and the interests of conservation. There is a statutory system of land-use planning applying to virtually every kind of development, and there are laws dealing specifically with environmental health, the control of pollution and the conservation of the natural environment. Most development requires local 'planning permission', and applications for permission are dealt with in the light of development plans which set out strategies for each area on such matters as housing, transport, industry and open land. However, many minor developments are subject to a general permission under which they do not need a specific planning application; the opportunity is being taken to expand this general permission wherever possible. Many voluntary organisations take an active interest in planning, conservation and the control of pollution.

Planning

The system of land-use planning in Great Britain involves a centralised structure under the Secretaries of State for the Environment, Wales and Scotland and compulsory planning duties for local planning authorities. The Department of the Environment brings together the major responsibilities in England for land-use planning, housing and construction, countryside policy and environmental protection. The Welsh Office and the Scottish Development Department have broadly equivalent responsibilities. Strategic planning in England and Wales excluding London is primarily the responsibility of the county councils and the metropolitan district councils, while district councils and, in London, the councils of the London boroughs and the City of London are responsible for most local plans and development control, the main housing functions and many environmental health matters. In Scotland planning functions are undertaken by regional and district councils whose responsibilities are divided on a basis broadly similar to that in England and Wales. In the more rural regions and the islands, all planning responsibilities are carried out by the regional and islands councils respectively. In Northern Ireland the Department of the Environment for Northern Ireland is responsible for planning matters through six divisional planning offices which work closely with the district councils. The councils have local environmental health responsibilities.

Development Plans The development plan system in England and Wales involves 'structure' and 'local' plans. Structure plans are prepared by county planning authorities and require ministerial approval. They set out broad policies for the development and other use of land including measures for the improvement of the physical environment and traffic management. Local plans provide detailed guidance, either generally for development expected to start within about ten years, or, more specifically, in 'action area' plans, where implementation is to be given short-term priority, and in 'subject' plans which concentrate on special issues

such as mineral working. The plans are normally prepared by district planning authorities, although sometimes by county planning authorities, and must conform generally to the approved structure plan. In exceptional cases, with ministerial approval, the adoption of a local plan may precede the approval of a structure plan. Local plans are adopted by the planning authorities without being subject to ministerial approval unless called in by the Secretary of State. All plans are kept under review and may be altered from time to time. In Greater London and the other six metropolitan areas in England structure and local plans are gradually being replaced by new unitary development plans. This follows abolition of the county planning authorities in those areas on 1 April 1986. Unitary development plans will be prepared and normally adopted by London borough and metropolitan district planning authorities. They will contain both general policies and detailed proposals for land use and development control. Like local plans, unitary development plans can be called in by the Secretary of State in exceptional circumstances.

Scotland has a broadly similar system, with structure plans being prepared by regional or islands authorities, and local plans by the districts. Regional and islands authorities may also produce a regional report outlining their priorities and policies. Under Northern Ireland's single-tier system, plans are prepared by the Department of the Environment for Northern Ireland.

Public Participation

Members of the public and interested organisations are given an opportunity to express their views on the planning of their areas during the formative stages of the structure and local plans. The local planning authorities must ensure adequate publicity for matters proposed for inclusion in the plans; representations may be made about them to the authorities. These opportunities for public participation are additional to provisions for objecting to prepared plans. In the case of structure plans the Secretary of State normally holds an examination in public of matters on which he or she requires more information in order to reach a decision. In the case of local plans objectors have a right to be heard at a public local inquiry held by the planning authorities. There will be similar provisions for participation in the preparation of unitary development plans and for making objections to them. Usually the planning authorities will hold a public local inquiry to hear objectors to unitary development plans.

Where specific proposals for development differ substantially from the intentions of a development plan, they must be publicised locally. Other schemes affecting a large number of people are usually advertised by the local planning authority, and applications seeking permission for certain types of development must also be advertised. (In Scotland there is a system of neighbour notification of planning applications, under which the applicant must notify the proprietors of land and buildings adjoining the site of a proposed development at the same time as the application is submitted to the local planning authority.) The applicant has a right of appeal to the Secretary of State if planning permission is refused or is granted subject to conditions. Most appeals are transferred for decision to inspectors (in Scotland reporters) appointed by the Secretary of State.

Similar provision is made in Northern Ireland for public participation in the planning process and for the hearing of representations at public inquiries. For planning applications which do not give rise to public inquiries there is a right of appeal to an independent Planning Appeals Commission.

Major Schemes The Secretaries of State can direct that a planning application be referred to them for decision. This power is exercised sparingly and usually only in respect of proposals of national or regional importance, for example, proposals for a major new airport or coalfield. The applicant and the local planning authority

have the right to be heard by a person appointed by the Sccretary of State and a public inquiry is normally held for this purpose. In the case of development schemes of exceptional importance the departments concerned have set up procedures to aid the progress of the inquiry by helping the parties to resolve procedural matters beforehand. Where highway development is proposed, the government minister concerned can hold such inquiries as he or she considers appropriate; these generally relate to the compulsory acquisition of land.

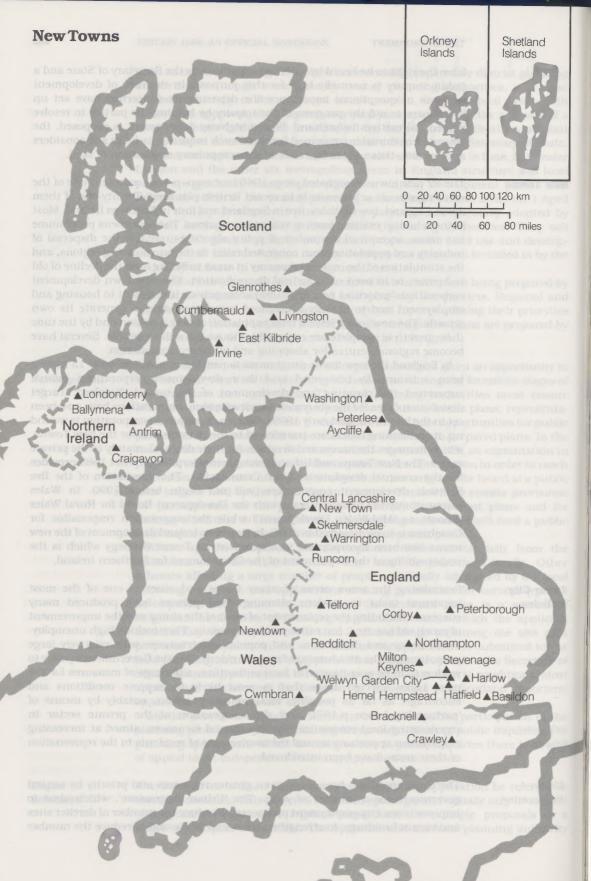
New Towns

The 32 new towns designated since 1946 (see map, p 186) represent one of the most significant achievements in recent British planning. Twenty-one of them are in England, two in Wales, five in Scotland and four in Northern Ireland. Most of them had an existing town or village as a nucleus. The new towns programme has taken account of a number of policy objectives, notably the dispersal of industry and population from congested cities to the surrounding regions, and the stimulation of the regional economy in areas suffering from the decline of old industries or in need of industrial diversification. The new town development corporations' priorities now are to maximise private investment in housing and employment and to achieve a balanced community able to generate its own growth. The new towns have a total population of over 2 million and by the time their growth is complete are expected to house 2.5 million people. Several have become regional centres for shopping and office accommodation.

In England the new towns programme is nearing completion, with 13 having been substantially completed and their development corporations (which supervised the planning and development of the towns) dissolved. Target dissolution dates for the six remaining development corporations have now been set in the late 1980s and early 1990s. When a development corporation is wound up, its remaining assets are transferred to the Commission for the New Towns, which manages the assets and arranges for their disposal, mainly to the private sector. The New Towns and Urban Development Corporations Act 1985 provides for the eventual dissolution of the Commission. The dissolution of the five Scottish development corporations will not begin before 1990. In Wales responsibility for Newtown rests with the Development Board for Rural Wales (known as 'Mid-Wales Development') while the corporation responsible for Cwmbran is to be dissolved in 1988. In Northern Ireland development of the new towns has been incorporated in a new District Towns Strategy which is the responsibility of the Department of the Environment for Northern Ireland.

Inner City Policies Revitalising the inner areas of many towns and cities is one of the most important tasks in modern planning. Past policies have produced many successes including the replacement of most of the slums and the improvement of much old housing, but other problems remain. They include high unemployment, decay and dereliction, and population structures with relatively large proportions of the disadvantaged and the elderly. It is the Government's policy to work out, in co-operation with local authorities, a package of measures for the most badly affected areas that is most likely to improve conditions and encourage, as far as possible, local voluntary action, notably by means of 'partnerships' (see p 187), and the co-operation of the private sector in regenerating local economies. Various special measures, aimed at increasing employment opportunities and the involvement of residents in the rejuvenation of their areas, have been introduced.

Urban Programme The inner city areas have been given greater resources and priority by central government for a number of years. The 'Urban Programme', which aims to improve inner city employment prospects, to reduce the number of derelict sites and vacant buildings, to strengthen the social fabric and to reduce the number



THE ENVIRONMENT 187

of people in acute housing stress, has been increased from a 1977–78 level in England and Wales of under £30 million to £324 million in 1987–88. The Programme complements the main economic, environmental and social programmes of local authorities. It is being reorganised from 1987–88 as part of a gradual attempt to improve its effectiveness. In January 1987 the Government announced that, in order to achieve a greater impact with available funds, resources were to be concentrated on 57 areas with special problems and needs. The Urban Programme represents only a part of the central assistance to urban, and other, local authorities. The main contributions are through the annual rate support grant, housing subsidy and other programmes.

In certain places, special schemes are in operation. A co-ordinated 'partnership' approach is in operation in seven English areas (Birmingham, Liverpool, Manchester/Salford, Newcastle upon Tyne/Gateshead and the inner London boroughs of Hackney, Islington and Lambeth) in which central and local government work together to tackle urban problems where they are at their most severe. Each partnership has a three-year action programme rolled forward annually, which is based on the needs of the area and its particular priorities. Partnerships receive allocations of urban programme resources ranging from £10 million to £25 million a year. In 1985 the Government announced the establishment of five 'City Action Teams' (one for the inner London boroughs and one for each of the other partnership areas) to secure improved co-operation between government departments in developing and implementing their policies and programmes for these areas. These teams were given special budgets in April 1987 to enable them to develop collaboration between the private and public sectors in key areas, and to promote project development.

In 1986 the Inner Cities Initiative was announced, involving the creation of 'task forces' to intensify and bring together the efforts of government departments, local government, the private sector and the local community in eight inner city areas: Leeds, Middlesbrough, Leicester, Manchester, Bristol, Birmingham, and two in London. A further eight areas were added in April 1987: Hartlepool, Rochdale, Preston, Nottingham, Coventry, Wolverhampton, Doncaster and the London borough of Tower Hamlets. Funds in addition to those available under existing programmes are being provided and the initiative is being co-ordinated by the Secretary of State for Trade and Industry.

In 1981 the Government set up two urban development corporations modelled on the new town development corporations, in the London docklands and the Merseyside dock area. These are receiving some £111 million in 1987–88. Five new urban development corporations were set up in 1987 at Trafford Park (Greater Manchester), Teesside, Tyne and Wear, the Black Country (West Midlands) and Cardiff Bay.

Urban Development Grant aims to promote the economic and physical regeneration of deprived urban areas by encouraging private sector investment. Grant is available for capital investment projects which would not otherwise go ahead and would contribute to meeting the special social needs of inner urban areas. Since the scheme was launched in 1982, some 290 projects have been approved, representing investment of £772 million. Under the Housing and Planning Act 1986 the Government is able to pay Urban Regeneration Grant to private developers engaging in larger and more complex schemes to promote the regeneration of difficult sites in run-down urban areas.

National garden festivals, based on the European idea of garden shows, are being introduced with the aim of rejuvenating inner urban areas and reclaiming derelict sites. The first festival in Liverpool in 1984, which had international status and attracted nearly 3·4 million visitors, was followed by a second in Stoke-on-Trent in 1986, and further festivals will be held in Glasgow in 1988, Gateshead in 1990 and Ebbw Vale in 1992.

In Scotland, where the Urban Programme amounts to £38 million in 1987–88, a major urban renewal exercise in Glasgow to regenerate the city's east end (the Glasgow Eastern Area Renewal Project) has been organised on somewhat similar lines to the partnership areas in England, and a further eight Scottish districts have been designated under the Inner Urban Areas Act. In addition, the Scottish Development Agency operates the Local Enterprise Grants for Urban Projects Scheme (equivalent to the Urban Development Grant). In Northern Ireland, inner city problems on a substantial scale are largely confined to Belfast, where a major housing programme is supplemented by Urban Development Grants, an environmental improvement scheme and a comprehensive development programme to regenerate the commercial parts of the inner city. In 1987–88 these programmes have a combined allocation of £8 million.

In Wales, where the Urban Programme is administered by the Welsh Office, the Secretary of State for Wales in 1986 launched a new three-year programme, the 'Valleys Initiative' for the south Wales valleys aimed at bringing about a substantial improvement in the environments of the town centres and surrounding areas. Ideas on how the valley communities can be revitalised and improved are being sought from within the communities. The Welsh Office is using existing mechanisms of assistance and making additional resources available to bring about change.

Enterprise Zones

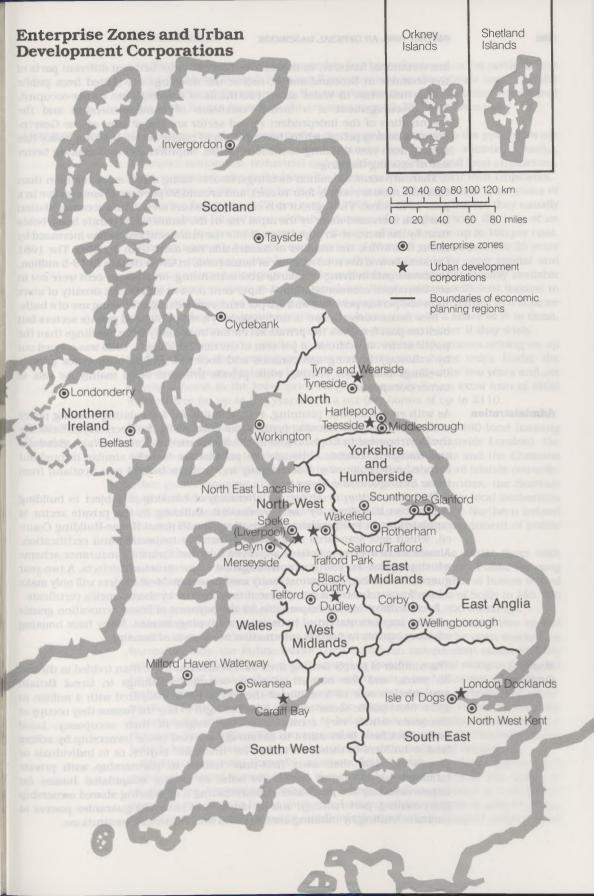
Since 1981 the Government has set up 25 'enterprise zones' (see map, opposite). The aim of this experimental policy is to see how far industrial and commercial activity can be stimulated by the removal of certain tax burdens and by relaxing or speeding up the application of a number of administrative controls. The zones, which contain land suitable for development, range in size from about 50 to 450 hectares (about 120 to over 1,100 acres). Benefits in the zones include exemption from rates (the local property tax); 100 per cent allowances for corporation and income tax purposes for capital expenditure on industrial and commercial buildings; a much simplified planning system in which many forms of development are automatically permitted; and a reduction in government requests for statistical information.

Simplified Planning Zones

The Housing and Planning Act 1986 provides for the establishment of 'simplified planning zones'. They will use a simplified planning framework, already operational in enterprise zones, under which advance planning permission will be given for specified types of development within a zone. This will remove the need for each developer to make a separate planning application in these cases. They will not have the fiscal incentives available in enterprise zones, but their effectiveness in promoting the development or redevelopment of an area will be increased if they are used in conjunction with other incentives which may be available.

Housing

The pattern of housing tenure has changed considerably in recent years, with a substantial increase in owner-occupation and a decline in privately rented accommodation. Between the end of 1971 and 1986 the proportion of owner-occupied dwellings in Great Britain rose from 51 to 63 per cent of the housing stock, while the proportion accounted for by dwellings rented from a local authority or new town authority fell from 31 to 27 per cent, and the proportion of other types of tenure fell from 19 to 11 per cent. The fall in the last category reflected the decline in privately rented dwellings, while the number of housing association dwellings increased substantially during this period. There



are variations, however, in the distribution of tenure between different parts of the country; in Scotland almost half of the dwellings are rented from public authorities while in Wales about two-thirds of dwellings are owner-occupied. The encouragement of a further extension of home ownership and the regeneration of the independent rented sector are major aims of the Government's housing policy, while the emphasis of public sector housing policy has shifted from new building to modernisation, improvement and making better use of existing dwellings.

There are some 22 million dwellings, houses being much more common than flats (the ratio is roughly four to one), and around 50 per cent of families live in a post-1945 home. Throughout this century pressure on housing accommodation has been increased more by the rapid rise in the number of separate households than by the increase in population. While the number of people has increased by about two-fifths, the number of households has more than doubled. The 1981 Census showed the total number of households in Great Britain as 19.5 million. Improvements in living standards were continuing: only 1.3 per cent were not in self-contained accommodation, 4.3 per cent lived at an average density of more than one person per room and 3.2 per cent were lacking or sharing use of a bath.

New house construction is undertaken by both public and private sectors but over the past few years the private sector has built many more dwellings than the public sector. In addition, 6 per cent of the new building in 1986 was carried out by voluntary housing associations and societies. Public authorities provide dwellings mainly for renting while private interests build mainly for sale to owner-occupiers.

Administration

As with environmental planning, responsibility for formulating housing policy and supervising the housing programme is borne by the Secretary of State for the Environment in England and by the Secretaries of State for Wales, Scotland and Northern Ireland. Although the policies are broadly similar throughout Britain, provisions may differ slightly in Northern Ireland and Scotland from those in England and Wales.

The construction or structural alteration of housing is subject to building regulations laid down by the Government. Building in the private sector is regulated by an independent organisation, the National House-Building Council, which sets standards and enforces them by inspection and certification. Almost all new private houses are covered by the Council's insurance scheme which provides ten-year guarantees against major structural defects. A two-year guarantee is also given against faulty workmanship. Most lenders will only make a loan for purchase of a new house if it is covered by the Council's certificate.

Local authorities are responsible for the payment of house renovation grants and the implementation of housing renewal programmes. Many have housing advisory centres to provide information on aspects of housing.

Home Ownership

The number of people owning their own homes has more than trebled in the last 35 years, and the number of owner-occupied dwellings in Great Britain amounted to over 13.5 million at the end of 1985, compared with 4 million in 1951. Most public sector tenants have the right to buy the homes they occupy at discounts which vary according to the length of their occupancy. Local authorities have been asked to encourage low-cost home ownership by selling land to builders to construct homes for 'first-time' buyers, or to individuals or groups to build their own 'first-time' homes in partnership with private builders; by improving homes for sale; by selling dilapidated homes for improvement by the purchaser ('homesteading'); by offering shared ownership (part owning, part renting); and by using local authority guarantee powers to facilitate lending by building societies and other financial institutions.

In Northern Ireland shared ownership has been developed in the public sector by the Northern Ireland Housing Executive and in the private sector by the Northern Ireland Co-ownership Housing Association. The Executive has offered most of its homes for sale to the tenants; over 32,700 have been sold.

Mortgage Loans

Most people buy their homes with a mortgage loan (for which the properties are regarded as securities) from such sources as building societies, banks, insurance companies, industrial and provident societies, and local authorities. Some companies also make loans for house purchase to their own employees.

Building societies are by far the largest sources of such loans, their share of the market being about 78 per cent in 1986. For first-time buyers they usually advance about 90 per cent of their valuation of a property with the help of an appropriate insurance guarantee but it is possible to borrow up to 100 per cent. Loans are normally repayable over periods of 20 or 25 years (up to 30 or 35 years in certain circumstances) by equal monthly instalments to cover capital and interest. Ordinary mortgage loans from building societies are usually available to purchasers on average income or above. People with insufficient income to obtain a mortgage for outright purchase may be able to participate in a scheme in which a housing association buys the home and sells a share in it to them, allowing them to rent the remainder and to purchase it later if they wish.

Owner-occupiers are entitled to tax relief on interest payments arising on up to £30,000 of their mortgage loans (on their main home only). Under the Homeloan Scheme first-time home buyers who have saved for two years and are buying a home in the lower price range may qualify for an extra loan of £600 interest-free for up to five years, and a tax-free bonus of up to £110.

Public Sector Housing Most of the public housing in Great Britain is provided by 460 local housing authorities. The authorities are: in England and Wales (outside London), the district councils; in London, the London borough councils and the Common Council of the City of London; and in Scotland, the district and islands councils. Other public housing authorities are the new town authorities, the Scotlish Special Housing Association, which supplements building by local authorities in Scotland, and the Development Board for Rural Wales. The Northern Ireland Housing Executive is responsible for the provision and management of public housing in Northern Ireland.

Subsidies may be made available to the authorities to assist them with housing costs, and guidance is given on design and layout. Public housing authorities own about 6 million houses and flats. The number of homes owned by each authority varies widely, from 141 homes in the Isles of Scilly to 165,000 in Glasgow. Most authorities own between 2,500 and 15,000 dwellings.

Local authorities meet the capital costs of new house construction and of modernisation of their existing stock by raising loans on the open market, by borrowing from the Public Works Loan Board (an independent statutory body set up to make loans to local authorities) or from the capital receipts generated by the sale of local authority houses and housing land. Current expenditure, including maintenance and management costs and loan interest and repayment, is met from rents, which may be supplemented by subsidies from the Government and, where required to balance housing revenue accounts, from the rates. Local authorities are required to charge their tenants reasonable rents (which keep a balance between the interests of tenants and ratepayers).

Sheltered housing (usually accommodation with an alarm system and resident warden) is provided for those elderly people who need this degree of support, but increasing emphasis is being placed on schemes to help elderly people to continue to live in their own homes and on schemes to adapt existing housing to meet the housing needs of physically handicapped people. Local

authorities have a statutory duty to ensure that accommodation (not necessarily owned by the authority) is available for homeless people who have dependent children or are vulnerable on grounds such as age or disability.

The Housing Act 1980 (consolidated in the Housing Act 1985) established a charter for public sector tenants in England and Wales, giving them statutory rights which include security of tenure, provision for a resident member of the tenant's family to succeed to the tenancy on the death of the tenant, rights of subletting and taking in lodgers, and, at the landlord's discretion, reimbursement for improvements made by the tenant. With a few exceptions, public sector tenants of at least two years' standing can buy their house or flat at a discount which depends on the length of occupation. Similar provisions are made for Scotland and Northern Ireland under separate legislation. By the end of 1986 over 1 million council, housing association and new town homes had been sold.

A National Mobility Scheme, sponsored by the Department of the Environment, the Scottish Development Department, the Welsh Office and the Department of the Environment for Northern Ireland, was introduced in 1981 to assist tenants who need to move to another area for employment or social reasons. Tenants who wish to move by exchanging homes are able to make use of the Tenants Exchange Scheme, a free computer-based national information scheme, introduced in 1982.

Privately Rented Housing There has been a steady decline in the number of rented dwellings available from private landlords (including tied accommodation), from over 50 per cent of the housing stock in 1951 to less than 10 per cent in 1987 (under 2 million dwellings). Major factors have been the increased demand for owner-occupation, the greater availability of public rented housing and the operation of rent restriction. Privately rented dwellings are predominantly found in older housing. Many landlords are individuals owning a small amount of property, but some rented housing is provided by larger property owners, including property companies. It is the Government's policy to increase the availability of privately rented accommodation and it is encouraging a greater variety of agencies to let such accommodation.

Most private lettings are subject to the system of protection provided by the Rent Act 1977 (and similar legislation in Scotland) and associated legislation. Where the letting is a fully protected 'regulated tenancy', the tenant or the landlord may apply for a 'fair rent' to be fixed by independent rent officers and there is a wide degree of security of tenure. More limited provisions apply where there is a resident landlord, when a 'reasonable rent' may be fixed by a rent tribunal (in Scotland by a rent assessment committee). The Housing Act 1980 (and similar legislation for Scotland and Northern Ireland) introduced an additional system of 'shorthold' lettings, giving tenants security of tenure for an agreed period of between one and five years, after which the landlord is guaranteed repossession. The 1980 Act also introduced for England and Wales the system of 'assured' tenancies, which allows approved bodies to let newly built property at freely negotiated rents outside the Rent Acts. At the beginning of 1987 this scheme was extended to cover improved properties. Tenants and most other residential occupiers may not be evicted without a court order. Harassment of residential occupiers is a criminal offence. Occupiers may, depending on their personal circumstances, be eligible for housing benefit to assist them in paying their rent and rates.

In Northern Ireland only certain pre-1956 properties subject to rent restriction come under statutory control, and rent levels are linked to those of the Northern Ireland Housing Executive. Rent increases are permitted only for properties which meet a prescribed standard. There is an uncontrolled rent sector, comprising mostly furnished accommodation.

THE ENVIRONMENT

Housing Housing associations extend the choice of housing by providing accommodation Associations available for rent or sale through new building or the rehabilitation of older property. The associations normally cater for people who would otherwise look to a local authority for a home, and also provide particularly for the special needs of elderly, disabled and single people.

The associations, which are non-profit-making, have grown under government encouragement and now own some 500,000 homes. Individual associations range in size from a group of 'almshouses' for fewer than ten old people to associations with more than 10,000 homes. In Great Britain housing schemes carried out by associations qualify for government grant if the association is one of over 2,600 registered with the Housing Corporation, a statutory body. Most rented homes owned by housing associations come within the fair rent arrangements, and most housing association tenants have rights under the tenants' charter in the Housing Act 1985—in Scotland the Tenants' Rights, Etc (Scotland) Act 1980—including, in some cases, the right to buy or the possibility of a discount on the purchase of an alternative home. Housing associations also provide accommodation on a shared ownership basis, allowing the occupier to part-rent and part-own a home, and they can purchase improved older properties for outright sale. Both activities are eligible for government grants.

In Northern Ireland assistance is available to associations registered with the Department of the Environment for Northern Ireland. Rent levels are linked to those of the Northern Ireland Housing Executive. Tenants have rights under a tenants' charter, but not the right to buy, although housing associations may sell their dwellings voluntarily.

Older Houses

Improving In urban areas of Britain slum clearance and redevelopment used to be major features of housing policy. Large-scale clearance is now virtually at an end, although there are still pockets of unfit housing for which demolition is considered the best solution. Greater emphasis has been placed on the retention of existing communities accompanied by the modernisation and conversion of sub-standard homes. Although housing conditions have improved considerably, problems remain in some areas where there are high concentrations of dwellings lacking basic amenities or requiring substantial repairs.

More recently there has been concern about the problems associated with high-density local authority estates in inner city areas or on the outskirts of cities, some of which have not been popular with tenants, and about serious structural defects found in some local authority dwellings. Authorities are tackling these problems in a variety of ways including refurbishment and sale to the private sector.

The Government's Estate Action Initiative, which started in 1985, is working with local authorities to deal with the problems of their run-down council estates. Measures which are being developed include local housing management along the lines of the Department of the Environment's Priority Estates Project (see below); the injection of private sector skills and resources; capital investment in the refurbishment of the housing stock; community refurbishment schemes to enable previously unemployed people to work on environmental improvements; the development of tenant management and ownership co-operatives; and measures to increase the diversification of tenures on estates.

> The Priority Estates Project was set up in England in 1979 (with similar arrangements for Wales set up in 1983) to promote locally based housing management, under which control of landlords' services in council housing is devolved to a locally based management team. Estate budgeting and accounting are essential elements, together with the involvement of tenants. There are 30 experimental projects on estates in England and Wales, and an increasing number of local authorities are applying local management to their own estates.

Over 900,000 home improvement grants were paid to householders in Great Britain between 1980 and mid-1987. There are four types of grant: improvement grants, for carrying out improvements to a good standard; intermediate grants, for the provision of standard amenities (such as a bath and an inside lavatory) and associated repairs; repair grants for substantial and structural repairs to pre-1919 houses (pre-1957 in Northern Ireland and pre-1964 in Scotland, where a grant can cover all forms of repair work); and special grants for providing standard amenities and repairs (not available in Scotland) and means of escape from fire in houses which are in multiple occupation. In addition, since 1978 grants for loft insulation have been paid in respect of some 3.5 million homes.

Declaring 'general improvement areas' and 'housing action areas' enables local authorities in England and Wales to tackle the improvement of whole areas of older housing systematically. General improvement areas, of which there are more than 1,700, contain fundamentally sound houses and a stable population, while housing action areas (of which there are about 260 in England and Wales) are characterised by relatively poor housing and bad environmental conditions combined with social stress. Local authorities have special powers to bring about an improvement in living conditions for the benefit of residents. In both types of area government financial aid for environmental improvement (such as landscaping and work to improve the external appearance of buildings) is available to local authorities. In these areas home improvement grants may range up to 75 per cent of the eligible expense limit, and in certain cases of hardship up to 90 per cent. 'Enveloping', introduced in 1982, involves the renovation of the external fabric of whole terraces or streets of mainly privately owned property in housing action areas which has deteriorated beyond routine maintenance. It is carried out by local authorities at public expense, and the encouragement it gives to residents is reflected in the increased take-up of grants for improvements to the interiors after enveloping.

An 'improvement-for-sale' scheme has also been introduced; the Government helps to meet any loss a local authority may make in buying, improving and

selling run-down or neglected housing.

In Scotland housing action area powers are available for the improvement of areas in which at least half the houses fail to meet a statutory tolerable standard. Since 1975 some 1,580 housing action areas, covering houses requiring improvement or demolition, have been declared by local authorities. Outside such areas in Scotland local authorities have powers to require the improvement of houses below the statutory tolerable standard, or lacking certain basic amenities, by improvement orders. In housing action areas or where an improvement order has been made, grants of 75 per cent (up to 90 per cent in cases of hardship) of the eligible expense limit may be made. Government financial aid is also given towards the costs incurred by local authorities in improving the environment of predominantly residential areas.

Northern Ireland has a major problem of derelict and unfit housing, especially in Belfast, the situation having been made worse by civil disturbance. Concerted measures are being taken in housing action areas, and there is a continuing programme of rehabilitation in Belfast. Housing receives priority in Northern

Ireland's social and environmental programme.

Conservation

Britain is one of the leading countries in the conservation movement. A wide range of groups, including many voluntary organisations, are active in it. The Council for Environmental Conservation is a national coalition of non-governmental organisations which focuses attention on major issues.

THE ENVIRONMENT

195

Historic Buildings, Ancient Monuments and Conservation Areas Lists of buildings of special architectural or historical interest are compiled, as required by the planning Acts, by the Secretary of State for the Environment and the Secretaries of State for Scotland and Wales; some 400,000 buildings are listed in England, over 35,000 in Scotland and 10,600 in Wales. It is against the law to demolish, extend or alter the character of any listed building without special consent from the local planning authority or the appropriate Secretary of State; where consent is given to demolish a building, the Royal Commission on Historical Monuments (for England) and similar bodies for Scotland and Wales have an opportunity to make a photographic and written record of the building. Emergency 'building preservation notices' can be served by the local planning authority to protect buildings not yet listed.

Maintaining royal parks (which are open to the public) and palaces is the responsibility of the Secretaries of State for the Environment, Scotland and Wales. The Historic Buildings and Monuments Commission for England (known as English Heritage) is charged with protecting and conserving England's architectural and archaeological heritage; it manages some 400 ancient monuments on behalf of the Secretary of State for the Environment and gives grants for the repair of ancient monuments, historic buildings and buildings in conservation areas in England. In Scotland and Wales similar functions are performed by the Historic Buildings and Monuments Directorate of the Scottish Development Department and by Cadw (Welsh Historic Monuments) with advice from an ancient monuments board and a historic buildings council for each country. Local authorities can make grants and loans for any building of architectural or historic interest. The National Heritage Memorial Fund provides assistance towards the cost of acquiring, maintaining or preserving land, buildings, works of art and other items of outstanding interest which are also of importance to the national heritage. In 1986-87 the Fund assisted in the preservation of about 90 heritage items and gave assistance, for example, to secure the preservation of Kedleston Hall (Derbyshire), Nostell Priory (West Yorkshire) and Weston Park (Shropshire) through an additional £25 million given to the Fund by the Government in 1985, together with a further £10.5 million in 1986.

Local planning authorities have designated for special protection about 6,000 'conservation areas' of particular architectural or historic interest. Grants and loans are available from the Historic Buildings and Monuments Commission for works which make a significant contribution towards the preservation or enhancement of such an area.

In Northern Ireland the Department of the Environment for Northern Ireland has 160 historic monuments in its care, and some 750 monuments are scheduled for protection. It is also responsible for listing buildings of special architectural or historic interest and for designating conservation areas; there are some 7,000 listed buildings and 25 conservation areas. It may also provide grants and loans to help with the repair and maintenance of listed buildings and to preserve or enhance conservation areas. It has the advice of a Historic Buildings Council and a Historic Monuments Council.

Among the voluntary organisations which campaign for the preservation of buildings are the Society for the Protection of Ancient Buildings and the Ancient Monuments Society; the Georgian Group; the Architectural Heritage Society of Scotland; the Ulster Architectural Heritage Society; the Victorian Society; and the Council for British Archaeology. The National Trust (for Places of Historic Interest or Natural Beauty), an independent charity with more than 1.4 million members, owns and protects some 200 historic buildings in addition to 246,900 hectares (more than 610,000 acres) of land and 777 km (483 miles) of coastline in England, Northern Ireland and Wales. Scotland has its own National Trust.

Architectural Standards

Besides helping to conserve the finest buildings inherited from the past, the Government encourages high standards in new building. The Department of the Environment, in collaboration with the independent Royal Institute of British Architects (RIBA) and the National House-Building Council, sponsors the biennial Housing Design Awards Scheme for England and Northern Ireland, with categories for renovation as well as new building. Scotland and Wales have similar but separate awards schemes. The Government has also encouraged the use of architectural competitions, and has set an example in the award of some of its own contracts. Royal Fine Art Commissions for England and Wales and for Scotland advise government departments, planning authorities and other public bodies on questions of public amenity or artistic importance.

The RIBA, the principal professional body for architects, exercises control over standards in architectural education and encourages the maintenance of high architectural standards in the profession. The Royal Incorporation of Architects in Scotland is allied to it, as is the Royal Society of Ulster Architects. The Civic Trust, with associate trusts in Scotland, Wales and north-east and north-west England, encourages high standards in urban design and the protection and improvement of the environment.

Tree Preservation

Local planning authorities have power to protect trees and woodlands in the interest of amenity by means of tree preservation orders. When granting planning permission for development, a local planning authority must, where appropriate, ensure adequate provision for the preservation or planting of trees. In general, landowners must replace trees which die or are removed, uprooted or destroyed in contravention of a preservation order.

Green Belts

In order to restrict the further sprawl of large built-up areas, to prevent neighbouring towns merging into one another, or to preserve the special character of a town and the amenities of the countryside, 'green belts' (areas where it is intended that the land should be left open and free from inappropriate building development and where people can seek recreation) have been established on the fringes of certain urban areas. Much of London's green belt, for example, is agricultural land or woodland, some of which is used for recreation. Some 1.9 million hectares (4.7 million acres) of land have been designated as green belt in Great Britain.

In 1987 guidance was given to encourage alternative uses of farmland and a more diverse rural economy and rural enterprise. The Government's commitment to the protection of green belts was also reiterated; its intention is to permit green belt development applications only when these relate to the rural community or to leisure.

The Coast

The maritime local planning authorities are responsible for planning land use at the coast providing, for example, recreational facilities and amenities for holidaymakers and local residents; at the same time they attempt to safeguard and enhance the coast's natural attractions and preserve areas of scientific interest. The protection of the coastline against erosion is administered centrally by the Ministry of Agriculture, Fisheries and Food, the Welsh Office and the Scottish Office.

A comprehensive study of the coastline of England and Wales, undertaken by the Countryside Commission (see p 197) in 1966–70, recommended that certain stretches of undeveloped coast of particular scenic beauty should be treated as heritage coast. Jointly with local authorities, the Commission has defined 38 of these coasts so far, protecting 1,263 km (784 miles).

In 1965 the National Trust launched its Enterprise Neptune campaign to raise funds for the nation to acquire stretches of coastline of great natural beauty and

THE ENVIRONMENT 197

recreational value. More than £10 million has been raised so far and as a result the Trust has under its protection 710 km (441 miles) of coastline in England and Wales. As part of the campaign, relaunched in 1985, the Trust is raising funds to acquire a further 671 km (417 miles) considered at risk. Some 128 km (80 miles) of coast in Scotland are protected by conservation agreements with the National Trust for Scotland. In Northern Ireland 66 km (41 miles) of coast and coastal path have been acquired by the National Trust.

In exceptional cases economic arguments override conservation; development associated with North Sea oil and gas is occurring on remote and unspoiled coastal areas in Scotland, for instance, but planning guidelines drawn up by the Scottish Development Department aim to ensure that oil-related activities are sited so as to make the best use of existing labour and infrastructure and to minimise the effect on the coastline. Provision has also been made for funds to be set aside for the restoration of sites once there is no further need for them.

Countryside Commissions

Two Countryside Commissions (one for England and Wales, the other for Scotland) are responsible for conserving and enhancing the natural beauty and amenity of the countryside, and for encouraging the provision and improvement of facilities for open-air recreation in the countryside. These include the provision by local authorities (sometimes in association with other bodies) and private individuals of country parks and picnic sites often within easy reach of towns; the provision or improvement of recreational paths; the encouragement of amenity tree-planting schemes; and the increased use of reservoirs, canals and other waterways for bathing, sailing and other activities. The Countryside Commission recognises 206 country parks and 240 picnic sites in England and Wales. In Scotland 34 country parks are recognised and a large number of local authority and private sector schemes for the provision of a variety of countryside facilities have been approved for grant aid. The Commissions undertake research projects and experimental schemes, working in consultation with local authorities and such bodies as the Nature Conservancy Council (see p 198) and the Sports Councils. The Commissions give financial assistance to public, private and voluntary bodies and individuals carrying out countryside recreation and amenity projects, and landscape conservation projects.

National Parks, Areas of Outstanding Natural Beauty and National Scenic Areas The Countryside Commission (for England and Wales) is empowered to designate, for confirmation by the appropriate minister, national parks and 'areas of outstanding natural beauty'; to define heritage coasts in conjunction with local authorities (see p 196); and to make proposals for the creation of long-distance footpaths and bridleways. Ten national parks have been established, covering 13,600 sq km (5,250 sq miles), 9 per cent of the area of England and Wales, and 36 areas of outstanding natural beauty have been designated and confirmed, covering 17,000 sq km (6,600 sq miles).

The land in these designated areas generally remains privately owned, but agreements or orders to secure additional public access may be made by local authorities. Steps are taken to preserve and enhance the landscape's natural beauty by high standards of development control, and by positive measures, for which grants are available, such as tree planting and the removal of eyesores. In the national parks other measures for the benefit of the public include the provision of car parks, camping and caravan areas, and information centres. All national parks and some other designated areas have warden services. Most local authority expenditure on national parks is met by government grants.

In Northern Ireland the Ulster Countryside Committee advises the Department of the Environment on the preservation of amenities and the designation of areas of outstanding natural beauty. Eight areas of outstanding natural

beauty have been designated, covering 259,500 hectares (641,000 acres), and seven areas are being managed as country parks and one as a regional park.

In Scotland there are no national parks as such, but there are two regional parks and 40 'national scenic areas', covering more than 1 million hectares (2.5 million acres), or 13 per cent of the country, where certain kinds of development are subject to consultation with the Countryside Commission for Scotland, and in the event of a disagreement, with the Secretary of State for Scotland. More than 98 per cent of the land in Scotland is designated countryside within which the Commission may provide grants for a wide range of countryside projects.

There are seven forest parks in Great Britain, covering some 243,000 hectares (600,000 acres) and administered by the Forestry Commission, and nine in Northern Ireland administered by the Forest Service of the Department of Agriculture. Camping and other recreational facilities are provided.

> Many voluntary organisations are concerned to preserve the amenities of the countryside; they include the Councils for the Protection of Rural England and of Rural Wales, the Association for the Protection of Rural Scotland and the Ulster Society for the Preservation of the Countryside.

Public Rights of Way and Open Country

County councils in England and Wales are required to prepare and keep under review definitive maps showing public rights of way; they are also responsible for keeping rights of way free from obstruction, and signposted. If a path is not shown on the map, a private citizen may claim that it is a public right of way if it has been regarded as such and used without hindrance for at least 20 years. Public footpaths are maintained by local authorities, which also supervise landowners' duties to repair stiles and gates. Local authorities in Great Britain can create paths, close paths no longer needed for public use and divert paths to meet the needs of either the public or landowners. Local planning authorities can also convert minor roads into footpaths or bridleways to improve the amenities of their area. There are 14 approved long-distance footpaths and bridleways in England and Wales covering some 2,700 km (1,685 miles) and three approved long-distance routes in Scotland covering some 580 km (360 miles). Voluntary organisations concerned with footpaths include the Open Spaces Society, the Scottish Rights of Way Society and the Ramblers Association.

There is no automatic right of public access to open country, although many landowners permit more or less free access. Local planning authorities can secure access by means of agreements with landowners; if agreements cannot be obtained, authorities may acquire land or make orders for public access. Similar powers cover Scotland and Northern Ireland.

Common land, a large proportion of which is open to the public, totals an estimated 600,000 hectares (1.5 million acres) in England and Wales. (There is no common land in Scotland or Northern Ireland.) This land is usually privately owned, but people other than the owner may have various rights on or over it, for example, of pasture for farm animals. Commons are protected by law and cannot be built on or enclosed without the consent of the Secretaries of State for the Environment or Wales.

Nature Conservation

The official body responsible for nature conservation in Great Britain is the Nature Conservancy Council, which has the functions of establishing, maintaining and managing nature reserves, advising the Government, providing general information and advice, and commissioning or supporting research. There are 228 national nature reserves covering some 160,400 hectares (396,400 acres). Some 5,000 sites of special scientific interest have been notified for their flora, fauna or geological or physiographical features.

The Forestry Commission has 344 sites of special scientific interest on its land

(covering 70,000 hectares – 173,000 acres) on which nature conservation is a primary objective of management. Local authorities have declared about 130 local nature reserves. Voluntary nature conservation trusts and the Royal Society for the Protection of Birds play an important part in protecting wildlife, having established between them some 1,800 reserves. The trusts are affiliated to a parent organisation, the Royal Society for Nature Conservation. The Royal Society for the Protection of Birds, with nearly 500,000 members and 87,000 young ornithologists, is the largest voluntary wildlife conservation body in Europe.

In Northern Ireland the Committee for Nature Conservation advises the Department of the Environment for Northern Ireland on nature conservation matters including the establishment and management of terrestrial and marine nature reserves and the declaration of areas of special scientific interest.

The Wildlife and Countryside Act 1981 extended the list of protected species, restricted the introduction into the countryside of animals or plants not normally found in the wild and afforded greater protection for areas of special scientific interest and other important habitats. In Northern Ireland two orders, which became operative in 1985, have brought legislation into line with the rest of Britain on species and habitat protection.

Other conservation measures promoted by the Government have included a ban (in conjunction with other European Community countries) on the import of whale products and certain seal pup products, a system of licensing zoos to ensure that captive animals are kept in suitable conditions, and stricter controls for the protection of wild birds. Certain areas, of importance for their landscape, historic and habitat value, are being designated 'environmentally sensitive areas' as a result of a change in European Community regulations allowing governments to make special payments to farmers to continue their traditional farming methods for the sake of preserving the countryside and its wildlife. The first nine designations came into force in March 1987 and further areas were announced in May 1987.

Britain is participating in the European Year of the Environment (from March 1987 to March 1988), which aims to raise public awareness of environmental issues and of the individual's responsibility for the present and future quality of the environment. Among issues that are being highlighted are nature conservation, the control of pollution and wastes, and the improvement of the urban environment.

Land Reclamation and Use Derelict land is often concentrated in places associated with nineteenth-century industrial development, but the restructuring of particular industries over the past decade or so is continuing to add significantly to this problem in certain areas. Dereliction can take various forms and can include mineral waste tips, old mineral workings, former industrial sites such as steelworks, disused railways and docks, and contaminated sites.

In England, central government grants are available under the Derelict Land Act 1982 to local authorities and to other public bodies, to the private sector and to nationalised industries for the reclamation of derelict land in order to bring it into beneficial use or to improve its appearance. The expenditure provision for the derelict land reclamation programme in 1987–88 is £81 million. The main priority is given to reclamation schemes in urban, particularly inner city, areas that lead to development by the private sector for industry, commerce and especially housing. Between 1 April 1979 and 31 March 1987 some 10,800 hectares (over 26,000 acres) of derelict land were reclaimed in England with the aid of some £390 million of derelict land grant.

In Scotland and Wales responsibility for derelict land reclamation rests with the respective development agencies, which may acquire and reclaim land, employ local authorities as their agents (in Scotland) or make grants to local authorities for the purpose (in Wales). In Northern Ireland grants may be paid to landowners who restore or improve derelict sites.

To prevent new dereliction, planning controls require that when permission is given for mineral working, various measures must be taken to minimise the disturbance caused by the work and to secure whatever restoration is practicable, either progressively or when working ceases. The use of land for disposal of waste materials is also subject to conditions restricting the height of waste tips or requiring treatment of waste on completion of workings.

In Wales, land use is additionally encouraged by the Land Authority for Wales, a statutory body with powers to make land available for development in circumstances where the private sector would find this difficult or impossible.

Land Registers

In England the Government has instituted, and made available for inspection, registers of under-used land held by local authorities, nationalised industries and other public bodies; some 60,000 hectares (149,000 acres) have been registered. Of this, some 20,230 hectares (50,000 acres) have been deregistered mainly because the land has been sold to the private sector or brought into use. There is power to direct a public body to dispose of registered land; directions in respect of some 40 sites had been issued by January 1987. Registers are also published for certain areas of Wales.

Environmental Improvement Scheme

In 1986 the Government launched a new initiative to encourage a wide range of local environmental improvement work which is being undertaken both by volunteers and by Manpower Services Commission Community Programme teams. The initiative, called UK 2000, brings together representatives of voluntary organisations and independent members from business. It aims to improve the natural and built environment and people's enjoyment of it, create jobs, and provide work and training for the participants. Voluntary organisations promote programmes of work and assist in the setting up of local projects such as creating parks, footpaths and other areas of greenery in cities, conserving the industrial heritage and the natural environment, tackling litter problems, recycling waste, and providing tourist information and facilities.

Control of Pollution

Government measures to control environmental pollution are long established, and are complementary to the planning system and the various measures to conserve amenities and the country's heritage.

The Control of Pollution Act 1974, which applies to England, Scotland and Wales, sets out a wide range of powers and duties for local and water authorities, including control over wastes, air and water pollution and noise, and contains important provisions on the release of information to the public on environmental conditions. In particular, it introduced a new system for the comprehensive planning of waste disposal operations so as to ensure that disposal is carried out to satisfactory standards and that where practicable waste materials are recovered and recycled. The Act also increased the penalties for a large number of pollution offences. The provisions relating to noise and air pollution are fully in force, as are the most important relating to water and a substantial number of those relating to waste on land. Similar legislation applies in Northern Ireland.

Administration

Executive responsibility for pollution control rests in general with local and water authorities, although certain registered industrial processes are controlled by central government agencies. Local authorities are responsible for

matters such as collection and disposal of domestic wastes; control of air pollution from domestic and certain non-registered industrial premises; and noise abatement measures. Sewerage and sewage treatment and disposal are the responsibilities of regional water authorities in England and Wales, of local authorities in Scotland and of the Department of the Environment in Northern Ireland. The regional water authorities in England, the Welsh Water Authority, the river purification boards and islands councils in Scotland and the Department of the Environment for Northern Ireland are responsible for control of water pollution.

An independent standing Royal Commission on Environmental Pollution advises the Government on national and international matters concerning the pollution of the environment, on the adequacy of research and on the future possibilities of danger to the environment. It has so far produced 11 reports covering a wide range of topics.

Central government is principally concerned with formulating policy, exercising general budgetary control, promoting the necessary legislation, and advising pollution control authorities on its implementation. The Secretary of State for the Environment has general responsibility for co-ordinating the work of the Government on environmental protection and in this is assisted by a Central Directorate of Environmental Protection within the Department. In Scotland, Wales and Northern Ireland the respective Secretaries of State are responsible for pollution control co-ordination in their countries. They are assisted by the Scottish Development Department, the Water and Environmental Protection Division of the Welsh Office, and the Department of the Environment for Northern Ireland respectively. On 1 April 1987 the former Industrial Air Pollution Inspectorate (of the Health and Safety Executive), the Radiochemical Inspectorate and the Hazardous Waste Inspectorate were amalgamated in a single unified inspectorate for England and Wales known as the Inspectorate of Pollution.

The Land

The main risks of land pollution lie in the indiscriminate dumping of waste materials on land, careless disposal of pesticides and chemicals, and the deposition of materials from the atmosphere and from flood-water. The Control of Pollution Act places a duty on waste disposal authorities to arrange for the disposal of controlled wastes. It requires them to draw up and revise periodically a waste disposal plan and establishes a licensing system for waste disposal sites, treatment plants and storage facilities receiving controlled wastes. In addition, it provides for a more intensive control system for certain especially hazardous or difficult wastes. The Inspectorate of Pollution and the Hazardous Waste Inspectorate for Scotland advise local authorities on how to improve their control of waste management and to work towards environmentally acceptable standards for dealing with hazardous wastes.

It is a criminal offence to leave litter in any public place in the open air or to dump rubbish except in designated places. To help counteract the problem of litter, financial support is given to the Keep Britain Tidy Group, which provides a comprehensive litter abatement programme in collaboration with local authorities and secures sponsorship from industry to undertake litter abatement promotions. The Group is also included in UK 2000 (see p 200).

Recycling and Materials Reclamation

The Government encourages the reclamation and recycling of waste materials wherever this is practicable and economic in order to reduce waste disposal costs and to help to conserve natural resources. Industry already makes considerable use of reclaimed waste material such as metals, paper and textiles. Local authorities reclaim about 40,000 tonnes of waste paper and about 50,000 tonnes of metals annually. In an increasing number of areas there are 'bottle

banks' and 'can banks' where the public can deposit used glass and metal containers respectively. Voluntary organisations also arrange collections of waste material. Waste disposal authorities have powers under the Control of Pollution Act to take full account of opportunities for waste reclamation and have a duty when drawing up their waste disposal plans to include information on disposal methods which should be used, including reclamation.

Water Pollution There has been a steady and significant improvement in water quality: the level of pollution in the tidal Thames, for example, has been reduced to a quarter of the 1950s' level and over 100 different kinds of fish have been identified there since 1964. A major scheme has been launched to clean up the Mersey, the largest British estuary still suffering from severe pollution, and programmes aimed at considerably improving water quality in the Tyne and Tees are also in progress. Discharges of polluting matter into rivers and estuaries have been controlled for many years and recently powers have been extended to provide full control over discharges into underground and coastal waters. Information on all aspects of water pollution is publicly available on registers maintained by the individual water authorities and by the river purification authorities in Scotland. More than 95 per cent of the population is provided with main drainage, and public authority sewage treatment works serve over four-fifths of the population—a very high proportion by international standards.

Marine Control of marine pollution from ships is based largely on international Pollution conventions drawn up under the auspices of the International Maritime Organisation, a United Nations agency with headquarters in London, and implemented for British ships by domestic legislation. The Merchant Shipping (Prevention of Oil Pollution) Regulations 1983 and the Prevention of Oil Pollution Act 1986 make it an offence for ships of any nationality to discharge oil or oily mixtures into British territorial waters and for British registered ships to make similar discharges anywhere into the sea, except in accordance with the regulations.

The Department of Transport's Marine Pollution Control Unit, set up in 1979, undertakes operations at sea to counter pollution when oil (or other dangerous substances) threatens major coastal pollution or is likely to harm important fisheries or concentrations of sea birds. It maintains a national contingency plan and dispersant spraying, cargo transfer and mechanical recovery resources. It also maintains specialist beach cleaning equipment to assist local authorities (which have the primary role in dealing with oil and chemical pollution of beaches and inshore waters), finances a research programme, advises on the contingency plans of local authorities and offshore operators, and provides training to local authority staff in beach cleaning management and techniques.

Offshore operators must ensure that oil does not escape into the sea and are required to have contingency plans for dealing with oil spilled accidentally. Discharges containing oil are controlled under the Prevention of Oil Pollution Act 1971. Discharges of chemicals are controlled and monitored by a nonstatutory Chemical Notification Scheme, administered by the Department of Energy in consultation with fisheries departments.

The Food and Environment Protection Act 1985 (which superseded the Dumping at Sea Act 1974) tightened the controls over dumping at sea, the most significant change being the introduction of specific controls on marine incineration. Under the Act a licence has to be obtained for the permanent deposit of any substance or article into tidal waters and the sea. Dumping at sea is permitted on the basis of the scientific criteria set out in the annexes to the Oslo Convention (International Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft 1972) and the London Convention on the Prevention of Marine Pollution by Dumping Wastes and Other Matter 1972.

Clean Air

Responsibility for clean air rests primarily with local authorities. Under the Clean Air Acts 1956 and 1968 they may declare 'smoke control areas' within which the emission of smoke from chimneys constitutes an offence. About two-thirds of the premises in conurbations are now covered by smoke control orders. Emissions from most industrial premises are also subject to the control of local authorities under the Clean Air Acts and the Public Health Acts. The emission of dark smoke from any trade or industrial premises or from the chimney of any building is in general prohibited, and new furnaces must be capable as far as practicable of smokeless operation. The height of the chimney serving a new furnace must generally be approved by the local authority, and approved grit and dust arrestment plant has to be installed. Regulations prescribe specific limits to the quantities of grit and dust which may be emitted from certain furnaces. Industrial premises that have the greatest potential for giving rise to noxious or offensive emissions are, in England and Wales, under the control of the Inspectorate of Pollution. In Scotland this function is discharged by the Industrial Pollution Inspectorate. The Inspectorates require the best practicable means to be used to prevent emissions or render them harmless. Similar legislation and controls apply in Northern Ireland.

Strict controls are in force on emissions from motor vehicles, and Britain has played a constructive role in European Community discussions on tighter limits. The maximum permitted lead content of petrol in Britain was reduced to 0·15 grammes per litre on 31 December 1985. The European Community has adopted a directive which requires the introduction of unleaded petrol throughout the Community by October 1989. The first unleaded petrol in Britain went on sale at selected service stations in 1986.

Considerable progress has been made towards the achievement of cleaner air and a better environment, especially in the last 30 years or so. Total emissions of smoke in the air have fallen by over 85 per cent since 1960. The domestic smoke control programme has been particularly important in achieving this result. London no longer has the dense smoke-laden 'smogs' of the 1950s and in central London winter sunshine has increased by about 50 per cent since 1958. Similar improvement has been achieved in other cities including Glasgow and Sheffield. National sulphur dioxide emissions have fallen by about 40 per cent since 1970. The Government intends to achieve further reductions of 30 per cent from the 1980 levels of emissions of both sulphur dioxide and nitrogen oxides by the end of the 1990s.

Britain is supporting an extensive research programme into the causes and effects of acid rain, and the likely results of possible abatement technologies. It is also participating in international research programmes and monitoring schemes. The Government has announced measures to reduce sulphur and nitrogen emissions from power stations. Flue gas desulphurisation equipment is to be fitted to three existing coal-fired power stations, and over the next ten years low nitrogen oxide burners are to be installed at the 12 largest power stations. This equipment will be a requirement for all new fossil-fuel fired power stations.

Noise

The Control of Pollution Act 1974 (and similar legislation in Northern Ireland) requires local authorities to inspect their areas for noise nuisance and gives them the power to deal with it. It also enables them to designate 'noise abatement zones' within which registered levels of noise from certain premises may not be increased without their permission. The Act contains specific

provisions to control noise from construction and demolition sites. It also contains provisions enabling individuals to take action against noise amounting to a nuisance.

Transport is one of the main offenders in noise pollution, and control measures are aimed at reducing noise at source, through requirements limiting the noise that aircraft and motor vehicles may make, and at protecting people from its effects. The Road Vehicles (Construction and Use) Regulations 1986 set out the permissible noise levels for various classes of vehicles when new and when in use. More stringent limits will begin to take effect for new vehicles in 1988.

Under the Land Compensation Act 1973 and similar legislation in Scotland, compensation is payable for loss in property values caused by physical factors including noise arising from the use of new or improved public works such as roads and airports. Regulations made under the Acts also enable highway authorities to carry out or make grants for insulation of homes subject to specified levels of increased noise caused by new or improved roads. Noise insulation may also be provided where construction work for new roads is likely to seriously affect nearby homes.

Noise emission levels of almost all aircraft on the United Kingdom Register are regulated in accordance with standards agreed by the International Civil Aviation Organisation. Since 1986 all subsonic jets on the United Kingdom Register have had to comply with these standards, and this requirement is to be extended to overseas-registered aircraft from 1 January 1988. Various operational restrictions have been introduced to reduce noise disturbance further.

Radioactivity Radiation resulting from industrial and other processes represents only a small fraction of that to which the population is exposed from the natural environment. Nevertheless, that fraction is subject to stringent control because of possible effects on health or longer-term genetic effects. Under the Radioactive Substances Act 1960 most users of radioactive materials other than those subject to licence under the Nuclear Installations Act 1965 must be registered by the appropriate department, and authorisation is also required for the disposal of radioactive waste. The Health and Safety Executive, through its Nuclear Installations Inspectorate, is the authority concerned with the granting of nuclear site licences for commercial nuclear installations. No installation may be constructed or operated without a licence granted by the Executive. The National Radiological Protection Board (NRPB), established under the Radiological Protection Act 1970, provides an authoritative point of reference on radiological protection. In January 1987 the Government announced a series of measures to deal with the problem of naturally occurring radon gas in houses, including a survey by the NRPB to identify houses with the highest levels where remedial action would be necessary.

Radioactive Radioactive wastes vary widely in nature and level of activity, and the practices Waste followed reflect this variation. Some wastes are dispersed safely in the Disposal environment. The Nuclear Industry Radioactive Waste Executive (UK Nirex Ltd) is responsible for developing and operating disposal facilities for solid wastes with a low or intermediate level of activity and is seeking to identify a suitable location for a deep multi-purpose facility. UK Nirex Ltd is evaluating the relative merits of techniques of deep burial in a repository on land, tunnelling under the sea-bed from the shore, and disposal into the sea-bed from a sea-based rig. The Department of the Environment is also sponsoring research, in collaboration with other countries, into disposal of high-level wastes, but these will first be stored in vitrified form for at least 50 years.

9 Religion

Everyone in Britain has the right of religious freedom (in teaching, worship and observance) without interference from the community or the State. Churches and religious societies may own property, conduct schools, and propagate their beliefs in speech and writing. There is no religious or denominational bar to the

holding of public office.

There are two established churches, that is, churches legally recognised as official churches of the State: in England the (Anglican) Church of England, and in Scotland the (Presbyterian) Church of Scotland. Clergy of the established churches work in services administered by the State, such as the armed forces, national hospitals and prisons, and are paid a salary by the State. Clergy of other denominations are also appointed. Voluntary schools provided by religious denominations may be wholly or partly maintained from public funds. The churches' involvement in broader social issues and the practical help they give to groups of many kinds—from young people to the bereaved and homeless—was highlighted in the Church of England report Faith in the City: A Call for Action by Church and Nation, published in 1985. This made recommendations for alleviating the problems of the inner cities and other areas of social deprivation and led to a decision by the Church of England in 1986 to set up an urban aid fund with the aim of raising £10 million in capital for its work in inner city and other priority areas.

There is no precise or uniform information about the number of church adherents since no inquiries are normally made about religious beliefs in censuses or other official returns, and each church adopts its own criteria in counting its members. Membership figures in this chapter are therefore

approximate.

About one-sixth of the adult population in Britain are members of a Christian church and there are considerable regional variations in church membership: England has the lowest membership with 13 per cent, Wales has 23 per cent, Scotland 37 per cent, and Northern Ireland the highest with 80 per cent.

There has been a decline in recent years in both the number of fultime ministers and the recorded adult membership of the larger Christian denominations. This has been accompanied by a significant growth among small break-away, independent, or Pentecostal churches and new religious movements. However, the churches today share a strong desire to work together and the ecumenical movement is well supported. Religious education in schools is required by statute in England, Wales and Scotland, but the subject has increasingly become concerned with religious and moral attitudes and values, often taking into account many different faiths, rather than simply being a vehicle for instruction in the Christian faith.

The Church of England

The Church of England's relationship with the State is one of mutual obligation—privileges accorded to the Church balanced by certain duties which it must fulfil. The Sovereign must always be a member of the Church, and promises to uphold it; Church of England archbishops, bishops and deans are appointed by the Sovereign on the advice of the Prime Minister; all clergy take an

oath of allegiance to the Crown. The Church can regulate its own worship. The two archbishops (of Canterbury and York), the bishops of London, Durham and Winchester, and 21 other bishops (according to their seniority as diocesan bishops) sit in the House of Lords. Clergy of the Church (together with those of the Church of Scotland, the Church of Ireland and the Roman Catholic Church) are not allowed to sit in the House of Commons.

The Church has two provinces: Canterbury, comprising 30 dioceses (including the Diocese of Europe), and York, with 14 dioceses. The Archbishop of Canterbury is 'Primate of All England', and the Archbishop of York 'Primate of England'. The dioceses are divided into 13,300 parishes. In 1985 it was estimated that, in the two provinces (excluding the Diocese of Europe), some 238,000 people were baptised into the Church; of these 200,000 were under one year old (32 per cent of live births). In the same year there were 76,900 confirmations. Attendances at services on a normal Sunday are around 1.2 million. Many people who rarely, if ever, attend services, nevertheless regard themselves as belonging to the Church of England (amounting perhaps to some 60 per cent of the population).

The central governing body, the General Synod, has both spiritual authority and legislative and administrative powers; and bishops, clergy and lay members are involved in decisions. Certain important issues must be referred for the approval of the dioceses before being decided by the Synod. Lay members are associated with church government in the parishes through the ancient office of churchwarden and the modern parochial church councils.

The General Synod is the centre of an administrative system dealing with such matters as education, mission, inter-church relations, social questions, recruitment and training for the ministry, church work in Britain and overseas and the care of church buildings, particularly those of historical and architectural interest. It is also concerned with church schools in England and Wales (which are maintained from public funds) and colleges of education, theological colleges, and centres for training women in pastoral work. At present, men only are admitted to the priesthood, but in 1987 the General Synod voted to proceed with legislation to enable women to be ordained priests; final decisions on the matter, however, are not expected to be taken for some years.

The Church has its own courts whose jurisdiction today extends only to church property and matters of ecclesiastical discipline.

Church finance is administered locally by the parishes and the dioceses, with contributions to a central fund for the maintenance of central services, including capital expenditure on training and theological colleges and grants for training candidates for ordination. The State makes no direct financial contribution to church expenses. The Church's endowment income is mainly administered by the Church Commissioners, the body largely responsible for the payment of clergy stipends and pensions.

Communion

overseas and three regional councils overseas with a total membership of about 70 million. In the British Isles, there are four provinces: the Church of England (established), the Church in Wales, the Scottish Episcopal Church in Scotland, and the Church of Ireland.

Every ten years the Lambeth Conference meets for unofficial consultation among all Anglican bishops (the next Conference will be held in Canterbury in 1988). Presided over by the Archbishop of Canterbury, the Conference has no executive authority, but enjoys great prestige, and its findings on doctrine, discipline, relations with other communions, and attitudes to political and social questions are widely studied. The Anglican Consultative Council (an assembly of laymen and clergy as well as bishops) meets every two or three years

207 RELIGION

and is designed to provide consultations within the Anglican Communion and to serve as an instrument of common action. The Council last met in Singapore in 1987.

The Church of Scotland

The Church of Scotland has a presbyterian form of government, that is, government by elders, all (including ministers) of equal rank. Its status as the national church derives from the Treaty of Union 1707, and the Church of Scotland Act 1921 which confirmed its complete freedom in all spiritual matters. It appoints its own officers, and its decisions on questions of doctrine and discipline are not subject to parliamentary discussion or modification.

Both men and women are admitted to the ministry and each of 1,745 churches is governed locally by the Kirk Session, consisting of the minister and the elected elders of the Church; above the Kirk Session is the Court of the Presbytery, then the Court of the Synod, and finally the General Assembly, consisting of elected ministers and elders, which meets annually under the presidency of an elected moderator who serves for one year. The Sovereign is represented at the General Assembly by the Lord High Commissioner. The adult communicant membership of the Church of Scotland is over 854,300.

The Free Churches

The expression 'Free Churches' is commonly used to describe those Protestant churches in Britain which, unlike the Church of England and the Church of Scotland, are not established. In the course of history they have developed their own convictions in church order and worship. All the major Free Churches— Methodist, Baptist, United Reformed and Salvation Army—admit both men and women to the ministry.

The Methodist Church, the largest of the Free Churches with nearly 458,600 adult full members, originated in the eighteenth century following the evangelical revival under John Wesley, and is based on a 1932 union of most of the separate Methodist Churches. The Methodist Churches which did not join the union include the Independent Methodists (4,200 members) and the Wesleyan Reform Union (with some 3,300 members). The Methodist Church in Ireland has over 20,560 members in Northern Ireland.

> The Baptists are nearly all grouped in associations of churches, most of which belong to the Baptist Union of Great Britain and Ireland (formed in 1813), with a total membership of about 170,300. In addition, there are separate Baptist Unions for Scotland, Wales and Ireland and other Baptist Churches.

> The United Reformed Church, with some 129,000 members, was formed in 1972 when the Congregational Church in England and Wales (the oldest community of dissenters in Britain) and the Presbyterian Church of England merged—the first transdenominational union of churches in Britain since the Reformation in the sixteenth century. In 1981 there was a further union with the Re-formed Association of the Churches of Christ.

> Among the other Free Churches are the Presbyterian Church in Ireland; the Presbyterian (or Calvinistic Methodist) Church of Wales, which arose from the revivalist movement led in 1735 by Howell Harris; the Union of Welsh Independents; the Free Church of Scotland; the United Free Church of Scotland; the Free Presbyterian Church of Scotland; the Reformed Presbyterian Church of Scotland; the Reformed Presbyterian Church of Ireland; and the Non-Subscribing Presbyterian Church of Ireland.

Other Protestant denominations include: the Unitarian and Free Christian Churches; the Fellowship of the Churches of Christ (known also in the United States as Disciples of Christ), which has been an organised community in Britain since the early nineteenth century; the British Province of the Moravian Church, which is an international missionary church; the Free Church of England (or Reformed Episcopal Church), which was formed in 1844 as a direct

result of the Oxford Movement: and the Congregational Federation, formed from Congregational Churches which did not enter the United Reformed Church. There are also the Pentecostalists, who are increasing in numbers. Their two main bodies operating in Britain are the Assemblies of God and the Elim Pentecostal Church, many of whose members are of West Indian origin. There are also a growing number of black-led churches.

The Religious Society of Friends (Quakers), with about 18,000 adult members in Britain and 454 places of worship, came into being in the middle of the seventeenth century under the leadership of George Fox. Silent worship is central to its life as a religious organisation and Friends work for peace and the relief of suffering in many parts of the world.

The Salvation Army, founded in Britain in 1865, has since spread to 88 other countries. Within Britain there are 56,400 active members operating from nearly 1,000 centres of worship. The Salvation Army's distinctive ministry of Christian evangelism and practical care is also expressed through the work of 170 social service centres, ranging from hostels for the homeless to homes for the elderly, for abused children and for teenagers on probation, and recreational centres for Service personnel.

A recent development in Christian worship has been the house church movement, which began in the early 1970s and now has an estimated membership of over 89.000 (attendance being considerably greater than membership). Each house church has an average of 100 members, the majority of whom are former members of various Protestant denominations; groups of between 15 and 20 members hold services and prayer meetings in private houses, with the position of chairman being taken in rotation. House churches receive money from their members to enable them to support their leaders and carry out missionary and social work.

There are also a number of other religious organisations in Britain all of which were founded in the United States in the last century. These include the Jehovah's Witnesses, the Church of Jesus Christ of Latter-Day Saints (the Mormon Church), the Christian Scientists and the Spiritualists.

The Roman Catholic Church The Roman Catholic hierarchy in England and Wales, which became temporarily extinct during the sixteenth century, was restored in 1850; the Scottish hierarchy became extinct in the early seventeenth century and was restored in 1878. There are now seven Roman Catholic provinces in Great Britain, each under an archbishop, 30 episcopal dioceses (22 in England and Wales, eight in Scotland), and over 3,000 parishes. In Northern Ireland, there are six dioceses, some with territory partly in the Irish Republic. It is estimated that there are some 5·7 million adherents to the Roman Catholic faith in Britain. Men only are admitted to the priesthood. In 1982 Pope John Paul II paid a pastoral visit to Britain, the first by a reigning pontiff.

The Roman Catholic Church attaches great importance to the education of its children and requires its members to try to bring up their children in the Catholic faith. A number of schools for Catholic children are staffed by members of the religious orders (to the extent of one teacher in 20). These orders also undertake other social work such as nursing, child care, and the conduct of homes for old people. The great majority of Catholic schools are maintained out of public funds and new schools may be established with government grants.

Jewry

Jews first settled in England at the time of the Norman Conquest, but the present community in Britain dates from 1656, having been founded by those of Spanish and Portuguese origin (known as Sephardim). Later and more

RELIGION 209

numerous settlers were of German and eastern European origin, known as Ashkenazim. The present community, numbering about 330,000, is the second largest in Europe.

The community is, broadly speaking, divided into two groups. About 80 per cent of the majority Ashkenazi Jews are Orthodox and most acknowledge the jurisdiction of the Chief Rabbi, with the Sephardi Orthodox element following their own spiritual head (the Haham). The Reform movement which was founded in 1840 and the Liberal and Progressive movement which followed in 1901 account for the remaining 20 per cent.

Jewish congregations in Britain number about 350. Jewish denominational schools (some of them supported by public funds) are attended by about one in three Jewish children. There are a number of charitable and welfare agencies caring for the aged and handicapped.

The officially recognised representative body is the Board of Deputies of British Jews.

Other Religious Communities

Christian communities of foreign origin, including the Orthodox, Lutheran and Reformed Churches of various European countries, together with the Armenian Church, have established their own centres of worship, particularly in London. Britain has a long tradition of religious tolerance, a feature which has been much in evidence during the past 30 years with the acceptance of a wide variety of religious beliefs and traditions brought in by substantial numbers of immigrants of different nationalities. There are now large and growing communities of Muslims, Hindus and Sikhs, and arrangements have been made in places of work to allow the members of non-Christian religions to follow their religious observances.

Britain's Muslim population is estimated at around 1.5 million, the largest number of whom originate from Pakistan and Bangladesh, with sizeable groups from India, Cyprus, the Arab world, Malaysia and parts of Africa. There is also a growing community of British-born Muslims, mainly the children of immigrant parents, but including an increasing number of converts to Islam. The Islamic Cultural Centre (and London Central Mosque) on the edge of Regent's Park is the most important Muslim institution in the Western world, and there are over 1,000 mosques and prayer centres throughout Britain.

There are large Sikh and Hindu communities in Britain, both of which mainly originate from India, each with 150 or more temples throughout the country. Sikhs form the largest religious group of the Indian community and their temples cater for the religious, cultural and social needs of their community.

There are well over 150 Buddhist groups and centres and at least seven monasteries and a number of temples. All schools of Buddhism are represented. The Buddhist Society, with its headquarters in London, publicises the principles of Buddhism and encourages their study and practice; it adheres to no one school of Buddhism.

Co-operation among the Churches

The British Council of Churches, with representatives or observers from all the main Christian churches in the British Isles, facilitates common action and seeks to further Christian unity. It works through five divisions: Christian Aid (which has a separate constitution); Conference for World Mission; Ecumenical Affairs; Community Affairs; and International Affairs.

The Free Church Federal Council (which has a concordat with the British Council of Churches) comprises most of the Free Churches of England and Wales. It promotes unity and joint action among the Free Churches and is a channel for communication with central and local government.

Inter-church conversations about the doctrinal and practical issues involved in the search for unity now take place through international as well as national

bodies. The Roman Catholic and Orthodox Churches are represented on some of these as well as the Anglican and some of the Free Churches.

The Anglican and the main Free Churches also participate in the World Council of Churches (of which the British Council of Churches is an associated national council). This links together some 300 churches in over 100 countries for co-operation and the study of common problems. The Council of Christians and Jews works for better understanding among members of the two religions and deals with problems in the social field. The British Council of Churches has also established a Committee for Relations with People of Other Faiths.

The Sharing of Church Buildings Act 1969 enables agreements to be made by two or more churches for the sharing of church buildings.

10 National Economy

In 1987 the British economy entered its seventh year of sustained growth from the low point of the recession in May 1981. This represented the longest upswing since 1945. Investment, export volume and productivity have risen substantially; inflation has fallen. Although unemployment has been declining since the middle of 1986, it remains high. However, the number of people in work and the number of vacancies have both been rising.

ECONOMIC BACKGROUND

Britain has an open economy, in which international trade is a vital part of economic performance. In 1986 exports of goods and services accounted for about one-third of its gross domestic product (GDP), one of the highest shares in the major economies. The proportion has increased over the last two decades from about 20 per cent in the early 1960s. Similar rises have occurred in most other developed countries, reflecting the growing importance of international trade in an increasingly interdependent world economy.

The economy is primarily based on private enterprise, and government policy is aimed at encouraging and expanding the private sector, which accounts for three-quarters of GDP and a similar proportion of total employment.

The traditional economic strength of Britain, as a pioneer in the industrial revolution, has been manufacturing. However, the period since 1945 has seen a marked rise in living standards and, as in other major developed countries, the increase that has taken place in real disposable income has led to a faster growth of demand for services than for manufactures. An adjustment to the relative size of the manufacturing sector has also resulted from the growth of North Sea oil output. Services now account for nearly three-fifths of GDP and for two-thirds of employment, compared with just under half in 1950, while manufacturing accounts for about a quarter, compared with just over one-third in 1950.

Some 2.8 per cent of Britain's employed labour force is engaged in agriculture—a lower proportion than in any other major industrialised country. However, because of a high level of productivity, Britain is able to produce nearly two-thirds of its own food.

Britain's energy position has been transformed in the last decade. With the discovery and exploitation of oil and natural gas from the Continental Shelf under the North Sea, the country has become self-sufficient in energy in net terms. Together, the extraction of oil and gas accounted for 2 to 3 per cent of GDP in 1986. Coal—traditionally the most important source of energy—still meets over a third of Britain's needs.

One of the largest exporters of visible goods, Britain accounts for about 5 per cent of the world total. It is among the major exporters of aerospace products, electrical equipment, most types of machinery, chemicals and oil. It is also one of the world's largest importers of agricultural products, raw materials and semi-manufactures.

The broad historical pattern of Britain's overseas trade has been a deficit on visible trade offset by a surplus on transactions in invisibles. The significant contribution made by invisibles to the current account is partly a reflection of Britain's position as a major financial centre. The banks, insurance

underwriters and brokers, and other financial institutions of the City of London provide world-wide financial services, and the City contains perhaps the most comprehensive and advanced capital market in the world.

Economic Growth

The marked rise in living standards in recent years has been accompanied by the emergence of new industries and the renewal and improvement of much of the country's infrastructure. At the same time, in spite of short periods of rapid economic expansion, the rate of growth has been low in comparison with the rates in most other industrialised countries, averaging 2 to 3 per cent annually up to 1973 but only about 1 per cent from then until the recession of the early 1980s. Since then, however, the underlying rate of growth has been some 3 per cent a year. In 1986 Britain had the highest rate of growth among member countries of the European Community.

Inflation and From the late 1960s until about 1980 high rates of inflation reduced Britain's Competitiveness competitiveness. Huge rises in the price of oil in 1973-74 and 1979 and substantial increases in the money supply and public spending were followed by upsurges in inflation; retail prices rose by 24 per cent in 1975 and by 18 per cent in 1980. Earnings also grew rapidly; in 1980 the underlying rate of increase was about 21 per cent. From 1981 inflation declined, reaching an annual rate of 3.4 per cent in 1986. The rate rose a little during 1987, to 4·4 per cent by August. Since mid-1984 average earnings have been rising at an annual rate of some 7.5per cent.

In the late 1970s competitiveness suffered from a much more rapid increase in unit labour costs than in most other industrialised countries, as well as a marked appreciation in sterling, which rose by 18 per cent between 1978 and 1980. Partly as a result of weakness in the world oil market, sterling then depreciated: between 1980 and 1984 the value fell by 18 per cent; it steadied in 1985 but resumed its fall in 1986. The decline was partly reversed in the early part of 1987; by the middle of the year the value of sterling was some 7 per cent above that at the end of 1986. Sterling depreciation, together with greater moderation in pay settlements and a substantial rise in productivity since the end of 1980 (see p 213), led to a considerable improvement in competitiveness: between 1981 and early 1987 Britain's unit labour costs in manufacturing, relative to those of its main competitors and adjusted for movements in the exchange rate, fell by 17 per cent.

Industrial In the decade to 1973 output of the manufacturing industries grew at a faster **Production** rate than the economy as a whole. After the oil price rises of 1973–74, however, and with increasing competition from overseas—from both developed and newly industrialising countries—manufacturing output fell sharply so that in 1975 it was 8 per cent lower than two years previously. It then increased from this trough but, following another oil price rise and stagnation in the world economy, fell back by over 14 per cent between 1979 and 1981. It has since averaged an annual rise of a little over 2 per cent but remains below its 1979 level which, in turn, was below the levels of 1973-74. However, output of the production industries as a whole (manufacturing, energy and water) had by 1985 risen above its earlier peak of 1979; it continued to grow in 1986. In that year energy output was more than twice the level of ten years earlier.

Investment

Fixed investment grew by about 5 per cent a year during the 1960s but between 1970 and 1983 it held steady apart from cyclical variations. By 1986 it had reached a record level, one contributory factor having been rising company profitability. Although, with a falling oil price, profits of oil companies declined in 1985, profits (net of stock appreciation) of non-oil industrial and commercial

companies were 30 per cent higher than in 1984. A further influence may have been increased capacity utilisation as Britain recovered from the recession of 1979–81. Over the period 1975 to 1985 there was an increase in the private sector's share of total investment (excluding transactions in existing dwellings and land) from 58 to 79 per cent. Over the same period the share of investment undertaken by the services sector increased from 40 to 49 per cent while that of manufacturing fell from 16 to 13 per cent.

Employment and Productivity

Britain has an employed labour force of some 24 million. The number of jobs in the economy is increasing: between June 1983 and June 1987 the number of people in work rose by over 1 million; self-employment is at a high level. There has also been a large growth in the working population; demographic factors have meant that the number of people reaching working age has exceeded that reaching retirement age, and there has also been a rise in the number of women seeking work. As a result, unemployment has remained high. As in other industrialised countries, this has proved an intractable problem since the early 1970s. From a level of 300,000 to 400,000 in the mid-1960s, unemployment rose to over 1 million in the mid-1970s (representing around 5 per cent of the working population) and then increased again very sharply after 1979 to reach 3 million in the early 1980s. The rate of increase then slowed; since mid-1986 unemployment has been falling slightly but still amounts to some 11 per cent of the working population.

Other labour market indicators have improved. The number of vacancies has risen; overtime in manufacturing has increased and short-time working has fallen. The shedding of surplus labour and renewed growth have led to gains in productivity: between 1980 and 1986 output per head rose by 17 per cent in the economy as a whole and by 34 per cent in manufacturing alone.

Overseas Sector

Britain's overseas trade performance fluctuated during the 1970s. In general, imports of food, energy, raw materials and manufactured goods were greater than visible exports, which were largely manufactured goods. This deficit on visible trade was wholly or partly offset by a surplus on invisibles, which cover earnings from services, together with interest, profits and dividends, and transfers.

In the years 1980 to 1982 Britain ran surpluses on visible trade. Since then, however, imports—especially of manufactures—have risen more sharply than exports and the deficit on visible trade has reappeared. After a long period of deterioration in the balance of trade in manufactures there was a deficit in 1983—the first since 1945. The deficit continued in the following three years. Substantial net earnings on invisible trade, however, kept the current account in surplus up to 1985, while in 1986 it was roughly in balance.

Membership of the European Community has had a major impact on Britain's pattern of trade, increasing the proportion with other member countries and reducing the share of Commonwealth trade. Between 1972 and 1986 the proportion of Britain's exports of goods going to other members of the Community rose from 34 to 48 per cent while that going to other Commonwealth countries fell from 19 to 11 per cent. Imports followed a similar trend. Trade with the newly industrialised countries, including Singapore, Korea, Taiwan and Malaysia, has risen substantially.

The strength of overseas earnings from invisibles has been maintained by the continued adaptation to new conditions, particularly following the abolition of exchange controls in 1979, and growth in world markets of insurance, banking, tourism, construction, consultancy and other services. In 1986 exports of services were valued at over one-third of exports of goods; the growth of overseas assets has resulted in high net receipts of investment income.

The substantial cumulative surplus on current account in the first half of the 1980s implies a corresponding increase in Britain's net external assets, which are estimated to have risen from £12,000 million at the end of 1979 to about £114,000 million at the end of 1986—second in size only to those of Japan. Following the abolition of exchange controls investment outflows, particularly portfolio investment, increased sharply. There has been an acceleration in the growth of portfolio investment since 1984, partly a reflection of investment by banks as they moved into lending in readily marketable forms (such as floating rate notes) and away from traditional loans. British banks' sterling lending abroad has also been at a high level since the abolition of exchange controls.

The development of North Sea oil and gas production has had a significant effect on the economy; in 1987 Britain was the world's fifth largest oil producer. The benefits to the balance of payments began to appear in the second half of the 1970s; in 1980 Britain had its first surplus on oil trade. In 1974 oil accounted for some 4 per cent of Britain's visible exports and 19 per cent of visible imports; in 1986 the proportions were 11 per cent and 5 per cent respectively. The oil surplus reached its peak in 1985, at £8,100 million. With the fall in oil prices (see below) the surplus fell to £4,200 million in 1986. Exports, mainly to other European Community countries, are equivalent to more than half of domestic production. They are partly offset in balance of payments terms by imports of other grades of crude oil from the Middle East and elsewhere.

North Sea oil helped to alleviate the fall in real national income which Britain, along with other industrialised countries, suffered following the oil price rises of the 1970s. It has helped to ease the task of controlling public sector borrowing, contributing to the Government's counter-inflation strategy. Even after production runs down, the stock of external assets (see above) that has been built up largely because of North Sea oil will provide a steady flow of income.

The price of oil fell sharply in early 1983 and, after almost three years of virtual stability, again in late 1985 and the first half of 1986. The price then rose gradually but by August 1987 was still below its level in late 1985. Although a fall in the oil price leads to some loss of revenues from oil exports and oil taxation, consumers and non-oil industry can be expected to benefit.

As a reflection of Britain's position as a net oil exporter, sterling has been strong during periods of high oil prices. Sterling appreciated markedly in 1979 and 1980, with rising oil prices, but, as the oil market weakened, sterling fell back. The sterling index shows the value of the currency as a weighted average (1975 = 100) of its exchange rate against other currencies. In July 1987 the index was 72.8 compared with an average of 96.1 in 1980.

ECONOMIC STRATEGY

British governments traditionally sought to influence the rate of growth and the level of employment by macroeconomic policy measures (for example, by variations in government expenditure, taxes or controls on consumer credit). At the same time they attempted to keep inflation down and to achieve approximate equilibrium in the balance of payments. However, each time the economy expanded, inflation tended to accelerate and a strong rise in imports typically gave rise to a balance of payments problem. The effects would finally lead to the imposition of restraints on home demand. The cyclical pattern of stimulus followed by restraint became known as 'stop-go'.

From the late 1960s until about 1980, increases in wage and price levels had an adverse effect on competitiveness, profitability and business confidence. This was associated with an increase in unemployment over the period. At various times governments attempted to control pay rises and (less frequently) price

rises by means of voluntary or statutory controls, but such policies were largely unsuccessful.

The present Government has adopted economic policies which in many ways represent a break with those of its predecessors. Macroeconomic (monetary and fiseal) policies are now directed at bringing down the rate of inflation and ultimately achieving price stability. Microeconomic policies are aimed at working with the grain of market forces by encouraging enterprise, efficiency and flexibility, and so improving the supply side performance of the economy (see below). Together, these policies are aimed at improving the division of the increase in money GDP between output growth and inflation, and helping to create jobs.

Monetary Policy

The central aim of monetary policy is the creation of conditions that will exert steady downward pressure on the rate of growth of money GDP, so bringing down the rate of inflation. Monetary conditions are assessed in the light of movements in narrow and broad money and the behaviour of other financial indicators, in particular the exchange rate. There is no mechanical formula for taking these factors into account; a balance is struck between monetary growth and the exchange rate consistent with the Government's inflation objectives. Narrow money as measured by M0¹ has had a stable relationship with money GDP over a number of years and has proved a reliable indicator of monetary conditions. A target range of 2 to 6 per cent has been set for M0 growth in 1987–88. Changes in broad money have become increasingly difficult to interpret; far-reaching changes in financial practices have meant that there is no simple relationship between the growth in broad money and in money GDP. The Government has therefore decided that there should be no formal target for broad money in 1987–88.

Fiscal Policy

Monetary policy has been complemented by a firm fiscal policy whose aim has been a progressive reduction in public borrowing as a proportion of GDP. The Government is seeking to limit public expenditure as a proportion of GDP. The figure has been falling since 1982-83 and, by 1989-90, is expected to be back to the levels of the early 1970s. In the early years of the financial strategy the public sector borrowing requirement amounted to around 3 per cent of GDP but by 1986-87 this had fallen to $2\cdot25$ per cent—the lowest since 1971-72. Further reductions are envisaged.

Supply Side Policies

While designing macroeconomic policy with the intent of reducing inflation, the Government has sought to improve the supply response, and hence the efficiency, of the economy through microeconomic policies. Action has been taken to expose more of the economy to market forces. Direct controls (for example, on pay, prices, foreign exchange, dividend payments and commercial credit) have been abolished, competition in domestic markets strengthened, labour market reforms introduced, measures taken to encourage share ownership and a substantial amount of activity transferred from the public to the private sector by privatisation and by contracting work out. In addition, regulatory burdens on business have been reduced.

In the labour market the Government has sought to improve work incentives by reducing personal income tax rates and raising tax thresholds and also by encouraging the extension of share ownership among employees. A scheme of income tax relief has been introduced to encourage the spread of profit-related

 $^{^{1}}$ M0 is notes and coin in circulation with the public and banks' holdings of cash and their operational balances at the Bank of England.

pay. To improve employment prospects, the Government has also abolished the National Insurance surcharge (a tax on employed labour) and established a graduated structure of National Insurance contribution rates which has reduced the cost to employers of hiring lower-paid workers. The Government has also taken steps to achieve a better-balanced legal framework for industrial relations and to improve vocational training. Obstacles to the mobility of labour have been reduced. For example, the rights of those leaving occupational pension schemes early have been improved and new arrangements for personal pensions introduced, both of which will bring down the costs of changing jobs. The Government has enacted legislation to limit the scope of wages councils. However, in spite of these measures and although unemployment has remained at a high level, wages have continued to rise in excess of the inflation rate. This has taken place despite the Government's emphasis on the link between pay and jobs: it has repeatedly warned that, if employment is to rise faster, wages must rise more slowly.

To improve the working of capital markets, the Government has abolished controls on foreign exchange transactions, company dividends, hire purchase and bank lending. Competition among financial institutions is being encouraged within a new statutory framework of investor protection. The Government has also taken steps to reduce the distorting effects of the tax system on investment and savings decisions by, among other things, reforming corporation tax and the system of capital allowances. Planning restrictions on industrial investment have been eased, while government support to industry has been made more selective and, where appropriate, more closely related to job creation. Particular efforts have been made to improve the flow of investment funds to small firms and to assist innovation in industry.

Economic Management

The Treasury has prime responsibility for the formulation and conduct of economic policy, which also involves the Departments of Trade and Industry, Employment, Energy, the Environment and Transport and the Ministry of Agriculture, Fisheries and Food. Other bodies are concerned with specific aspects of economic policy. These include the Bank of England (the central bank), the National Economic Development Council (in which the Government meets representatives of management, trade unions and other interests), the Office of Fair Trading and the Monopolies and Mergers Commission.

On matters of major public policy such as the broad economic strategy, and on the economic problems it faces, the Government makes known its purposes and keeps in touch with developments throughout the economy by means of informal and continuous links with the chief industrial, financial, labour and other interests. Final responsibility for the broad lines of economic policy rests with the Cabinet.

NATIONAL INCOME AND EXPENDITURE

The value of all goods and services produced in the economy is measured by GDP. This can be expressed either in terms of market prices (the prices people pay for the goods and services they buy) or at factor cost (the cost of the goods and services before adding taxes and subtracting subsidies). It can also be expressed in current prices or in constant prices (that is, removing the effects of inflation in order to measure the underlying growth in the economy). In 1986, GDP at current factor cost totalled £319,000 million.

Gross domestic product is conventionally estimated in three different ways as the sum total of expenditure, income or output in a given year. Each method yields the same total in principle, but in practice there are slight differences. Over the longer term the average of the three is the best indicator of growth in the economy. The output measure is usually considered the most reliable measure of short-term movements. In 1986 the index of the average estimate of

GDP at constant factor cost was 113.8 (1980 = 100), compared with 94.5 in 1976, an increase of some 20 per cent.

Expenditure

Table 7 gives figures for the expenditure-based measure of GDP, at both current market prices and current factor cost, and shows how two other main aggregates used in the national accounts, gross national product and national income, are derived.

Table 7: Gross Domestic Product, Gross National Product and National Income

	£ million	
	1976	1986
Total final expenditure	163,530	476,203
less imports of goods and services	-36,894	-101,308
Gross domestic product at market prices	126,636	374,895
plus net property income from abroad	1,550	4,686
Gross national product at market prices	128,186	379,581
less factor cost adjustment (taxes less subsidies)	-12,846	-55,806
Gross domestic product at factor cost	113,790	319,089
Net property income from abroad	1,550	4,686
Gross national product at factor cost	115,340	323,775
less capital consumption	-13,992	-46,004
National income (net national product		
at factor cost)	101,348	277,771

Source: United Kingdom National Accounts 1987 Edition.

Table 8 shows the categories of total final expenditure in 1986. Consumers' expenditure accounted for 62 per cent of domestic expenditure. Between 1976 and 1986 the proportion of final expenditure devoted to exports averaged 22 per cent.

Table 8: Total Final Expenditure 1986 at Market Prices

	£ million	per cent
Consumers' expenditure	234,167	49.2
General government final consumption	79,423	16.7
Gross domestic fixed capital formation	64,227	13.5
Value of physical increase in stocks and work in		
progress	551	0.1
Total domestic expenditure	378,368	79.5
Exports of goods and services	97,835	20.5
Total final expenditure	476,203	100.0

Source: United Kingdom National Accounts 1987 Edition.

Personal Incomes and – Expenditure Personal incomes at current prices before tax rose rapidly and fairly steadily from £113,000 million in 1976 to £327,000 million in 1986. Personal disposable income (that is, personal incomes after deductions—mainly taxation and National Insurance contributions) was £258,000 million in 1986, 4·3 per

cent higher in real terms than in 1985. Consumers' expenditure amounted to 72 per cent of pre-tax personal income in 1986 compared with 67 per cent in 1976.

Table 9 shows the pattern of consumers' expenditure in 1986. Housing, food, alcoholic drink, clothing and footwear, and fuel and power together accounted for 48 per cent of the total. Consumers' expenditure increased by 5.8 per cent in real terms between 1985 and 1986. The changes in the pattern between 1976 and 1986 in Britain were paralleled in other industrialised countries, with declining proportions spent on food, and on clothing and footwear. Over the longer term, as incomes rise, people tend to spend increasing proportions on consumer durables and services—personal, financial and leisure services in particular.

Saving as a percentage of personal disposable income has fluctuated over the last decade and in 1986 stood at $9\cdot 1$ per cent, down from $14\cdot 2$ per cent in 1980. The recent reduction in the saving ratio partly reflects an adjustment to declining rates of inflation: during periods of rapidly rising prices people need to increase their rate of saving to maintain the real value of assets fixed in money terms.

Sources of Income The proportion of total personal income accounted for by income from employment was 64 per cent in 1986; average gross weekly earnings in April 1986 in Great Britain were £203·40 for full-time male workers and £134·70 for full-time female workers. The three other main sources of personal income were self-employment (11 per cent), income from rent, dividends and interest (9 per cent) and current grants from general government (15 per cent).

Current Government Expenditure Current expenditure on goods and services by central government and local authorities amounted to £79,000 million in 1986; it rose by 9 per cent in real terms over the period 1976 to 1986. The main cause of this was the growth over the period in the social services, especially education and health.

In addition to their expenditure on goods and services, public authorities transfer large sums to other sectors, mainly the personal sector, by way of

Table 9: Consumers' Expenditure in 1976 and 1986

	1976	19	1986		
	per cent	per cent	£ million		
Food (household expenditure)	18.4	_13·8	32,342		
Alcoholic drink	7.5	7.0	16,474		
Tobacco	4.1	3.2	7,471		
Clothing and footwear	7.6	7.0	16,388		
Housing	13.4	14.9	34,951		
Fuel and power	4.7	4.8	11,148		
Household goods and services	7.5	6.6	15,432		
Transport and communications	14.9	16.5	38,557		
Recreation, entertainment and education	9.2	9.4	21,927		
Other goods and services	11.8	14.5	34,063		
Other items ^a	0.9	2.3	5,414		
Total	100.0	100.0	234,167		

Source: United Kingdom National Accounts 1987 Edition.

^a Household expenditure overseas plus final expenditure by private non-profit-making bodies minus expenditure by foreign tourists in Britain.

National Insurance and other social security benefits, grants, and interest and subsidies. Central government also makes grants to local authorities to finance about half of their current expenditure.

Gross Domestic Product by Industry Table 10 shows GDP by industry in 1976 and 1986. Over a period of time agriculture and manufacturing have come to account for smaller proportions of national income, while energy and services have grown relatively. Services now account for about 60 per cent of GDP.

Table 10: Gross Domestic Product by Industry^a

	1976		1986	
	£ million	per cent	£ million	per cent
Agriculture, forestry and fishing	3,225	2.9	5,902	1.8
Energy and water supply	6,782	6.1	24,445	7.5
Manufacturing	31,679	28.6	79,111	24.3
Construction	7,179	6.5	20,061	6.2
Distribution, hotels and				
catering; repairs	13,719	12.4	45,770	14.0
Transport	6,139	5.5	14,813	4.5
Communications	3,155	2.8	8,914	2.7
Banking, finance, insurance,				
business services and leasing	11,934	10.8	51,513	15.8
Ownership of dwellings	6,735	6.1	18,873	5.8
Public administration, defence				
and social security	8,457	7.6	23,578	7.2
Education and health services	10,497	9.5	29,510	9.1
Other services	5,772	5.2	20,963	6.4
Total	115,273	104.0	343,453	105.3
Adjustment for financial services	-4,473	-4.0	-17,404	-5.3
Gross domestic product at		1001-00-0	M0-99	
factor cost (income-based)	110,800	100.0	326,049	100.0

Source: United Kingdom National Accounts 1987 Edition.

^a Before provision for depreciation but after deducting stock appreciation.

11 Framework of Industry

Among the most prominent trends in industrial activity in Britain during the last ten years have been the growth of the offshore oil and gas industries together with related products and services; the rapid development of electronic and microelectronic technologies and their application to a wide range of other sectors; and a continuous rise in the service industries' share of total employment. Industrial output has risen steadily since the recession of 1980–81, which, as in other market economies, was largely brought about by a rise in world oil prices. In early 1987 total output was 19 per cent higher than at its trough in early 1981. It was only during 1985, however, that production regained the level of mid-1979, which had been the high point of a period of growth since 1976. A marked increase in productivity has been a major feature of recovery. Manufacturing productivity has grown by 30 per cent since 1979, the highest increase among the major industrial countries. Gains in productivity, however, meant that this increased output was produced with fewer workers. Consequently, employment, though increasing, was still lower than in 1981. Table 11 shows gross domestic product (GDP) by sector and the percentage of total GDP and of total employment in each sector in 1986.

Table 11: Gross Domestic	Product ^a by	Industry	in	1986
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	dard Industrial Classification ed 1980	£ million	% of total	% Employment
0	Agriculture, forestry and fishing	5,902	1.8	1.5
1	Energy and water supply	24,445	7.5	2.5
2-4	Manufacturing	79,111	24.3	24.3
5	Construction	20,061	6.1	4.6
6-9	Services	213,934	65.6	67.1
-1	Adjustment for financial services	-17,404	-5.3	_
	s domestic product at factor cost come-based)	326,049	100.0	100.0

Sources: United Kingdom National Accounts 1987 Edition and Monthly Digest of Statistics.

^a Before depreciation but after providing for stock appreciation.

Government policies are designed to help British industry become more competitive and responsive to market forces, both in Britain and overseas (see p 229), and also to encourage development in advanced technologies. These objectives are also borne in mind by the Government when participating in the formulation of European Community industrial policies.

This chapter outlines recent industrial performance and describes some of the general features of industrial organisation in Britain, such as the forms of enterprise, methods of financing and industrial association. It looks at factors affecting productivity and competitiveness, including investment, technological

advance, research and development, and management and workforce training, as well as means of improving standards of design and quality assurance. It also outlines the framework of incentives for general industrial development provided by the Government, and by Community institutions, and the regulatory framework within which industry operates.

INDUSTRIAL **ORGANISATION**

The forms of industrial organisation and the patterns of ownership and control are varied. The main categories of organisation are: unincorporated businesses (sole traders and partnerships) of which there are at least 1 million; incorporated companies; and public sector enterprises, which are owned by the Government (see p 231). Incorporation means that companies are entered on an official register of companies (see p 241); at the end of 1985 there were over 1 million companies on the registers, though a proportion of these were not actively trading. About 5,000 of these companies were public limited companies. There are about 13 major public sector enterprises with an employed labour force of 1.2 million. The Government is pursuing a programme of 'privatisation' whereby some of these enterprises are transformed into incorporated companies and their shares sold to the public (see p 232). Employees in such companies are being given a preferential right to buy shares in their new companies and employee share ownership in general has been facilitated by changes in legislation, thus enabling employees to have a financial interest in the profitability of their companies. Although not numerous, co-operative enterprises (which are also incorporated companies) increased in number from 300 in 1979 to about 1,500 in mid-1986. There has also been a rise in the number of 'buy-outs' in which the staff, or management, of a company raises the finance to purchase it. In the period from 1979 to mid-1986 there were more than 1,200, with a total value of nearly £3,000 million.

> In some sectors a small number of large companies and their subsidiaries are responsible for a large proportion of total production notably in the vehicle, shipbuilding, aerospace and transport equipment industries. However, it is rare for a few shareholders to have a controlling interest since shares in these companies are usually distributed among many holders or held by insurance companies or pension funds representing a cross-section of the community.

Private enterprises account for about 73 per cent of GDP in Britain and for the greater part of activity in the agricultural, manufacturing, construction, distributive, financial and miscellaneous service sectors. There is substantial public ownership in the energy, transport and communications sectors, though, with privatisation (see p 232), this has declined. Unincorporated businesses, corporate enterprises and public sector enterprises contribute about 21, 52 and 8 per cent of GDP respectively (the remainder being accounted for by central and local government).

About 100 companies registered in Britain each had capital employed of over £500 million in 1985. In terms of annual sales four of the top 20 industrial groups in Europe were British, with British Petroleum second, Shell Transport and Trading third, BAT Industries eighteenth and Imperial Chemical Industries

Industrial

Over half of companies' funds for further investment and other purposes are Financing internally generated. Banks provide the chief external source of finance, but companies have increasingly turned to equity finance in the mid-1980s. The main forms of short-term finance available in the private sector are bank overdrafts, trade credit and factoring (making cash available to a company in exchange for its debts). Types of medium- and long-term finance include bank loans, the mortgaging of property and the issue of securities and shares to the public through the Stock Exchange. The leasing of equipment may also be regarded as a form of finance. Other sources of finance for industry include the Government (see p 232), the European Community and specialist financial institutions.

The 1980s have been particularly notable for the growth of venture capital schemes run by financial institutions in both the public and private sectors to provide 'start-up' and development finance for small and new firms. The establishment of two new securities markets under the auspices of the Stock Exchange and over-the-counter markets outside the Exchange has enabled fast-developing young companies to raise capital through share issues, even though they are not eligible for a full Stock Exchange listing.

Industrial Association

There are several types of voluntary association representing private enterprises and covering, with varying degrees of completeness, most of British industry. The central body representing British business and industry is the Confederation of British Industry (CBI). The CBI directly represents about 10,500 parent and subsidiary companies, as well as the members of some 200 trade associations and the majority of public sector enterprises. For its members, it acts as an advisory and consultative body, providing them with information and statistics, ascertaining their collective views and representing them nationally to the Government and public as well as internationally. CBI representatives sit on such bodies as the National Economic Development Council, the Manpower Services Commission and the Health and Safety Commission.

Chambers of commerce are open to producers and traders of all kinds and are organised on a geographical basis. They exist to provide export assistance as well as advisory and information services and training courses. There are 88 local chambers of commerce, representing 60,000 firms, affiliated to regional associations and the Association of British Chambers of Commerce. Additional central organisations serve Scotland, Wales and Northern Ireland.

Trade associations consist of companies producing or retailing a particular product or group of products. There are estimated to be over 1,500 such associations. They exist to provide common services, regulate trading practices and represent their members to government departments. Employers' organisations are usually concerned with the negotiation of wages and conditions of work in a particular industrial sector, although sometimes one institution may combine this function with that of a trade association. The Department of Employment lists 150 major employers' associations.

Other voluntary associations include industrial development associations for particular regions or areas and the Scottish Council (Development and Industry) in Scotland.

PROFITABILITY AND PRODUCTIVITY

British companies have had a relatively low rate of profitability historically, although there was an improvement between 1981 and 1985. For all industrial and commercial companies the rate rose to about 12 per cent in 1985, the highest level for over 20 years. Manufacturing profitability rose to 7 per cent, the highest rate since 1973.

Although output per head in Britain has in the past been low by international standards, it has risen sharply since 1981 and in recent years the growth has been among the highest in the major industrialised nations. The rise for manufacturing has been greater than for the economy as a whole. The index for the whole economy in 1986 was 116.6 (1980 = 100). Table 12 shows the output and employment indices for 1985 and 1986. There was a fall in employment in production industries between these years, but this was more than offset by a rise in employment in service industries, which led to an overall increase. Output and output per head in both production and service industries rose

between 1985 and 1986. The Government believes that the increased competitiveness resulting from these productivity gains will lead to a sustained rise in living standards and a rise in employment.

Among the factors affecting productivity are capital investment, innovations and improvements in products and processes, and the performance and training of management and labour. The following sections outline trends and developments in these areas.

Table 12: Industrial Output and Employment (Indices: 1980 = 100)

	Out	Output		Employment ^a		
	Index 1985	Index 1986	Index 1985	Index 1986		
Agriculture, forestry and fishing	118.8	118.8	91.4	88.2		
Production industries of which: Energy and water supply Manufacturing	108·1 120·1 103·8	110·2 125·4 104·7	77·7 81·1 77·3	75·4 74·2 75·5		
Construction	99.8	102.1	82.2	79.8		
Services of which: Distribution, hotels,	113.3	117.7	103.9	106.1		
catering and repairs Communications Financial and	114·8 123·6	120·4 130·8	100·4 99·3	101·9 100·0		
business services	140.0	154.0	126.5	133.8		
Whole economy	110.7	114.0	89.7	90.0		

Sources: United Kingdom National Accounts 1987 Edition and Monthly Digest of Statistics. ^aExcluding self-employment.

Investment

Investment by the manufacturing, construction, distribution and financial services industries grew by 9 per cent in real terms in 1985 and reached a record level, 33 per cent higher than in 1981. It fell back a little in 1986 but is forecast to grow again in 1987. Investment in major sectors of the economy in 1986 (at 1980 prices) is shown in Table 13. The figures for manufacturing industry do not include expenditure on leased assets since these are attributed to the service industries on the basis of ownership. Manufacturing industry is, however, the major user of leased assets. The practice of leasing has grown rapidly since the early 1970s but is likely to decline marginally owing to changes made in the tax treatment of capital investment in the 1984 Budget (see p 230).

Technological Advance

Britain was a pioneer in both computing and telecommunications. It is among the world's leading nations in the production and use of micro- and minicomputers as well as in the provision of computing services and systems. Between 1981 and 1986 the number of British firms utilising microelectronic devices doubled; in firms with more than 500 employees more than 90 per cent were so equipped at the end of 1986. Computerised control is widely used in steel mills, coal-mines, oil refineries and chemical and engineering plants. Nearly twice as many robots were installed in British factories in 1986 as two years earlier. Greater use of robotics and of other new technologies such as fibre optics and optoelectronics is encouraged by various Department of Trade and Industry schemes.

Table 13: Gross Fixed Capital Formation (Investment) by Sector

	£ million	Index
	1986	1986
	(at 1980 prices)	(1980 = 100)
Agriculture, forestry and fishing	753	73.6
Oil and gas extraction	2,001	83.4
Other energy and water supply	3,138	95.4
Manufacturing	6,329	97.7
Construction	376	80.3
Distribution, hotels, catering and repairs	4,192	129.4
Transport and communications	3,699	95.3
Finance and business services		
Leased assets	3,103	143.9
Other assets	5,037	148.9
Other services	6,581	131.4
Dwellings	9,118	105.1
Transfer costs of land and buildings	2,219	142.2
Whole economy	46,546	112.0

Source: United Kingdom National Accounts 1987 Edition.

The use of personal computers in offices is now common, and advanced data transmission systems and databases are being developed. New technology is also being used in the area of personal banking and sales as electronic funds transfer at point of sale (EFTPOS) equipment begins to be installed in addition to the automated teller machines which are now widespread. In the financial institutions of the City of London computerised information is now fundamental to the working of many of the markets and in the Stock Exchange computers have become integral to the dealing and regulatory systems.

British firms are also advanced in the forefront of technical innovation in the aerospace industry, especially in the application of electronics. In the pharmaceuticals sector, four of the five best-selling drugs in the world in 1985 were discovered in British laboratories. In the field of medical technology British companies and hospitals have been among the leaders in applying techniques such as magnetic resonance imaging and laser surgery. Biotechnology has gained a new impetus from research achievements in genetic engineering and cell fusion. The Department of Trade and Industry and other government bodies are encouraging the exploitation of new developments. A Biotechnology Unit at the Laboratory of the Government Chemist is the focus for government co-operation with industry.

The British Technology Group (BTG) promotes the industrial application of developments of all kinds made in public sector research institutions and universities (see p 233). Some of the major technical achievements which it has exploited or supported are cephalosporin antibiotics, pyrethroid insecticides, glass-reinforced cement, carbon fibres and advanced integrated circuits.

Research and Development

Industrial expenditure on research and development in 1985 was £5,146 million, of which £1,193 million came from government sources, £575 million from overseas and £3,377 million from other sources (mostly from private sector companies themselves). The main areas of expenditure were electronics (£1,738 million), chemicals and allied products (£941 million), aerospace (£845

million), mechanical engineering (£269 million), and motor vehicles (£372 million).

Estimated outturn figures for government-funded research and development in 1985–86 include: Ministry of Defence, £2,388 million; Department of Trade and Industry, £367 million; Science and Engineering Research Council, £285 million; Department of Energy and United Kingdom Atomic Energy Authority, £224 million; Ministry of Agriculture, Fisheries and Food, £122 million; Agricultural and Food Research Council, £48 million; Medical Research Council, £122 million; Natural Environment Research Council, £65 million; and Department of Transport, £25 million.

The Government has sponsored a major programme in advanced information technology, known as the Alvey programme, which comprises research projects involving collaboration between industry, academic institutions and other research organisations. The programme runs over the years 1983-88 with a total budget of £350 million, over half of which is being provided by the Government. The four main areas of research are software engineering, man-machine interfaces, very large-scale integrated circuits and intelligent knowledge-based systems. By June 1986, 95 per cent of the funds had been committed to 187 projects involving industrial firms and universities and 116 collaborative schemes with no direct industrial participation. Altogether, 108 firms, 53 universities, 11 polytechnics and at least 20 research establishments are involved in the programme. The European Community's research programme into the development and application of information technologies, the European Strategic Programme of Research into Information Technology (ESPRIT), has a budget of 1,500 million ECUs¹ (£1,030 million) for the five years 1984-89, of which 50 per cent will be provided by the Community. British companies are participating in 179 of the 219 projects.

The BRITE programme (Basic Research in Industrial Technology) is a Community project designed to encourage collaborative research into applications of advanced technology in some of the more traditional industries. Nearly 100 British firms and educational and research organisations are involved in 51 of BRITE's 99 projects. It has a budget of 125 million ECUs (£85 million) over the four years 1985–88.

The European Community's Research in Advanced Communications for Europe Scheme (RACE) aims to lay the groundwork for broadband optical fibre communications systems. Britain was represented in 26 of the 32 collaborative research and development projects in RACE's first phase in 1986.

British companies are participating in 40 of the 108 projects in the Eureka programme, which aims to encourage European co-operation in the development and production of high technology products with global sales potential, and which has the support of 18 European governments and the European Commission.

Management Education

Management education is provided by all the polytechnics and many colleges of further education, while Regional Management Centres have been established in England and Wales by associations of some of these colleges, with some similar organisations in Scotland. Universities make an important contribution, especially through the full-time postgraduate programmes at business schools such as those of London, Manchester, City, Durham and Strathclyde universities. Training courses for managers are offered by several independent colleges, including the Management College (Henley-on-Thames), Ashridge College (Berkhamsted) and the Cranfield School of Management (Bedford). Open

¹ ECU = European Currency Unit, based on a 'basket' of national currencies including sterling, the value of which is recalculated daily.

and distance learning opportunities are becoming more widely available. The British Institute of Management, which aims to encourage excellence in management, has a particular interest in management training. There are a number of other professional bodies concerned with standards and training in specialised branches of management.

Engineering The Engineering Council was established under Royal Charter in 1981. Its Council objectives are to promote the science and practice of engineering and to advance education in engineering. The Council maintains a register of 300,000 chartered engineers, technician engineers and engineering technicians. In co-operation with the various professional institutions and other organisations concerned with training in engineering, it has set standards for education, training and experience, and accredited courses by which people qualify for registration. The council is advised by 170 industrial affiliates, who are employers of engineers, on industrial requirements for engineers and technicians.

Vocational

Technical and A well-trained workforce is essential for economic growth, and recent technological advances have created a need for an even greater quantity, range and Training quality of technical and vocational training, both for young people and for adults. The main responsibility for training rests with employers and individuals. The Business & Technician Education Council (BTEC), a privately funded body, deals with the education and training of technicians and their equivalents in the professions and commerce, by designing syllabuses and validating courses offered at colleges of further education and elsewhere in England and Wales; its Scottish counterpart is the Scottish Vocational Education Council. The BTEC is working with the Engineering Council and the Engineering Industry Training Board to co-ordinate their systems of assessing and certifying the skills of those receiving technician education and training, and with the City and Guilds of London Institute to develop the pre-vocational courses of the two organisations into a more coherent and comprehensive system. The National Council for Vocational Qualifications (NCVQ) was set up as a limited company by the Government in 1986 to design and implement a new national framework for vocational qualifications with agreed standards of occupational competence. Working with and through the established examining and awarding bodies, the NCVQ will give accreditation to various qualifications, which will carry an insignia to show this. Initially a framework with four defined levels of occupational competence will be operated.

The Government is increasing its responsibility for some aspects of training. It is estimated to have spent some £450 million on this in 1979–80, rising to over £1,500 million in 1986–87. The Manpower Services Commission (MSC), which consists of representatives of employers, unions and local authority and educational interests, is the main agency through which the Government institutes action and monitors progress in training. Its main scheme is the Youth Training Scheme, which offers a course of planned work experience integrated with off-the-job training for unemployed 16- or 17-year-old schoolleavers. The scheme provides two years of training for 16-year-olds and one year for 17-year-olds, leading to a recognised qualification. The Technical and Vocational Education Initiative aims at providing four-year courses with a strong technical and vocational element in schools and colleges for 14- to 18-year-olds. Following successful pilot projects this will be expanded into a national scheme from the autumn of 1987.

The Department of Education and Science announced plans in 1986 to set up technology colleges in urban areas to provide a broadly based secondary education with a strong technological element.

The aim of the Government's adult training strategy is to encourage employers

and others to give adult training a high priority and to secure an adequate supply of people with up-to-date skills. The MSC's adult training schemes are grouped into two main programmes—the Wider Opportunities Training Programme, a broad-based series of schemes aimed at enhancing unemployed people's employability, and a Job-Related Programme which aims to enhance the skills of both employed and unemployed people, including the Job Training Scheme, which trains unemployed people in skills for which there is a known local labour demand. The MSC is also encouraging the use of open learning methods (using video and tapes) on all training courses, and is establishing the Open College which, beginning in September 1987, will broadcast vocational courses below degree level. In 1986–87 the MSC's adult training schemes helped about 420,000 people.

Education departments' PICKUP schemes, which include updating training for adults working with new technology, are to be expanded in 1987–88, and a national network of New Technology Centres is to be set up in partnership with the industry departments and the MSC.

The Open University, which provides degree courses using distance learning techniques, notably television broadcasts, has set up the Open University Business School, which offers part-time courses leading to a diploma in management. The School, which is strongly supported by the British Institute of Management, has been used by over 2,000 companies and organisations since it opened in 1983. Managers continue to work while studying, which is of particular use to those small companies which cannot afford to release staff on a full-time basis.

'Industry Year 1986', launched by the Royal Society of Arts with the aim of changing attitudes to industry, is continuing under the title 'Industry Matters'. The campaign, which the Government strongly supports, has been particularly successful in establishing links between companies and schools.

Design Good design is seen as crucial for maintaining and improving the quality and competitiveness of goods and services; the Department of Trade and Industry gives priority to its campaign to encourage greater awareness in industry and commerce (among both producers and customers) of the value of good design. It organises conferences to underline the importance of design and has taken steps to include design education in the school system and widen awareness of design in business schools. Advice and assistance on design matters are available from the government-sponsored Design Council. The Design Council has centres in London, Cardiff and Glasgow, and its operations include giving advice on design problems; the organisation of product displays at overseas trade fairs, conferences and seminars on design; providing help for design education; and the production of a range of publications. A funded consultancy scheme, operated by the Design Council on behalf of the Government, offers firms employing up to 500 people a maximum of 15 working days' consultancy at subsidised rates. The Council provides annual awards for consumer and contract goods, engineering products and components, computer software, medical equipment, and motor vehicles and accessories. The Society of Chartered Designers is the representative professional body in Great Britain of industrial designers.

Quality and Standards

An important aim of government policy is to encourage industry and commerce to recognise the importance of quality and of the use of standards. The objective is to enhance the quality of British goods and services by encouraging an integrated approach to quality at all stages of design, production, marketing and delivery to customers. The National Quality Campaign, launched in 1983, aims at increasing the competitiveness of British industry. Through the Business and Technical Advisory Service (see p 236) the Government is helping small and medium-sized firms to learn about and apply quality-management techniques based on a national standard. To increase customer confidence, companies are being encouraged to obtain certification to the national standard. The National Accreditation Council for Certification bodies was set up to assess and officially approve the competence and performance of organisations undertaking such certification.

The British Standards Institution (BSI), a voluntary body which is responsible for standards-making nationally, works with industry and government to produce standards which are of the required quality, relevant to the needs of the market, internationally respected, and suitable for public purchasing and regulatory purposes. With government support, the BSI has become increasingly involved in international standards-making; the new approach under the European Standards Initiative will contribute to the aim of creating a single internal market in the European Community by 1992. About a quarter of the 10,000 British Standards are now identical with international standards. In 1987, Resource, a joint venture by the BSI and the Government, was launched to promote collaboration with overseas countries in standards, quality assurance, metrology and testing.

Measurement Standards

The National Physical Laboratory (NPL), a research establishment of the Department of Trade and Industry, is responsible for providing the measurement standards and calibration facilities necessary to ensure that measurements in Britain are made on a common basis and to the required accuracy. It maintains links with national standards laboratories all over the world to ensure international compatibility in measurements essential for overseas trade and technological co-operation. Based within the NPL, the National Measurement Accreditation Service (NAMAS) provides a focal point for the voluntary accreditation of calibration and testing facilities in Britain. It forms a link between the national standards maintained by the NPL and accredited measurement laboratories, including those servicing manufacturers and other producers, contractors, regulating bodies, quality assessment and product certification schemes, the Government, the health service and consumer bodies. NAMAS accredited laboratories offer calibration of scientific instruments and provide official certificates for electrical, mechanical, flow, optical, pressure, thermal and time measurements. Another NPL function is to carry out research in scientific and technological areas of national importance, such as engineering materials and information technology. The aim is to stimulate the exploitation of such technologies by British industry and to provide information for incorporation in new specification standards.

The National Weights and Measures Laboratory, also part of the Department of Trade and Industry, is responsible for administering the Weights and Measures Act 1985, which is largely concerned with standards and measuring equipment for use in trade. In 1984 the Government appointed a committee to review the metrological control of weighing and measuring equipment for commercial use taking account of the impact of modern technology and trading conditions; the Government has accepted many of its recommendations, including the introduction of a 'self-verification' scheme for approved manufacturers.

GOVERNMENT AND INDUSTRY

The Department of Trade and Industry is the department chiefly responsible for relations between the Government and industry. It is responsible for oversight of certain nationalised industries, for industrial science, technology and research, for industrial policy and assistance, for overseas trade and export promotion, for competition policy and consumer affairs, for company legislation and for the

Patent Office. In support of these activities it collects comprehensive statistics through the Business Statistics Office.

The aim of the Government's industrial policy is to increase the national production of wealth and promote and enhance the vitality and competitiveness of British trade and industry, within a proper regulatory framework. The heart of the policy is the control of inflation as the basis for sustained economic growth and the creation of a social and economic climate conducive to enterprise and initiative. To this end the Government is reducing the extent of state ownership, and industrial investment agencies in the public sector have been encouraged to secure private sector participation in their projects. Competition policy has been strengthened and other measures have been introduced to promote efficiency and competitiveness, including campaigns to enhance standards and quality assurance, to lay greater emphasis on training and skills, to increase links between industry and education and to remove unnecessary controls on companies. An Enterprise and Deregulation Unit has been set up within the Department of Trade and Industry, and the Government is also encouraging the development of small businesses by reducing their administrative burdens, adjusting taxation and other policies.

Successive governments have aimed to provide an environment favourable to industrial expansion. In the case of industrial plant and machinery there is an annual allowance against profits for tax purposes of 25 per cent (on a reducing balance basis) beginning in the year in which expenditure occurs. There is an allowance for investment in industrial property of 4 per cent a year (on a straight-line basis). Special arrangements exist for short life (usually high technology) assets. There is a 100 per cent allowance for scientific research. Progressive reductions in the main rate of corporation tax have been brought into effect as a result of the 1984 Budget.

The Department of Trade and Industry's schemes of assistance to industry and commerce are grouped under four headings: support for innovation; support for national and regional investment; business and technical advisory services; and support for exports. The Department's total spending (over £1,250 million in 1986-87) is to be reduced over the years up to 1989-90, mainly through cuts in support for nationalised industries and in regional and general industrial support. The Scottish, Welsh and Northern Ireland Offices also provide elements of industrial support. Various other government departments or agencies in the public sector provide aid, either for defined activities (such as agriculture, energy production, transport and tourism) or for specific geographical areas. The latter include inner urban areas, for which the Government has schemes of social and economic regeneration; enterprise zones—areas in which, as an experiment, economic activity is relieved of certain tax burdens and administrative controls; and freeports (also experimental) in which traders are freed from certain customs requirements. This national industrial assistance is supplemented by assistance from European Community funds (see p 237). Direct investment from overseas is encouraged, overseas firms generally being offered the same facilities and incentives as British-based companies.

Inward Investment The Department of Trade and Industry's Invest in Britain Bureau provides foreign companies with advice and assistance on all aspects of locating and relocating businesses in Britain, and on expanding existing facilities. The Bureau reported 322 new inward investment projects in 1986. Britain has for many years been the leading country for United States manufacturing investment in Europe and at the end of 1985 total US investment in Britain was valued at \$US 34,000 million (about £23,500 million), representing over 40 per cent of total US investment in the European Community. Britain has attracted around thirty per cent of all Japanese investment in the European Community since

1951 and total direct Japanese investment has reached an estimated \$US 3,200 million.

Industrial Recognition of outstanding industrial performance is conferred annually by The Awards Queen's Awards for Export and Technology. The Queen's Awards are granted on the recommendations of a committee, which includes senior representatives from industry, commerce, the trade unions and government departments. All firms incorporated in Britain are eligible to apply, regardless of size and the products or services they provide. Other awards include the Export Awards for Smaller Manufacturers (for firms employing fewer than 200 people) and the MacRobert Award, the major award for engineering in Britain (made by the Fellowship of Engineering for successful technological innovation).

Nationalised The major nationalised industries are: the electricity supply industry (including Industries the Central Electricity Generating Board and 12 area electricity boards in England and Wales); the ten regional water authorities; British Coal; the British Steel Corporation; British Rail; and the Post Office. In total the industries account for around 5.7 per cent of GDP and employ about 3.8 per cent of all employees.

The managing boards and staffs of the nationalised industries are not civil servants although they are responsible to ministers who appoint the chairman and members of each board. Ministers are responsible for agreeing with the industries their general strategies and have the power to give general directions as to how the industry should be run, but do not interfere in day-to-day management. The Government's policy is to encourage the nationalised industries to behave as far as possible as commercial enterprises, and this is carried out through the financial framework, set by the Government, within which the industries are expected to operate. This is designed also to integrate the industries' medium-term commercial aims with the requirements of government policy on the management of the economy. The main elements of the framework are: clear government objectives for the industries; regular corporate plans and performance reviews; systematic monitoring; agreed principles relating to investment appraisal and pricing; external financing limits; and financial targets and performance aims.

To ensure that nationalised industry investment earns an adequate economic return, there is a 'required rate of return' which investment programmes are expected to achieve. The current rate is 5 per cent in real terms before tax. Financial targets are set for individual nationalised industries to give them a framework similar to those of private sector companies which need to earn profits. They are supported by a series of performance aims, covering costs and standards of service, which are considered particularly important for industries with some monopoly power where financial targets would not automatically impose pressures for operating efficiency. External financing limits, which control the amount of finance (grants and borrowing) that a nationalised industry can raise from external sources in any financial year, are an important short-term operating control. They are set in the light of a nationalised industry's financial target and its expected performance and investment requirements. Nationalised industries are planning to finance a greater proportion of investment from internally generated funds.

External scrutiny of nationalised industry efficiency is conducted by the Monopolies and Mergers Commission (see p 238), which carries out a number of investigations each year at the instigation of ministers. Where appropriate, investigations may also be undertaken by management consultants. Nationalised industry matters are also considered by parliamentary committees such as the Treasury and Civil Service Committee and the Public Accounts Committee.

Privatisation

The Government believes that reform of the nationalised industries is essential to economic recovery, and that the best way to improve performance in the long term is to expose the industries to market forces, through privatisation and the promotion of competition. Privatisation also provides a major opportunity for the Government to pursue its policy of widening share ownership, encouraging both employees and the general public to take a direct stake in British industry. Since 1979 the Government has mounted 16 major public offers of shares, with net proceeds of some £17,500 million, and this has led to a substantial increase in the proportion of shareholders (estimated at 19.5 per cent in mid-1987 compared with 7 per cent in 1979). Businesses which have been privatised include British Aerospace, British Airways, British Gas, British Telecom, Cable and Wireless, the National Freight Consortium, Amersham International, Jaguar, Enterprise Oil, Britoil, Associated British Ports, Rolls-Royce, BAA (formerly the British Airports Authority), a number of subsidiaries of the National Bus Company and British Shipbuilders' warship-building yards. Many other state enterprises have also been sold and about 655,000 jobs have been transferred to the private sector. Planned privatisations include the remaining subsidiaries of the National Bus Company and a number of water supply authorities. To stimulate efficiency, the Government has relaxed the statutory monopolies of a number of nationalised industries.

Support for Innovation

Expenditure on research and development supported by the Department of Trade and Industry is aimed at encouraging firms to undertake innovations which promise high returns and to increase their investment in research and development, and at securing more effective exploitation of national and international advances. Emphasis is given to key technologies and collaborative work. Projects receiving support are being carried out increasingly in collaboration with higher education; other work is done at research associations and in government research establishments. The Department's research establishments are the National Physical Laboratory (responsible not only for measurement standards, but also for research and development in related fields of national importance, including the properties of industrially important materials, and information technology), the National Engineering Laboratory (research and development in mechanical engineering, including manufacturing systems and robotics, materials applications, fluid power, pumps, fans and heat exchangers, and structural analysis and testing), the Warren Spring Laboratory (control engineering, materials handling, metal extraction, mineral processing, waste materials processing and environmental technology), and the Laboratory of the Government Chemist (analytical services mainly to central and local government, public institutions and international

'Support for Innovation' is the Department of Trade and Industry's general facility for providing selective financial support for research and development projects leading to new products and processes and for longer-term applied research projects. In 1986–87 the Department is estimated to have spent some £390 million on scientific and technological assistance (project support, advisory services, awareness programmes, high technology investment schemes, aerospace, and research establishments). The Department is advised by a Technology Requirements Board and a number of advisory committees of senior industrialists and academics on the overall allocation of its resources to particular technologies and industrial sectors.

The Advisory Council for Applied Research and Development, whose membership includes academics, industrialists and trade unionists engaged in all aspects of research and development in a wide variety of industrial sectors, is a source of independent advice to ministers collectively on applied research and

development in both the public and private sectors, on the linkage between this research and scientific research supported by government departments, on the development and application of technology, and on the role of Britain in international collaboration in such activities. The Council has published a number of reports on various technologies and the exploitation of scientific developments. It is served by a secretariat in the Cabinet Office.

British Technology Group

The objective of the British Technology Group (BTG) is to promote the development of new technology into commercial products, particularly where the technology originates from public sector sources, such as universities, polytechnics, research councils and government research establishments. It offers to take responsibility for protecting and licensing inventions from these sources, provides funds for development, seeks licensees and negotiates licence agreements with industry. As part of its technology transfer role it can also offer companies up to 50 per cent of the cost of developing new products and processes based on new technology. The BTG approaches transactions on a commercial basis and expects to recover its investment by means of a percentage levy on sales of the resulting product or process.

The BTG currently has a portfolio of 1,715 British patents and patent applications, over 600 licensees in Britain and overseas, 427 development projects at universities and other public sector institutions, and 237 projects with industrial companies. Its licensing activities provide more than 80 per cent of its income.

In cases where a particular technology requires the setting up of a new company, the BTG can perform a catalytic role in launching start-up companies.

Support for Investment

In 1986–87, the industry departments in Great Britain spent £46 million on national selective assistance, £513 million on regional development grant and £123 million on regional selective assistance.

National Selective Assistance The Department provides investment support for major projects which are judged to have exceptional national benefits and which would not proceed without assistance. The Department also operates schemes of selective assistance to support investment in microelectronics, fibre optics and optoelectronics and advanced manufacturing technology.

Guarantees are provided for the repayment of loans and interest incurred in the purchase of new ships and mobile offshore installations built in Britain.

Regional Development

Economic imbalance between different parts of the country is due partly to the steady decline over the years, in certain regions, of older industries, such as coal, steel, shipbuilding and textiles, and partly to the tendency of many newer and expanding industries to develop elsewhere. Thus the traditional industrial areas, mainly in Scotland, Wales, Northern Ireland and the north of England, have experienced, for many years, higher unemployment rates than regions such as the South East, and have suffered from net outward migration and industrial dereliction. In order to help to restore the economies of the areas of greatest need the Government has provided incentives to encourage industrial development in designated 'assisted areas'. Following a review of policy in Great Britain (Northern Ireland is treated separately), the Government has reaffirmed its commitment to maintain an effective regional industrial policy to ease the process of change in areas which have been dependent on declining industries and encourage the setting up of new businesses there. A new structure of regional industrial incentives, more directly linked to job creation, and a revised designation of the assisted areas, were introduced in 1984.

There are two categories of assisted areas: 'development areas' and 'intermediate areas', with the former being adjudged to have the greatest need for assistance (see map, opposite). Regional development grants are payable for investment in qualifying activities in the development areas, either as a proportion of capital expenditure limited by a cost-per-job ceiling or as an amount for each new job created, whichever is the more advantageous to the investor. Small firms are not, in general, subject to a cost-per-job ceiling. Nearly all manufacturing industries and some service industries are eligible for regional development grants. In addition, regional selective assistance may be payable to manufacturing and certain service sector projects that create or safeguard employment throughout the assisted areas.

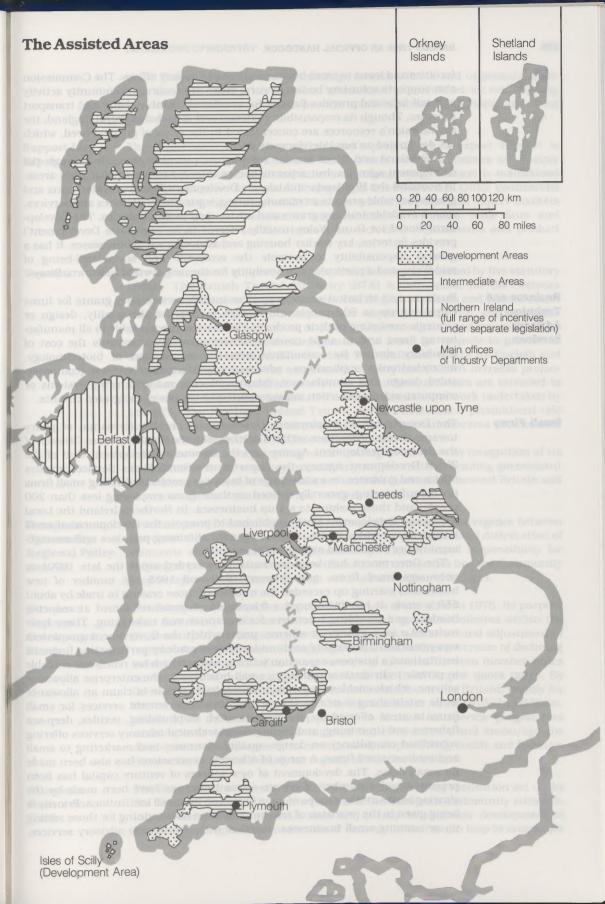
The Government provides factories and workshops where the private sector is unwilling to invest in them. Special grants are available towards the improvement of the infrastructure in the assisted areas and towards the clearance of derelict land.

The Department of Trade and Industry takes the lead in the formulation of regional industrial policy and administers the regional development grant and regional selective assistance schemes in England. The Welsh and Scottish Offices administer these schemes in their respective countries. Factories in the assisted areas are provided, often in association with the private sector, by the government-funded English Industrial Estates Corporation (known as English Estates), and by the Scottish and Welsh Development Agencies.

Northern Ireland The Industrial Development Board, formed in 1982 under the aegis of the Northern Ireland Department of Economic Development, offers a range of incentives similar to those available in the assisted areas (in some cases at higher rates). Incentives automatically available to manufacturing industry include grants of up to 20 per cent of the cost of new fixed assets, training grants, grants for key workers moving to Northern Ireland and exemption from local authority rates (local property taxes) for manufacturing premises. Manufacturing and service industry projects which create jobs may be eligible for grants of up to 50 per cent of the cost of new fixed assets, interest relief grants. favourable rental terms for factories, and grants to assist with setting-up costs and research and development costs. The Board can also provide equity and loan capital for new and expanding businesses, assist the development of new high-technology products and processes, and promote joint ventures with overseas companies. Other incentives include corporation tax relief of up to 80 per cent for certain new projects; 30 per cent grants for approved energy conservation projects; grants to attract and retain good management; and an advisory service on production methods.

Development Agencies Government regional policies have been aimed at encouraging new industries in order to offset the decline in traditional activities. Accordingly the Scottish and Welsh Development Agencies promote industrial development in their respective countries. They encourage investment by overseas companies, provide equity and loan capital for industrial projects (which they are expected to do with a maximum of private sector participation), provide government factories, and have powers to assist small firms and undertake land reclamation.

Rural Industries The Development Commission is responsible for promoting the economic and social development of rural England. It provides small factories and workshops which are built and managed by English Estates, and administers a grant scheme for the conversion of redundant buildings to industrial or commercial premises. The Commission's main agency, the Council for Small Industries in Rural Areas, provides technical, management and financial advice, training



facilities and loans to small businesses from 31 county offices. The Commission also supports voluntary bodies in rural areas to encourage community activity and self help and provides finance for small-scale rural housing and transport schemes. Though its responsibility extends over the whole of rural England, the Commission's resources are concentrated in the areas of greatest need, which are designated as rural development areas.

In Scotland and Wales similar services are provided generally through the development agencies, but separate bodies cater for two particular rural areas. In Scotland the Highlands and Islands Development Board provides loans and grants for viable projects in manufacturing, agriculture, fisheries and services, makes available training grants and advice, and builds factories. The Development Board for Rural Wales (usually referred to as 'Mid-Wales Development') provides factories, key worker housing and advice for small businesses. It has a general responsibility to promote the economic and social well-being of mid-Wales and a particular responsibility for the new town of Newtown, Powys.

Business and Technical Advisory Services Business and technical advisory services include consultancy grants for firms employing up to 500 people which wish to improve the quality, design or strategic marketing of their products. Grants are also available to all manufacturing firms and in some cases to service companies, towards the cost of feasibility studies by consultants into the exploitation of biotechnology, microelectronics applications, advanced manufacturing systems (computer-aided design and manufacture, robotics, flexible manufacturing systems or computer-aided production management) and the use of integrated circuits.

Small Firms

The Department of Employment is responsible for the formation of policy towards the small business sector. Together with the Small Business Division of the Scottish Development Agency and the Business Development Unit of the Welsh Development Agency, the Department's Small Firms Service provides advice and guidance on a wide range of business problems affecting small firms (in manufacturing, generally defined as those firms employing less than 200 people) and those seeking to set up businesses. In Northern Ireland the Local Enterprise Development Unit, established to promote the development of small industries, provides grants, loans, help with obtaining premises and management advice to new and expanding companies.

The Government has been particularly concerned since the late 1970s to encourage small firms, and between 1983 and 1985 the number of new businesses starting up exceeded the number of those ceasing to trade by about 550 a week. It has introduced a framework of measures aimed at reducing burdens and providing incentives for enterprise and risk-taking. These have included a loan guarantee scheme, under which the Government guarantees repayment of 70 per cent of medium-term loans made by participating financial institutions; a business expansion scheme, under which tax reliefs are available to private individuals investing in small businesses; the enterprise allowance scheme, which enables longer-term unemployed people to claim an allowance while establishing a new business; business improvement services for small firms in areas affected by job losses in steel, shipbuilding, textiles, deep-sea fisheries and tin-mining; and business and technical advisory services offering subsidised consultancy on design, quality assurance and marketing to small and medium-sized firms. A range of other tax concessions has also been made for small firms. The development of new sources of venture capital has been promoted and a number of private sector initiatives have been made by the clearing banks and by groups of large firms and financial institutions. Priority is being given to the provision of relevant and accessible training for those setting up or running small businesses, together with appropriate advisory services.

Local Enterprise Agencies, partnerships between firms and organisations in both the public and private sectors, which exist to provide advice and training for small businesses and also provide small business workshops, are being encouraged.

Support for Exports

The Department of Trade and Industry's programme of export support is directed by the British Overseas Trade Board, whose members are mainly business people with practical knowledge of exporting. Liaison is maintained with the extensive network of Foreign and Commonwealth Office commercial staff overseas. Services provided include advice on individual export markets and opportunities, assistance for exhibitors at overseas trade fairs and specialist advice on tariffs, regulations, technical requirements and product approval procedures.

Tourism

Direct government support for the tourism industry is provided by five statutory bodies. The British Tourist Authority (BTA) is responsible for the overseas promotion of tourism to Great Britain. The English, Scottish and Wales Tourist Boards, which promote tourism in their respective countries, encourage the development and improvement of tourist accommodation and amenities, and administer grants, interest relief grants, and loans for projects to provide or improve tourist amenities. The Scottish Tourist Board, unlike its English and Welsh counterparts, is also empowered to carry out its own overseas promotional activities in consultation with the BTA; these activities are intended to supplement, rather than replace, the overseas promotional work undertaken by the BTA. The Northern Ireland Tourist Board (NITB) has a promotional role similar to that of the other boards; the BTA carries out overseas promotional activities on behalf of the NITB on an agency basis.

The Government is providing extra funding for tourism in recognition of its contribution to the economy, particularly in job creation. Leading government objectives are to spread the benefits of tourism more widely around Britain and to encourage the extension of the tourism season.

European Community Regional Policy and Aid

The European Community seeks to increase the degree of convergence between the economics of member states and to ensure a more balanced distribution of economic activities within the Community. The principal responsibility for helping depressed areas remains with national authorities but the Community may complement schemes through aid from a number of sources.

European Regional Development Fund The European Regional Development Fund was established in 1975. Its purpose is to contribute to the correction of the main regional imbalances within the Community by participating in the development and structural adjustment of regions whose development is lagging behind and in the conversion of declining industrial regions. The Fund's resources are allocated between member states on the basis of quota ranges; Britain has the third largest quota range. By December 1986 about £2,290 million had been allocated to Britain, mainly for the assisted areas (see p 233) and Northern Ireland, since 1975. In addition, about £156 million has been allocated to Britain for specific programmes running over several years to improve the environment and encourage the development of employment in certain steel, shipbuilding, textile and fisheries closure areas and in the border regions of Northern Ireland.

European Investment Bank The European Investment Bank (EIB) is a self-governing institution set up by the Treaty of Rome with member states of the European Community subscribing to its capital. The Bank's aims are to help to stimulate development in less-favoured regions, to modernise or convert industries, to help to create new activities and to offset structural difficulties affecting certain sectors. The EIB also serves projects of common interest to several member states or the Community as a whole. It has loaned nearly £5,200 million since 1973 for projects in Britain, mostly for public works such as the Sullom Voe oil terminal, and manufacturing projects in the assisted areas.

European Coal and Steel Community The European Coal and Steel Community (ECSC) provides loans and grants to encourage rational distribution of production and a high level of productivity in the coal and steel industries while safeguarding employment and avoiding unfair competition. Areas eligible for aid are coal industry projects, conversion schemes, construction of housing for workers, allowances for redeployed workers and research, including research of a social or medical nature. Exchange risk cover may be provided by the Government on certain ECSC loans for projects qualifying for regional selective assistance. The British borrower takes on only a sterling liability.

COMPETITION
POLICY AND
CONSUMER
PROTECTION

A major feature of the Government's economic policy is the stimulation of competition and the control of practices which are restrictive or anti-competitive. Linked to this policy is the encouragement of fair trading, with the particular aim of helping consumers and safeguarding their rights. The Parliamentary Under-Secretary of State for Corporate and Consumer Affairs, who is answerable to the Secretary of State for Trade and Industry, has special responsibilities for competition policy and consumer affairs (although certain matters, such as safety of foodstuffs and road vehicles, are the concern of other departments). The Office of Fair Trading, a government agency headed by the Director General of Fair Trading, has various executive responsibilities relating to competition policy and consumer protection.

Competition Policy

Competition policy is supported by machinery for scrutinising and regulating monopolies, mergers, anti-competitive practices and restrictive trade practices, and by powers to regulate any structural changes or anti-competitive practices which operate against the public interest. The Director General of Fair Trading administers the Fair Trading Act 1973, which deals with monopolies and mergers, the Restrictive Trade Practices Act 1976, which deals with restrictive trading agreements, the Resale Prices Act 1976, which deals with minimum resale price maintenance, and the Competition Act 1980, which deals with anti-competitive practices. The Financial Services Act 1986 gives the Director General further responsibilities. In 1986 the Government began a review of law and policy on mergers and restrictive trade practices.

The Government is working to increase competition in professional services, through relaxation of unjustifiable restrictive practices including restrictions on fee scales and on advertising. Measures are being taken to improve competition in conveyancing. The opticians' monopoly on the dispensing of spectacles was ended in 1984, and certain professional groups (for example, accountants, solicitors and veterinary surgeons) have eased restrictions on advertising by their members. Building societies are now allowed to offer a greater range of services than in the past, which is bringing more competition to the fields of financial services and estate agency.

Monopolies and Mergers The Government believes that most mergers have a 'market rationale' and in most cases does not wish to intervene. However, it recognises the need to control mergers which would result in excessive market shares; this is provided for by the Fair Trading Act 1973.

The Secretary of State for Trade and Industry and the Director General of Fair Trading can refer monopolies for investigation by the Monopolies and Mergers Commission, an independent body whose members are drawn from a variety of doesn't recommend a backgrounds, including lawyers, economists, industrialists and trade unionemployees add guists. The legislation defines a monopoly as a situation where at least a quarter of a particular kind of goods or service is supplied by a single person or a group of connected companies or by two or more people acting in a way which prevents, restricts, or distorts competition. Local monopolies can also be referred to the Commission, and the Secretary of State can refer public sector industries. If the Commission finds that a monopoly operates against the public interest, the Secretary of State for Trade and Industry has powers to take action to remedy or prevent the harm which the Commission considers may exist. Alternatively the Director General may be asked to negotiate undertakings to remedy the adverse effects identified by the Commission.

Proposals for a merger (defined as occurring when two or more enterprises are brought under common ownership or control) may be referred to the Commission by the Secretary of State for Trade and Industry, taking account of advice from the Director General, if the merger would result in or intensify a monopoly whombs was dollar or if the total value of gross assets to be taken over would exceed £30 million. If second established the Commission finds that a merger or proposed merger may be expected to and the public interest, the Secretary of State can prevent it from taking place or ask the Director General to obtain undertakings to remedy the adverse effects identified; or, if it has already taken place, he can require it to be reversed. There are special provisions for newspaper mergers.

mollipsiend and The Government makes reference decisions primarily on competition grounds; and, in evaluating the competitive situation, it has regard to the extent of competition in the domestic market from overseas sources and to the competitive position of British firms in overseas markets.

Anti-Subject to limited exemptions, the Director General can investigate any competitive business practice (whether in the public or private sectors) which may restrict, Practices distort or prevent competition in the production, supply or acquisition of goods or services in Britain. If the Director General concludes that a practice is anti-competitive he may either accept an undertaking from the business responsible for the practice or, in default of such an undertaking, refer the matter to the Commission to establish whether it operates against the public interest. On an adverse finding by the Commission, the Secretary of State has powers to take remedial action.

The Public

The Competition Act empowers the Secretary of State to refer to the Monopolies Sector and Mergers Commission any questions concerning the efficiency and costs of, the service provided by, or the possible abuse of a monopoly situation by, certain bodies in the public sector. It is intended that at least one major examination of each industry should take place every four years.

Trade

Restrictive Under the Restrictive Trade Practices Act 1976, certain kinds of restrictive trading agreements have to be notified to the Director General of Fair Trading Practices for registration. Broadly, an agreement is registrable if two or more people who are party to it supply goods or services in Britain and accept some limitation on their freedom to make their own decisions about matters such as prices or conditions of sale. Failure to register an agreement within the required period means that the restrictions are void and the parties may be liable to legal proceedings. Once an agreement has been registered, the Director General is under a general duty to refer it to the Restrictive Practices Court, and the Court must declare the restrictions in it contrary to the public interest unless the parties can satisfy the Court by reference to criteria laid down in the Act that this is not the case. Restrictions declared contrary to the public interest are void,

and the Court can order the parties not to give effect to them or make any similar agreement. In practice, however, the great majority of agreements never reach the Court because, for example, the parties elect to give up the restrictions rather than go to court, or the Secretary of State accepts the Director General's advice that the restrictions are not significant enough to warrant reference to the Court.

Financial Services Under the Financial Services Act 1986 the Director General of Fair Trading is required to report to the Secretary of State for Trade and Industry on the implications for competition of rules, regulations, guidance and other arrangements which regulate investment businesses.

Community

European The objective of the European Community's competition policy is to ensure that there is free and fair competition in trade between member states and that the government trade barriers which the Treaty of Rome seeks to dismantle are not replaced by private barriers which fragment the common market. The competition rules are set out in articles of the Treaty of Rome which are directly applicable to member states and in regulations made under the articles. In most areas of economic activity their enforcement is primarily the responsibility of the European Commission, which has powers to investigate and terminate alleged infringements and to impose fines.

The Treaty prohibits agreements or concerted practices which may affect trade between member states and have as their object, or effect, the prevention, restriction or distortion of competition within the common market. Agreements meeting specified criteria may be exempted from this prohibition and, subject to particular conditions and safeguards, certain categories of agreement are exempted completely: these include agreements in respect of exclusive distribution and purchasing, patent licensing, research and development, and motor vehicle distribution and servicing. The Treaty also prohibits any abuse of a dominant position within the common market or a substantial part of it to the extent that it affects trade between member states.

In 1987 the Commission decided to remove barriers to competition and to the free movement of goods, individuals, services and capital within the Community by 1992.

Consumer Protection In addition to laws designed to benefit customers by providing effective competition, there is a body of legislation whose purpose is to ensure that consumers are adequately protected.

The Fair Trading Act 1973 provides machinery (headed by the Director General of Fair Trading) for the continuous review of consumer affairs, for action to deal with trading practices which unfairly affect consumers' interests and with persistent offenders under existing law, and for the negotiation of self-regulatory codes of practice to raise trading standards. The Director General is also responsible for the operation of legislation which regulates consumer credit and hire business and estate agency work.

The consumer's interests with regard to the purity of foods, the description and performance of goods and services and pricing information are safeguarded by the Food Act 1984, the Medicines Act 1968, the Trade Descriptions Act 1968, the Prices Act 1974, the Unfair Contract Terms Act 1977, the Sale of Goods Act 1979 and the Supply of Goods and Services Act 1982. The marking and accuracy of quantities are regulated by the Weights and Measures Act 1985. The Consumer Credit Act 1974 provides comprehensive protection for consumers who enter into credit transactions. The Consumer Protection Act 1987 implements a harmonised European Community regime of civil law covering product liability; establishes a general criminal offence of supplying unsafe

consumer goods; makes new provisions on misleading price indications; and consolidates powers provided under safety-related Acts.

The Financial Services Act 1986 offers greater protection to investors by establishing a new regulatory framework for the industry.

The European Community's consumer programme covers a number of important topics, such as health and safety, protection of the consumer's economic interests when purchasing goods and services, promotion of consumer education and strengthening the representation of consumers. The views of British consumer organisations are represented by the Consumers in the European Community Group (UK).

Consumer Advice and information on consumer matters is provided to the general public at Advice and local level by the trading standards or consumer protection departments of local Information authorities and in some areas by specialist Consumer Advice Centres. Citizens Advice Bureaux also provide advice to the public on consumer matters.

The independent, non-statutory National Consumer Council (and associated councils for Scotland and Wales), which receives government finance, ensures that the consumer's view is made known to those in government, industry and elsewhere whose decisions affect the consumer's interest. In Northern Ireland the General Consumer Council for Northern Ireland (which became fully operational in April 1985) has wide-ranging responsibilities in the field of consumer protection and consumer affairs in general.

Consumer councils for the energy, rail and other nationalised industries and the privatised gas industry investigate questions of concern to the consumer, while some trade associations in industry and commerce have established codes of practice. In addition, several private organisations work to further consumer interests. The largest is the Consumers' Association, funded by the subscriptions of its membership of 900,000. The Association conducts an extensive programme of comparative testing of goods and investigation of services; its views and test reports are published in its monthly magazines and other publications. The Association provides a legal advice service on subscription. Local consumer groups, many belonging to a national federation, also promote consumers' interests and provide information and advice.

COMPANY The formation and conduct of companies is regulated by the Companies Act LAW 1985. 'Incorporation' involves registering with the Registrar of Companies in Cardiff, Edinburgh or Belfast, depending on whether a company's registered office is in England or Wales, Scotland or Northern Ireland. The Act also deals with capital structure, the rights and duties of directors and members, and the preparation and filing of accounts. Most corporate businesses are 'limited liability' companies. Each company is a legal entity distinct from its members, who are not as such liable for its debts. The liability of members of a limited company is limited to contributing an amount related to their shareholding. In unincorporated businesses, such as sole proprietorships or partnerships, by contrast, individuals are personally liable for any business debts (except where a member of a partnership is a limited liability company).

Companies may be either public or private. A company must satisfy three conditions before it can be a public limited company (plc): it must be limited by shares and have a share capital; it must state in its memorandum of association that it is to be a public limited company; and it must meet specified minimum capital requirements. All other registered companies are, by definition, private companies and, as such, prohibited from offering their shares to the public.

The consolidation of the Companies Acts 1948–83 has been completed and came into force in July 1985; it restates existing law in a clearer and more convenient form, and makes application and interpretation easier for those concerned with the regulation of company affairs. The consolidation resulted in the Companies Act 1985 and three smaller Acts: the Business Names Act 1985, which regulates the names under which people may carry on business in Great Britain; the Company Securities (Insider Dealing) Act 1985, which restates the law on insider dealing; and the Companies Consolidation (Consequential Provisions) Act 1985, which deals with the technical aspects of the consolidation. (Powers to investigate suspected insider dealing were strengthened in the Financial Services Act 1986, and it is proposed to increase the penalties for such dealing.)

The Insolvency Act 1985 affects both corporate and individual insolvency proceedings. It introduced for England, Wales and Scotland a licensing procedure to ensure the professional competence, integrity and independence of people who act as trustees of bankrupt individuals, or as liquidators, receivers or administrators of insolvent companies. The Act also amended and supplemented the legislation relating to the winding-up of limited companies and the appointment of receivers in England, Wales and Scotland. In so doing the Act made substantial changes to parts of the Companies Act 1985. Subsequently these parts were consolidated with the Insolvency Act 1985 into the Insolvency Act 1986 and the Company Directors Disqualification Act 1986. A new framework for dealing with directors of limited companies who are demonstrably unfit to act as such came into operation in April 1986: they can be disqualified from office and, in some cases, held personally liable for a company's debts. It is now also possible for individual and corporate debtors to reach agreements with their creditors without the necessity for formal bankruptcy or insolvency proceedings. The law relating to individual insolvency proceedings in Scotland is now dealt with separately.

In October 1986 the Government announced a range of measures to improve the investigation and prosecution of fraud. A Serious Fraud Office is to be set up to collaborate with police work on fraud cases; restrictions on the use of documentary evidence in court cases are to be relaxed; and court procedures are to be streamlined.

INDUSTRIAL AND INTELLECTUAL PROPERTY

There is a substantial body of legislation designed to secure the rights of the originators of inventions, new industrial designs and trade marks. These matters are administered by the Patent Office, which includes the Design Registry and the Trade Marks Registry. The Patent Office is a division of the Department of Trade and Industry. Protection is also available under the European Patent Convention and the Patent Co-operation Treaty, and benefits may be claimed in other countries by virtue of the International Convention for the Protection of Industrial Property.

The Government is concerned to encourage innovation by providing a more adequate legal and administrative system for the protection of the ownership of ideas by means of patents, registered designs, trade marks and copyright, and to improve awareness of the value of these intellectual property rights and of their accessibility and usage, particularly by individuals and small businesses. In April 1986 it published a White Paper setting out legislative and other proposals covering the whole field of copyright and other aspects of intellectual property, including the future operation of the Patent Office. Legislation to extend copyright protection to owners of computer software was passed in July 1985. The penalties for trading in pirate sound and film recordings (including video) were greatly increased in 1983. In December 1986 a European Community regulation empowering customs authorities to prevent the entry of counterfeit goods bearing false trade marks came into effect. The law on trade marks was extended to include services in October 1986.

12 Manufacturing and Service Industries

The manufacturing and service industries, together with construction, account for about 91 per cent of Britain's gross domestic product (GDP), the remainder being accounted for by energy production and agriculture. As in other developed countries, rising living standards have led to a faster growth of demand for services than for manufactures in recent decades, so that the proportion of GDP accounted for by services has increased steadily and that of manufacturing has fallen. The service industries described in this chapter are the traded ones such as business services, distribution, and travel and tourism. Financial services and large non-traded service sectors such as education, health and public administration and defence are dealt with in other chapters.

Manufacturing

Structure

Manufacturing accounted for some 24 per cent of gross domestic product in 1986 and for a similar proportion of total employment. Around 75 per cent of visible exports consisted of manufactured or semi-manufactured goods, and their value was about twice the value of exports of services.

Most manufacturing is carried out by private enterprise, and though the greater parts of the iron and steel and shipbuilding industries are in public ownership, the Government is reducing the extent of state ownership of industry.

Table 14 shows the number of businesses in manufacturing in 1986. About 44 per cent of those employing over 1,000 people were in engineering and metals and vehicle manufacturing. Within the private sector, the largest 100 companies accounted for 33 per cent of manufacturing employment in 1984. The largest manufacturing concerns (by £ million turnover in the latest financial year) are BAT Industries (12,525), Imperial Chemical Industries (10,725), Unilever (6,495), General Electric Company (5,222), Hanson Trust (4,312), Ford Motor Company (4,045), the British Steel Corporation (3,736), Rover Group (3,415), Thorn-EMI (3,204) and Gallaher (3,095).

Growth

Manufacturing output, output per head and profitability have all risen from the low point of the recession of 1980-81. In 1986 output was 11 per cent higher than in 1981 (see Table 15). Output per head increased by a third between 1980 and 1986—a better record than that of the other major industrialised conomies. Net manufacturing profitability reached $7\cdot2$ per cent in 1986, the highest rate of return on capital for 13 years, the level having risen steadily from $2\cdot0$ per cent in 1981. The severity of the recession was such, however, that by 1986, annual output had not quite regained the position reached in 1979, when the index of output was $109\cdot5$ (1980=100). Part of the improvement in productivity reflects the shedding of labour in the early 1980s which, as in other

Table 14: Manufacturing—Size of Businesses by Turnover and Employment

Turnover size (£'000)	Number of businesses ^a 1986	Employment size	Number of businesses ^a 1986	Employment
19–50 ^b	41,067	1-9	97,527	306,720
51-100	25,315	10-19	17,072	234,448
101-250	27,648	20-49	12,397	382,783
251-500	15,927	50-99	5,512	382,335
501-1,000	11,163	100-199	3,331	464,028
1,001-5,000	13,041	200-499	2,348	714,159
over 5,000	5,272	500-999	829	573,707
	0.15.0	1,000 and over	576	1,816,933
Total	139,433°	Total	139,592°	4,875,113

Source: Size analyses of United Kingdom businesses 1986, Business Monitor PA 1003.

^c These totals differ because of slight variances in computing procedures.

countries, firms were forced to undertake in response to the recession.

Manufacturing employment fell from 7.2 million in 1979 to 5.9 million in 1982. In mid-1986 it was 5.2 million.

Table 15: Indices of Manufacturing Output (1980 = 100)

	Share of output 1980 (weight per 1,000)	1981	1985	1986
Electrical and instrument				
engineering	128	93.9	131.0	129.9
Chemicals and man-made				
fibres	92	99.5	118.9	120.8
Aerospace	29	107.3	105.2	108.9
Metal manufacturing	35	106.0	113.4	110.9
Other minerals and mineral				
products	56	89.0	94.5	96.9
Mechanical engineering	144	89.2	92.0	92.7
Other metal goods	61	92.2	99.4	97.2
Motor vehicles and parts	57	82.9	87.4	82.6
Other transport equipment	22	98.4	79.8	72.8
Food, drink and tobacco	135	98.3	101.0	102.5
Textiles	33	91.8	98.3	98.8
Clothing, footwear and				
leather	38	93.5	105.0	108.0
Paper, printing and				
publishing	91	94.9	98.3	102.6
Other manufacturing	79	91.1	99.8	105.6
Total	1,000	94.0	103.8	104.7

Source: Central Statistical Office.

^a Including companies, public corporations, partnerships, sole proprietors and non-profit-making bodies.

^b The figures are compiled from value added tax returns and exclude businesses with a turnover below the tax threshold (£18,700 in 1984–85, the period to which most turnover figures relate).

The recovery since 1981 has been most notable in chemicals and electrical and instrument engineering, both in terms of output and productivity. Productivity has also grown sharply in metal manufacturing (see Table 16), where there has been extensive reorganisation and modernisation.

Investment in manufacturing tends to be cyclical and 1983 saw the beginning of an upturn following a decline after 1979. In terms of constant (1980) prices fixed investment increased by 35 per cent between 1982 and 1986, though it was still less in 1986 than in 1979. Total fixed capital expenditure at current prices was £9,075 million in 1986, comprising £7,351 million in plant and machinery, £1,150 million in new building work and £574 million in vehicles. Investment by sector is shown in Table 16. In addition, assets worth a further £1,154 million were leased to manufacturers by the financial community.

The underlying level of manufacturing exports has risen in volume terms, on the basis of overseas trade statistics, the index standing at 114 in 1986 (1980=100). This represented a recovery from a low point in 1983 when the index was 95·5. British exporters were particularly affected during the recession by a sharp rise in the exchange value of sterling. With the value of sterling at a lower level in more recent years, manufacturing exports rose to £73,009 million in 1986, on an industry basis, compared with £44,587 million in 1983 and £38,675 million in 1980, at current prices. The leading exports in 1986 were basic industrial chemicals (£4,841 million), aerospace (£4,299 million), data-processing equipment (£3,094 million), telecommunications equipment, electrical instruments and electronic capital goods (£2,920 million), and motor vehicle parts (£2,131 million). The value of exports exceeded that of imports in each of these sectors except for data-processing equipment.

Import volumes rose strongly in the early 1980s, the index reaching 121.5 in 1983 and 148.2 in 1986. Imports were valued at £86,067 million in 1986.

High-Technology Industries The high-technology manufacturing industries in Britain can be defined as falling mainly within electrical, electronic and instrument engineering, chemicals and aerospace. The definition is arrived at primarily by selecting those industries with the highest levels of research and development spending in relation to their gross output. In some cases assessments of the ratio of scientific and technical staff to other staff are also counted.

Most of the electrical and electronic industries count for inclusion: office machinery, electronic data-processing equipment, basic electrical equipment, telecommunications equipment, electric instruments and control systems, radio and electronic capital goods, and components. Within instrument engineering, precision equipment for measuring and checking, and medical, optical and photographic and filming equipment are included. In chemicals the definition covers plastics materials, synthetic resins, synthetic rubbers and pharmaceuticals. Aerospace production as a whole is defined as high-technology.

The high-technology industries have shown strong growth in recent years with levels of output, productivity and exports well above the average for manufacturing. While the output of manufacturing industry as a whole grew by 5 per cent over the period 1980–86, that of high-technology manufacturing sectors rose by 31 per cent.

Take-up of Advanced Technology Utilisation of advanced technology is steadily increasing in all sectors of British industry. It has been estimated that the number of factories using microelectronic devices doubled between 1981 and 1985 to 53 per cent of all firms and 96 per cent of those with more than 500 employees. Microelectronics are applied to about half of all production processes in Britain and the proportion of factories using computer-aided design (CAD) facilities in 1987 is estimated to be 30 per

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THE RESERVE TO SHARE

Manufacturing in Table 16: Output, Employment, Productivity and Investment

134.5 9,075	77.9	5,148	72,921	Total
		544	5,819	Other manufacturing
110:7	94.0	476	7,427	Paper, printing and publishing
	1	300	2,659	Clothing, footwear and leather
131.9	79.1	236	2,284	Textiles
129.3	79.3	552	9,646	Food, drink and tobacco
		269	3,846	Aerospace and other transport equipment
880		252	4,041	Motor vehicles and parts
140.9	73.1	303	3,907	Other metal goods
1183		724	8,985	Mechanical engineering
1,154		761	10,250	Electrical and instrument engineering
126.7 522	9.92	223	3,678	Other minerals and mineral products
184.7	59.8	172	2,780	Metal manufacturing
147.1 1,374	82.2	336	7,599	Chemicals and man-made fibres
Gross domestic fixed capital ludex of output formation per head 1986 (£ million) (1980=100)	Index of In cmployment 1986 F (1980=100)	Employment June 1986 ('000)	Net output (£ million) 1985	

Sources: Central Statistical Office and Department of Employment.

^a Difference between total and sum of component parts is due to rounding.

cent. The number of British firms using robots more than doubled between 1984 and 1986. An outstanding example is the Cable and Wireless company's new submarine cable-laying robot 'CIRRUS', which can work at depths up to 1 km (3,280 ft) controlled entirely by a computer on its mother ship. Many British concerns are also making use of advanced materials, such as carbon fibre composites in the aerospace industry, new types of plastics in the automotive sector and high-fibre cholesterol-free protein in food production.

Among the traditional branches of heavy industry re-equipment and rationalisation has led to significant improvements in productivity in recent years. For example, British Steel's modernisation of its facilities at Port Talbot in south Wales and elsewhere helped the company to make their first net profit for more than a decade in 1985–86 and to raise labour productivity levels above those of its West German and Japanese competitors. The widespread adoption of robots has enabled the motor vehicle industry to become more efficient. This sector spent over 50 per cent more on research and development in 1985 than it did two years earlier.

The Government provides a range of grants to encourage firms to adopt new techniques and materials such as biotechnology, fibre optics and microelectronics. Under the Microelectronics Industry Support Programme £120 million is to be spent by 1990 to ensure that British firms keep up to date with the latest developments in this field. The Government has already offered companies assistance worth more than £38 million under the similar scheme for fibre optics and optoelectronics. Finance is also available to help firms to pay for consultancy work relating to the adoption of Advanced Manufacturing Techniques (AMT) and to its capital cost; £8.5 million was paid out under this scheme in 1985-86. In 1986 the Department of Trade and Industry organised a series of demonstrations in Birmingham to promote the use of computer integrated manufacturing (CIM) techniques and the adoption of Manufacturing Automation Protocol (MAP) and Technical Office Protocol (TOP) standards for communication among computers. In addition to these initiatives to persuade industry to adopt new technology, the Government also provides extensive financial assistance to companies and research organisations seeking to improve that technology.

THE SECTORS
OF MANUFACTURING

The relative sizes of the various branches of manufacturing are shown in the first columns of Tables 15 and 16. Table 16 also shows employment, productivity and investment levels in each industry. A more detailed description of the main branches is given in the sections that follow. The statistics in these sections are supplied by the Statistical Division of the Department of Trade and Industry. Unless otherwise stated, export and sales figures include parts, and export figures include re-exports. The sales figures show the sales of principal products made by each industry, so that they exclude, for example, any non-electronic goods produced by firms classified to the electronics industry. The labour figures show the number of people in employment in Great Britain in mid-1986.

Electrical,
Electronic and
Instrument
Engineering

This group of industries suffered much less than any other manufacturing industries as a result of the world-wide recession of the early 1980s. Output has grown steadily since 1982. The output of electronic data-processing equipment rose by 75 per cent between 1983 and 1986. Advances in microelectronics have meant that the borderlines between office machinery, data-processing equipment, telecommunications equipment and consumer electronic equipment are becoming even harder to define. The high-technology branches of this industry are concentrated in the south east of Britain.

Table 17: Electrical, Electronic and Instrument Engineering

1986	Labour ('000s)	Sales (£ million)	Exports (£ million)	lmports (£ million)
Data-processing equipment	n.a.	3,134	3,094	3,918
Basic electrical equipment	104	2,701	1,452	929
Communications equipment	37	1,742	219	365
Electrical instruments and				
control systems	33	1,360	1,239	991
Radio and electronic capital goods	68	2,783	1,250	867
Electronic components	n.a.	1,580	1,190	1,715
Consumer electrical and				
electronic goods	n.a.	2,298	649	2,214
Instrument engineering	105	2,572	1,230	1,617

n.a. = not available.

The computer sector, which has grown strongly over the past five years, produces an extensive range of computer systems, central processors and peripheral equipment, from large computers for large-scale data-processing and scientific work to mini- and microcomputers for use in control and automation systems and for home, educational and office use. Although the market for computers has begun to level out since 1986, some British electronics firms have continued to experience rapid growth. Companies which have achieved this by producing models using existing technology but at a very competitive price include Amstrad with their new range of low-cost IBM-compatible computers. Other companies have succeeded by developing new products for specialised markets, such as the transputer, produced by lnmos, a Thorn-EMI subsidiary; in effect a computer on a single chip, a transputer can be combined with hundreds of others in parallel to form a machine as powerful as existing 'supercomputers' but at less than a quarter of their price. British firms and research organisations, with government support, are also heavily involved in the development and application of the new family of 'three-five' semiconductor materials, such as gallium arsenide, which will ultimately enable much faster computers to be produced and are already used in a number of microwave devices.

British companies are strongly involved in the development of electronic revenue control equipment, including electronic funds transfer and point of sale equipment. The first large-scale trial of cashless shopping in Britain began in Northampton in October 1985, using equipment manufactured by ICL. Recent export orders include one for integrated store systems for a group of 139 retail stores across the United States. British-made computerised ticketing equipment is being installed throughout British Rail's network.

The main communications products are switching and transmission equipment, telephones and terminals for telex, facsimile and teletext. British Telecom (BT) is the main customer for network equipment and carries out research and development work in co-operation with suppliers. Mercury Communications has been licensed to compete with BT in the provision of network services, while the market for terminals and telephones has been fully liberalised. Innovative work is being particularly stimulated by the expansion of cable television and the growth in value added network services. In 1984, two cellular radio networks began operation. They provide sophisticated telephone services on portable telephones.

One important part of the industry produces transmission equipment and

cables for telecommunications and information networks and other purposes. Its products include submarine and high-specification data-carrying cables. BT, supported by a technically advanced cable industry, has led the way in the development of optical fibre communications systems. In 1986 it opened the world's first international submarine optical fibre link, which has doubled the number of telephone lines between Britain and Belgium. BT has also paved the way for simpler and cheaper optical cables by laying the first non-repeatered cable, over 100 km (62 miles) long, and developing the first all-optical repeater. Well over half of the world's undersea communications cables (of all types) have been made and laid by another British company, STC Submarine Systems, which plans, with its US and French partners, to complete the laying of the first transatlantic optical fibre cable in 1988. Britain also has a world lead in the transmission of computerised data along telephone lines for reproduction on television screens. British Telecom's Prestel service is now capable of transmitting full-colour photographs to domestic television reception quality. Sales of telegraph and telephone apparatus and equipment by British firms more than doubled between 1979 and 1986.

Another expanding sector of the industry is that which covers the manufacture of radio communications equipment, radar, radio and sonar navigational aids for ships and aircraft, thermal imaging systems, alarms and signalling equipment, public broadcasting equipment and other capital goods. Radar was invented in Britain and British firms are still in the forefront of technical advances. Racal Avionics' new X-band radar can distinguish different types of aircraft flying at very low altitude and is already in use at airports in several countries. GLORIA is a new type of ship-towed side-scan sonar, developed at Britain's Institute of Oceanographic Sciences and now being used for the United States Geological Survey to map the ocean floor within the US 200-mile Exclusive Economic Zones.

A range of electrical and electronic measurement and test equipment is made in Britain, as well as analytical instruments. Production of process control equipment is a large and expanding area along with the manufacture of numerical control and indication equipment for use in machine tools. British companies are among the leaders in several types of advanced electronic medical equipment. Pioneering work has been undertaken in magnetic resonance imaging (MRI), a technique in which the patient is placed in a strong magnetic field and scanned with radiofrequency (RF) energy. The body interacts with this energy and the information generated is processed by computer to construct images of internal organs and tissues. MRI enables large areas of the body to be examined internally without recourse to surgery or potentially harmful radiation. Developments in the field of laser technology over the last 25 years have also enabled British doctors in 1986 to invent new techniques for destroying cancers in their early stages and for unblocking arteries.

British companies also produce other advanced electronic medical equipment including ultrasound scanners, electromyography systems and patient monitoring systems for intensive and coronary care and other uses.

The comprehensive indigenous electronics components industry is supplemented by subsidiaries of a number of large overseas companies. The manufacture of integrated circuits is an area of particularly rapid change. Britain has strength in the manufacture of advanced components, especially in semi-custom devices such as gate arrays and transputers.

The electrical engineering industry manufactures a wide variety of products for the generation, transmission and distribution of electricity, ranging from power plant, transformers and switchgear to lighting, plugs and sockets. A mature industry, it nevertheless makes extensive use of advanced technologies in its products and processes. It also earns a considerable foreign trade surplus;

for example, GEC won a £250 million contract to supply two 985-megawatt turbine generators to China in 1986.

The domestic electrical appliance sector is dominated by a few large firms. The major electronic consumer goods produced are radio and television sets, music centres and high-fidelity audio and video equipment. In the audio field, British manufacturers have a reputation for high-quality goods but are less strong in the mass market.

The instrument engineering industry produces measuring, photographic, cinematographic and reprographic equipment; watches, clocks and other timing devices; and medical and surgical instruments and appliances. Its precision instrument and medical branches both earn significant and growing export surpluses, but the sector as a whole is contracting.

Fibres

Chemicals and Britain's chemicals industry is the third largest in Western Europe and the fifth Man-made largest in the non-communist world. Nearly half of its production is exported and in 1986 it contributed nearly £2,300 million to the country's balance of payments. One company, Imperial Chemical Industries (ICI), accounts for about a quarter of the industry's production and is the fifth largest chemicals company in the world. Traditionally Britain has been a major producer of basic industrial chemicals, such as inorganic and basic organic chemicals, plastics and fertilisers. Although these sectors still make up about 40 per cent of the industry's output, the most rapid growth in recent years has been in the production of speciality and 'problem-solving' chemicals, especially pharmaceuticals, pesticides, and cosmetics.

Table 18: Chemicals and Man-made Fibres

1986	Labour ('000s)	Sales (£ million)	Exports (£ million)	Imports (£ million)
Chemicals and man-made fibres of which: basic industrial	343	21,093	10,034	7,731
chemicals specialised industrial	125	8,403	4,841	4,266
products	48	3,597	1,676	950
pharmaceuticals soap and toilet	87	3,804	1,595	755
preparations	33	2,299	530	306

Pharmaceuticals were responsible for about a third of the chemical sector's overseas trade surplus in 1986. Of the five best-selling drugs in the world in 1985, four were discovered in British laboratories and three, Glaxo's ulcer treatment Zantac and ICI's beta-blockers Tenormin and Inderal, which reduce blood pressure, are manufactured by British companies. The United States subsidiary of Britain's Wellcome Foundation has been responsible for the first drug for the treatment of AIDS to win government approval and also for the first routine treatment for the herpes group of viruses. Among other recent major developments pioneered in Britain are semi-synthetic penicillins, new treatments for asthma and arthritis, and synthetic insulin. Britain is among the world leaders in the production of antibiotics by fermentation.

In the field of biotechnology the British Celltech company were the first to be licensed by the United States Food and Drugs Administration for the mass production of monoclonal antibodies, proteins which each seek out a particular

natural substance. They are used to diagnose diseases and identify different blood types and can be used in the treatment of cancer.

Britain is foremost among the world's developers of molecular graphics, a computer-aided technique for studying the structure of complicated organic molecules on a visual display unit, eliminating the need for many physical tests of drugs.

Notable recent British discoveries and developments in agricultural chemicals include pyrethroid insecticides, ICI's diquat and paraquat herbicides, systemic fungicides and aphicides, genetically engineered microbial pesticides and methods of encouraging natural parasites to attack common pests in horticulture. A substantial proportion of world research and development in agrochemicals is conducted in Britain.

Exports of cosmetics, toiletries and perfumery in 1986 were £370 million, compared with imports of less than £230 million. The home market amounted to about £1,170 million at manufacturers' prices.

A high proportion of inorganic chemicals production consists of relatively simple bulk chemicals, such as sulphuric acid and metallic and non-metallic oxides, serving as basic materials for industry. The most important products in the organic chemicals range (by weight) are ethylene (1,475,000 tonnes produced in 1986), propylene (857,000 tonnes) and benzene (860,000 tonnes).

Over 30 per cent of plastics production is exported. Expansion in recent years has mainly been in thermoplastic materials, of which the most important are polyethylene, polyvinyl chloride, polystyrene and polypropylene. A new group of plastics materials reinforced with carbon fibres is also in commercial production; they have up to three times the strength but are only 20 per cent of the weight of steel, and are being increasingly used in aircraft and vehicle manufacture. ICI have recently produced the world's first biodegradable thermoplastic, Biopol, which is used as a slow release agent for drugs and herbicides, as well as for making bottles and films that can be disposed of without polluting the environment. Synthetic rubbers in large-scale production include butadiene-based neoprene for tyres, high-styrene for shoe soles and flooring and oil-resistant nitrile rubbers.

Specialised products in the paint industry include new ranges of synthetic resins and pigments, powder coatings, non-drip and quick-drying paints and paints needing only one top coat. Two significant recent innovations have been solid emulsion paint and a temporary water-based finish for vehicle bodies and road markings, which can be removed easily by chemical treatment. Following its purchase of the US Glidden concern in 1986, ICl became the world's largest paint manufacturer.

The main types of man-made fibre are still those first developed—regenerated cellulosic fibres such as viscose and the major synthetic fibres such as nylon polyamide, polyester and acrylics. Extensive research continues to produce a wide variety of innovative products with characteristics designed to meet market needs, such as anti-static and flame-retardant fibres. More specialist products include the aramids (with very high thermal stability and strength), elastanes (giving very high stretch and recovery), melded fabrics (produced without the need for knitting or weaving) and carbon fibres (originally developed for the aerospace industry but now finding applications in other industries such as motor vehicles and sports goods).

Aerospace

Britain's aerospace industry is the third largest in the world, behind those of the United States and the Soviet Union. In 1986 it had a turnover of £8,000 million, with exports totalling £4,700 million, and contributed nearly £2,000 million to the balance of payments. Almost half of this export effort was due to the country's main airframe manufacturer, British Aerospace (BAe), which had an

order-book at the beginning of 1987 worth some £8,600 million. BAe manufactures a uniquely extensive range of aerospace, space and electronics products. Its major aircraft programmes are: on the civil side, the 146 family of regional airliners (one of the two quietest jetliners in the world, the other being the Rolls-Royce-engined Boeing 757), the new ATP advanced turboprop airliner, the Jetstream 31 commuterliner and the 125 business jet; and, on the military side, the V-STOL Harrier, the Hawk trainer and, in collaboration with Federal German and Italian aerospace manufacturers, the Tornado combat aircraft. BAe is also the main airframe contractor for the European fighter aircraft project (EAP), which involves Italy, the Federal Republic of Germany and Spain.

BAe owns 20 per cent of the European consortium Airbus Industrie which, at the end of the first quarter of 1987, had more than 450 orders for its wide-bodied A300 and A310 Airbuses and more than 440 firm orders and options for the new narrow-bodied A320, for all of which the British company makes the wings. Both the A320 and BAe's demonstrator for the EAP use the new 'fly-by-wire' system, which controls an aircraft by electronic rather than mechanical means. This 'active control technology' greatly improves manoeuvrability and allows much more aerodynamically efficient aircraft to be built.

Table 19: Aerospace

1986	Labour ('000s)	Sales (£ million)	Exports (£ million)	Imports (£ million)
Aircraft building and repair		3,533	2,718	1,133
Aero-engines and parts	} 161	1,821	1,526	1,109
Other aerospace equipment		394	55	184

BAe is also a major producer of air-, sea- and ground-launched guided weapons, including the Rapier air defence system. Collaborative guided weapon projects between Britain and its NATO partners are becoming increasingly important.

The government-owned firm Short Brothers of Belfast produces the Sherpa military transporter, the Tucano basic trainer aircraft (to be used by the Royal Air Force), the SD330 and 360 commuter airliners, a wide variety of airframe components for manufacturers in many countries, and missiles. In addition to performing a wide range of aerospace equipment work, Westland Helicopters manufactures the Sea King and Lynx military helicopters, the civilian W30, and is collaborating with Agusta of Italy to produce the multi-role EH101 for the early 1990s. In 1986 a Lynx fitted with Westland's new 'Berp-tip' rotor set a new helicopter world speed record at over 400 km/h (249 mph).

Rolls-Royce, which was privatised in May 1987, is one of the three largest manufacturers of aero-engines in the world. The order-book at the end of March 1987 stood at £3,000 million. The company's civil engine group produces engines for airliners, transport aircraft and executive and corporate jets. Of its RB211 family of engines, the 524D4D was launched in 1986 with orders from Cathay Pacific and British Airways to power the new Boeing 747-400 airliner; 14 out of 19 customers for the Boeing 757 have specified the 535 version. The new Tay turbofan, which is to go into service with the Gulfstream IV and Fokker 100 aircraft, had orders and options worth nearly £600 million at the end of 1986. Rolls-Royce is also a major partner in the five-nation International Aero Engines (IAE) consortium that is producing the V2500 which is scheduled for entry into service in 1989 on the new Airbus A320.

The military engine group of Rolls-Royce is responsible for a wide range of engines for military aircraft and helicopters. These engines include the

Turbo-Union RB199 for the Panavia Tornado aircraft, the unique Pegasus vectored-thrust engine for the Harrier, the Adour, the Spey and the advanced RTM322 helicopter engine. Rolls-Royce is also a partner in the consortium formed to develop the EJ200 for the proposed European Fighter Aircraft. In addition, the company produces gas turbines for power generation and for oil and gas pumping. It also provides gas turbine power for vessels of 25 of the world's naval forces and the propulsion systems for the Royal Navy's nuclearpowered submarines.

Aviation equipment manufacturers provide a wide range of systems essential to engines and aircraft, including engine and flight controls, electrical generation, mechanical and hydraulic power systems, cabin furnishings, flight deck control and information displays. British firms have also made important advances in the development of ejector seats, firefighting equipment and flight simulators, and are playing a major role in the development of both fly-by-wire and fly-by-light technology. They supply radar and air traffic control equipment and ground power supplies to airports and airlines throughout the world.

The main trade association for the industry is the Society of British Aerospace Companies, which organises a major international air show at Farnborough, Hampshire, every two years (the next in September 1988).

The British space industry's major strength is in the manufacture of satellites. BAe is the world's third largest producer of communications satellites and has been the prime contractor for all such spacecraft launched by the European Space Agency (ESA), as well as for scientific probes such as the Giotto satellite, which investigated Halley's Comet during 1986. BAe has also developed and built some 17 space pallets (payload and instrument carriers) for the United States Space Shuttle and has a major role in several international satellite projects.

Marconi Space Systems has primed many telecommunications satellite payloads, including those for the ESA's Olympus satellite, to be launched in 1989, and the International Maritime Satellite Organisation's spacecraft, the second generation of which will go into orbit in 1988. In January 1987 BAe and Marconi together won an order from NATO for satellites worth more than £100 million, the first time such an order had gone to a non-US company.

Products Products

Mineral Britain is the world's tenth largest steel-producing nation (by volume). British producers delivered 13·1 million tonnes of finished steel in 1986, of which 64 Iron and Steel per cent was sold on the home market and the remainder exported. The British Steel Corporation (BSC) is the world's fourth largest steel company and accounts for some 78-80 per cent of crude steel production in Britain. BSC's output is now based on flat products, plate, heavy sections, tubes and stainless items. Private sector firms are prominent in the manufacture of engineering and other special steels, wire rod and wire products, reinforcements for use in the construction industry, and other more specialised goods. Steel manufacture is concentrated in Wales, Scotland and northern England.

The industry has recorded sharp improvements in productivity in recent years, partly as a result of an extensive programme of rationalisation and closures: whereas it took BSC 14.3 man hours to produce a tonne of liquid steel in 1978-79, it took only 6.3 man hours in 1985-86. Most private sector firms have shown improved profitability and in 1985-86 BSC returned a net profit of £38 million, its first for ten years.

> The first steps have been taken to return to a free market in steel within the European Community, accompanied by a ban on state aid.

Non-ferrous Output in 1986 included: aluminium (276,000 tonnes of primary metal and Metals 116,000 tonnes of secondary metal); refined copper (62,000 tonnes of primary

Table 20: Mineral Products

1986	Labour ('000s)	Sales (£ million)	Exports (£ million)	Imports (£ million)
Metal manufacturing	172	7,277	3,953	4,414
of which: iron and steel products	118	4,753	2,045	1,753
non-ferrous metals	54	2,523	1,908	2,661
Non-metallic mineral products	222	7,618	1,127	989
of which: glass and glassware ceramic and heat-	48	1,352	319	452
resistant goods	68	1,143	400	237

metal and 63,000 tonnes of secondary metal); refined lead (156,000 tonnes of primary metal and 174,000 tonnes of secondary metal); and zinc (86,000 tonnes of slab metal). Primary metal production relies mainly on imported ores, concentrates and partially refined metal.

Britain is also a major producer of specialised alloys for high-technology requirements in the aerospace, electronic, petrochemical, and nuclear and other fuel industries. Titanium and titanium alloys are produced and used in aircraft production, power generation and North Sea oil production.

Nearly half of the industry is situated in the midlands and Wales. In recent years considerable progress has been made in the development of 'superplastic' alloys, which are more ductile and elastic than conventional alloys. Aluminium lithium is a relatively new alloy which has been developed by British Alcan Aluminium and already used in experimental aircraft construction. It is up to 20 per cent lighter than traditional materials and is stronger, stiffer and more resistant to fatigue.

Exports of aluminium and aluminium alloys reached £392 million in 1986 while exports of copper, brass and other copper alloys reached £124 million. Exports of silver, platinum and other precious metals totalled over £740 million in 1986.

Ceramics

The pottery industry, centred in Staffordshire, uses largely indigenous clay from Cornwall and Devon. Britain is the world's biggest exporter of china clay, which was the country's largest mineral export until the discovery of North Sea oil. Domestic pottery, including china, earthenware and stoneware, accounts for 54 per cent of the industry's output. Production of tableware is concentrated in two major groups, Wedgwood and Royal Doulton. Britain is the world's principal manufacturer of fine bone china, much of which is exported; famous makes include Wedgwood, Royal Worcester, Spode, Royal Doulton, Minton, Aynsley, Coalport and Royal Crown Derby.

Research is being conducted into ceramics for use in housebuilding and diesel and jet engines. Important industrial ceramics invented in Britain include silicon carbides developed by the United Kingdom Atomic Energy Authority and sialons developed at the University of Newcastle upon Tyne.

Products

Other Among building materials glass-reinforced cement composites were invented in Mineral Britain in the early 1970s and are manufactured under licence in over 40 countries.

> Containers form the largest part of the glass industry. Another major section is devoted to the manufacture of flat glass in its various forms, chiefly by the float glass process developed in Britain by Pilkington Brothers and licensed to glassmakers throughout the world. Pilkingtons have also developed an energysaving window glass which reflects room heat without impairing visibility.

Mechanical Engineering and Metal Goods Since much of the production of this industry is of capital equipment, it suffered particularly during the recession which began in 1979. However, in 1984 and 1985 there was a recovery in some parts of the industry. In 1986 sales of mechanical engineering as a whole rose by 2 per cent, with rises of 14 per cent in printing machinery, 10 per cent in chemical industry and textile machinery, and 27 per cent in mining machinery. Over 40 per cent of the industry's sales are exported, and exports in 1986 amounted to 11 per cent of all visible exports.

Table 21: Mechanical Engineering and Metal Goods

1986	Labour ('000s)	Sales (£ million)	Exports (£ million)	Imports (£ million)
Mechanical engineering	723	19,737	8,386	6,594
of which: industrial plant and steelwork agricultural machinery	77	2,950	500	274
and tractors	26	1,157	851	630
machine tools machinery for	78	1,657	584	740
process industries and non-metallic materials working mining, construction and	76	2,419	1,623	1,554
mechanical handling equipment	76	3,437	1,562	975
Other metal goods	302	8,917	1,180	1,519

Of particular importance are fabricated steel products such as pressure vessels, heat exchangers and storage tanks for chemical and oil-refining (process) plant, steam-raising boilers (including those of high capacity for power stations), nuclear reactors, water and sewage treatment plant, and fabricated steelwork for bridges, buildings and industrial installations.

Although the agricultural machinery industry's output fell sharply as world demand contracted in the 1970s, Britain is still the Western world's largest producer of tractors, which make up two-thirds of the country's total output of agricultural equipment. In 1986 this was £1,154 million, of which 74 per cent was exported, with a trade surplus of £221 million. Recent technical innovations include computer-controlled tractors, a highly efficient pesticide sprayer and combined mower/conditioners that significantly reduce the drying time for grass. Much of the new machinery is designed for use in a variety of conditions to meet the needs of overseas farmers, and since 1984 the Royal International Agricultural Show, held annually near Coventry, has had a specialised tropical machinery centre, where demonstrations of such machinery are given.

Almost all of Britain's machine tools are purchased by the engineering, vehicles and metal goods industries. The recession in these sectors cut the sales of machine tools until 1983, since when they have expanded by 33 per cent. The most commonly used metal-cutting machine tools are milling, grinding and turning machines. The manufacture of computerised numerically controlled machine tools and the adoption of flexible manufacturing systems are becoming increasingly important. Output and exports of machine tools in 1986 were both more than 30 per cent higher than in 1983, following a recovery in 1984–85.

In 1986, some 76 per cent of the sales of textile machinery were to export markets. Recent British innovations in this field include computerised colour matching and weave simulation, friction spinning, high-speed computer-controlled knitting machines and electronic jacquard attachments for weaving looms.

Within the ordnance, small arms and munitions industry, which earned a foreign trade surplus of £302 million in 1986, the Government agreed the sale of its Royal Ordnance factories to British Aerospace in April 1987.

Overseas sales of mining machinery and tunnelling equipment are substantial, while exports of construction equipment amounted to £858 million in 1986 (86 per cent of output). J. C. Bamford Ltd is the world's second largest manufacturer of backhoe loaders. It exports 60 per cent of its output, despite a steady fall in world demand between 1980 and 1984. The British mining equipment industry is very strong, especially in the production of coal-cutting and road-heading (shearing) equipment, hydraulic roof supports, conveying equipment, flameproof transformers, switchgear, and subsurface transport equipment and control systems. Exports of coal-mining equipment in 1986 were £105 million, 48 per cent up on the previous year. The main products of the mechanical handling equipment industry are cranes and transporters, lifts, escalators, conveyors, elevators, hoists, powered industrial trucks and air bridges. Electronically controlled and completely automatic handling systems are also produced. Britain is also an important producer of other machinery such as industrial engines, pumps, valves and compressors, and pneumatic and hydraulic equipment.

Despite an overall decline in the castings industry, some foundries have been investing in new melting, moulding and quality control equipment. Cosworth Engineering, for example, has developed a high-quality aluminium casting process and uses it to produce cylinder heads in quantity for Mercedes and Ford cars.

Motor Vehicles and Other Transport Equipment (excluding Aerospace) Output of cars is dominated by four groups which account for 96 per cent of car production: Rover, in which there is a majority public shareholding, Ford, Vauxhall and Peugeot-Talbot. The remainder is in the hands of smaller, specialist producers of cars such as Jaguar and Rolls-Royce, whose cars are renowned for their quality and durability (some 65 per cent of all Rolls-Royce cars built since 1904 are still roadworthy). The Rover Group shares the Government's commitment to return the company to private ownership. Following the flotation of Jaguar in 1984, Rover's bus and Danish operations and its majority interests in Unipart, Istel (its computer subsidiary) and its Australian business were all sold to their respective managements and employees during 1987.

In view of the over-capacity in the European truck industry, in 1986 General Motors (who also own Vauxhall) ended production of civilian trucks at their Bedford plant, and in 1987 Rover merged its truck, van, associated parts and

Table 22: Motor Vehicles and Other Transport Equipment

1986	Labour ('000s)	Sales (£ million)	Exports (£ million)	lmports (£ million)
Motor vehicles (including				
bodies, trailers, caravans				
and engines)	145	8,078	1,945	6,064
Motor vehicle parts	107	3,631	2,131	2,113
Other transport equipment	107	994	333	462
of which: shipbuilding and				
repairing	79	551	199	268
• 0				

certain overseas operations with those of the Dutch DAF company to form a new joint venture.

In recent years the home market has been increasingly supplied by imports, mainly from other European countries and Japan, but British manufacturers are responding to the competition, and import penetration was reduced in 1986. The industry remains a major exporter; in 1986 Jaguar's exports alone amounted to more than £560 million. The Japanese manufacturer Nissan opened a car assembly plant in Britain in 1986, while Rover launched its new executive car which was designed and developed in collaboration with Honda. In 1987 Rover also announced its intention to develop a new medium-sized car with the Japanese company.

Major component manufacturers include GKN and Lucas, which has developed a new cheap anti-lock braking system and the first direct fuel injection system for

small high-speed automotive diesel engines.

The motor industry is centred on the West Midlands and the South East.

About half of the market for pedal cycles is supplied by British firms, the largest of which is Raleigh, which was taken over by the specially created Derby International Corporation in January 1987.

In the past British Rail met its rolling stock requirements from its wholly owned subsidiary, British Rail Engineering Ltd (BREL). However, since early 1985 all British Rail's orders have had to be put out to open tender, and BREL now competes alongside the large private sector. Both BREL and private companies export equipment and provide consultancy services overseas.

Shipbuilding and Marine Engineering Britain has a long tradition of shipbuilding and remains active in the construction, conversion and repair of merchant vessels, warships and offshore structures.

Engineering

The largest sector is the building of warships, including both nuclear-powered and diesel-electric submarines, frigates, glass-reinforced plastics vessels, fast patrol craft and specialist naval auxiliaries. As well as meeting all the needs of the Royal Navy, the warship yards build and convert ships for overseas governments.

British yards build some of the most sophisticated and technologically complex merchant vessels in the world, including ferries, and offshore support and research vessels as well as more traditional ships and craft of all kinds for the leisure market. In 1986 British companies accounted for some 2 per cent of world merchant ship completions, about 20 per cent of which were for overseas registration. The shipbuilding industry is supplemented by ship-repairers, including the Royal Dockyards, which the Government leased to commercial management in April 1987. Repairers also modernise and convert all types of vessels and floating structures.

The British marine equipment industry offers a range of products from anchors to sophisticated navigational systems. Exports account for 70 per cent of the industry's production.

Nearly two decades of oil exploration and exploitation in the North Sea has generated a major offshore industry in Britain. Shipbuilders and fabricators build fixed platforms and semi-submersible units for drilling, production and emergency/maintenance support, drill ships, jack-up rigs, modules and offshore loading systems. Over 4,000 manufacturing and service industry firms supply a wide range of goods and services, including consultancy, design, project management, and research and development, to the offshore industry. In conjunction with the Offshore Supplies Office of the Department of Energy, the Department of Trade and Industry has a responsibility for promoting Britain's offshore interests overseas and maintains a central co-ordination unit to assist this activity.

Food, Drink and Tobacco Britain has a relatively large and sophisticated food processing industry, which has accounted for a growing proportion of total domestic food supply in recent

decades, though the rate of growth has slowed since the early 1970s. Convenience foods, particularly frozen foods, yoghurts and instant snacks, have formed the fastest-growing sector. The market is also growing in foods for consumers concerned about the effects of their diet on their health and weight. While Britain is a net importer of foodstuffs, the volume of imports declined between 1970 and 1980, since when it has risen for most types of foodstuff, notable exceptions being meat and cereals and products based on them. Exports have grown steadily. Basic research is being conducted into new sources of food. Ranks Hovis McDougall and ICI jointly launched in 1984 a new food from a fungus grown in continuous fermentation on glucose.

Food from Britain is a body with a wide remit to improve the marketing of British food and agricultural produce both domestically and overseas. It has selected France, the Federal Republic of Germany, the Benelux countries and the United States as key export markets.

Production of milk was some 15,608 million litres in 1986, of which just under half was for sale as liquid milk. Eight out of ten households in Britain receive pasteurised milk through a door-step delivery system employing about 37,000 roundsmen (not included in the employment figure in the table) driving electric vehicles. Domestic milk consumption per head (1·7 litres—3 pints—per week in 1986) is among the highest in the world.

The main milk products are butter (220,000 tonnes produced in 1986), cheese (255,000 tonnes), full-cream condensed milk (160,000 tonnes), full-cream milk powder (45,000 tonnes), and skimmed milk powder (277,000 tonnes). These levels of production have remained approximately the same since 1981, after significant rises in butter and cheese production in the late 1970s. The dairy industry accounted for 66 per cent of new butter supplies to the British market in 1986, 65 per cent of new cheese supplies, and nearly all of other milk products. Butter exports in 1986 were 33,000 tonnes and cheese exports 34,000 tonnes, compared with 16,000 tonnes and 10,700 tonnes in 1976. The other main exports are skimmed milk powder (170,000 tonnes in 1986) and whole milk powder (44,000 tonnes).

About 70 per cent of bread is manufactured in large mechanised bakeries, most of which use a British process (the 'Chorleywood' process) widely used in other countries. There is a growing consumer interest, however, in locally baked varieties, and in recent years demand for wholemeal bread has grown considerably. Biscuit exports (£123 million in 1986) are more than double the value of imports.

Of prime importance among the alcoholic drinks produced in Britain, and in the food and drink industry as a whole, is Scotch whisky. There are about 115 distilleries in Scotland and the well-known brands of blended Scotch whisky are made from the products of a number of different distilleries. Guinness plc, owners of the Distillers Company and Arthur Bell and Sons, accounts for 40 per cent of Scotch whisky output and 25 per cent of the British market. About 85 per cent of all Scotch whisky produced is exported. The value of whisky exports was over £1,000 million in 1986, the United States taking about a quarter.

In the brewing and malting industry there are six major brewery groups whose products are sold nationally. Demand for traditional cask-conditioned ales grew substantially in the 1970s but has now stabilised. The main raw materials used are malt, hops and some sugar. British malt, which is made almost entirely from home-grown barley, is used by brewers throughout the world. Lager has increased steadily in popularity since the late 1960s and accounts for over 50 per cent of beer sales.

The soft drinks industry has expanded markedly in the last decade. There are some very large companies among about 20 producing brands which are marketed on a national scale.

Table 23: Food, Drink and Tobacco

1986	Labour ('000s)		Exports (£ million)	Imports (£ million)
Food manufacturing	n.a.	27,579	2,319	6,353
of which: meat products	n.a.	3,842	556	1,586
milk and milk products	37	3,890	331	700
flour-based products	125	3,944	134	80
sugar, confectionery, cocoa and chocolate				
goods	60	1,507	338	829
animal feedstuffs	n.a.	3,597	123	159
Drinks ^a		5,296	1,453	1,193
of which: brewing and malting distilling and	n.a.	2,119	95	138
compounding	19	1,388	1,229	188
soft drinks	24			219
Tobacco ^a	17	1,544		

^a Sales figures exclude duty paid. n.a. = not available.

The British tobacco industry manufactures about 90 per cent of cigarettes and tobacco goods sold in Britain. Approximately 90 per cent of output is provided by three major manufacturers (Imperial Tobacco, Gallaher and Carreras Rothmans). The industry specialises in the production of high-quality cigarettes made from flue-cured tobacco and achieves significant exports, mainly of cigarettes-countries in Europe, the Middle East and Africa are important markets. Britain's most important sources of raw tobacco are Brazil, the United States, Zimbabwe, India and Canada. By voluntary agreement with the Government, cigarette manufacturers restrict their advertising, print health warnings on packets and are reducing the tar yield of cigarettes.

Clothing and Leather

Textiles, Despite its contraction over a number of years, this is still a large group of Footwear, related industries, employing over 500,000 people and making substantial exports. Its main products are yarn, woven and knitted fabrics, apparel, household textiles and carpets based mainly on wool, cotton and man-made fibres. The textiles industry has some 5,000 firms, comprising a few large multi-process companies such as Courtaulds and Coats Viyella, and a large number of small and medium-sized firms.

The textiles and clothing industries in Britain, as in other developed countries, have been affected by low-cost imports from developing countries. Trade in textiles and clothing is regulated by the Multi-Fibre Arrangement (MFA) of the General Agreement on Tariffs and Trade. The MFA allows a measure of restraint on imports of textiles and clothing from low-cost countries into industrialised countries; agreement on a fourth MFA, which will last for five years, was reached in August 1986. The use of computers and robots and other automated techniques in production processes is helping the textiles, footwear and clothing industries to compete against low-cost countries. Weft insertion in fabrics, for example, is now largely carried out by fast computer-controlled machines using 'bullets', thin blades or air or water jets, instead of the traditional loom.

In 1986 exports of tops (combed wool and hair), wool yarns, fabrics and other wool textile products exceeded imports by about 23 per cent. The industry is one

of the largest in the world and includes the world's biggest wool textile company, Illingworth Morris. There are two main branches, woollen and worsted. An increasing amount of man-made fibre is now blended with wool. West Yorkshire is the main producing area but Scotland and the west of England are also famous as specialised producers of high-quality yarn and cloth. Large quantities of raw wool are scoured and cleaned in Britain in preparation for spinning. British mills also process the bulk of rare fibres, such as cashmere and mohair, entering world trade.

Table 24: Textiles, Footwear, Clothing and Leather

1986	Labour ('000s)	Sales (£ million)	Exports (£ million)	Imports (£ million)
Textile industry of which: woollen and worsted	234	5,960	1,854	3,400
industry	40	1.423	522	426
cotton and silk industry hosiery and other	35	1,087	418	1,562
knitwear	n.a.	1,541	436	710
carpets, rugs and matting	18	919	178	327
Footwear	53	1,075	172	752
Clothing, hats and gloves	n.a.	4,016	808	1,704
Made-up textiles	29	763	100	198
Leather and leather goods	18	760	273	420

n.a. = not available

Low-cost competition has cut progressively into British markets for cotton. Production includes yarn and fabrics of cotton, spun man-made fibres and mixtures of these. The linen industry is centred in Northern Ireland, where the lighter types of fabrics for apparel, furnishings and household textiles are produced. The heavyweight canvas for sailcloth, tents, awnings and tarpaulins is mainly produced in Scotland. The hosiery and knitwear industry comprises about 1,700 companies situated mainly in the East Midlands and Scotland, of which most are small to medium in size.

Some 50 per cent of the value of carpet and rug output (76 per cent in volume terms) is made up of tufted carpets, in the production of which the pile, usually with a high man-made fibre content, is inserted into a pre-woven backing. Woven carpets, mainly Axminster, account for most of the remainder of sales. There is a higher wool content in woven types, although in these, too, more use is being made of man-made fibres. The high quality and variety of design make Britain one of the world's leading producers of woven carpets.

Jute products are manufactured in the Dundee area. Jute yarn and man-made polypropylene yarn are used in the manufacturing of carpets, cordage and ropes and woven into fabrics for a wide range of applications in the packaging, upholstery, building and motor-car industries.

The clothing industry is highly labour intensive with about 9,700 companies (predominantly small ones), accounting for 5 to 6 per cent of Britain's total employment in manufacturing. It supplies about two-thirds of domestic demand, while exports have risen since the mid-1970s. The British fashion designer industry became much more active in the mid-1980s. A wide range of clothing is imported from European and Asian countries. The footwear manufacturing industry is made up predominantly of small companies. It

supplies about 43 per cent of all the shoes sold in Britain. Imports have risen in recent years, but latterly at a very slow rate. About one-third of leather production is exported.

Other Manufacturing

The furniture industry comprises about 5,600 companies, mostly small to medium-sized. Domestic production of softwood timber has been steadily increasing but the timber-using industries are mainly dependent on imported supplies.

There were about 110 paper and board mills in 1986, operated by 70 companies; total production was nearly 4 million tonnes. The largest British groups are Wiggins Teape, the Dickinson Robinson Group and Reed International. Overseas paper and board groups with manufacturing investments in Britain include Georgia Pacific, Kimberly Clark, Consolidated Bathurst, the Scott Corporation and United Paper Mills of Finland.

There has been a significant trend towards waste-based packaging grades in order to reduce the industry's reliance on imported woodpulp supplies. The use of recycled waste paper is increasing and research is helping to extend it. Waste paper provides over half of the industry's fibre needs. Domestically produced wood pulp represents only a small percentage of raw material supplies.

Table 25: Other Manufacturing

1986	Labour ('000s)	Sales (£ million)	Exports (£ million)	lmports (£ million)
Timber and wooden furniture	206	5,525	380	2,383
Paper and paper products	133	7,176	911	3,186
Printing and publishing Processing of rubber and	341	8,655	793	582
plastics	200	7,594	1,647	2,181
Toys and sports goods	22	466	260	460

Mergers have led to the formation of large groups in newspaper, magazine and book publishing, the largest being the British Printing and Communications Corporation; but general printing, engraving, bookbinding and a large part of publishing still include many small firms. With increasing use of new technology, such as computer typesetting, fragmentation of the industry into small specialised units has taken place in the 1980s. The book publishing industry is a major exporter, selling one-third of production in overseas markets. Security printers (of, for example, banknotes and postage stamps) are important exporters, the major company being De La Rue.

Tyres and tubes represent about 45 per cent of sales of rubber manufactures, the most important other goods being vehicle components and accessories, conveyor belting, cables, hoses, latex foam products, and footwear, gloves and clothing. Tyre manufacturers include subsidiaries of United States and other overseas companies. The industry's consumption of rubber includes natural, synthetic and recycled rubber.

There are about 500 manufacturers of a wide range of toys and games, but few of significant size. About 50 per cent of total production is exported. There are about 400 manufacturers of sports equipment. British fishing tackle and golf and tennis equipment are established in export markets.

Jewellery, gold and silverware and the refining of precious metals is an industry with a strong craft tradition. The Royal Mint makes coins for over 70 overseas countries.

Construction

The construction industry accounts for about 6 per cent of gross domestic product. The total value of output in Great Britain in 1986 was £30,031 million, of which new work accounted for £16,238 million (54 per cent) and repairs and maintenance the remainder. In housing, new work was valued at £5,526 million and repairs and maintenance at £7,395 million. About 1 million people are employed in the industry (including apprentices), accounting for about 4 per cent of the employed labour force. There are also about 487,000 self-employed.

Efficiency and productivity within the industry are benefiting from new computerised techniques such as the use of electronic load safety measures for cranes, distance measuring equipment, computerised stock ordering and job costing, and computer-aided design. Increasingly, major contractors are managing projects (particularly higher value ones) and using subcontractors to do the actual work.

Government sponsorship of the construction industry is the responsibility of the Department of the Environment. Building regulations prescribe minimum standards of construction in England and Wales. Made by the Secretary of State for the Environment and administered and enforced by local authorities, the regulations apply to new building, the installation or replacement of fittings, and alterations and extensions to existing buildings. There are broadly similar controls under separate legislation in Scotland and Northern Ireland. As an alternative to local authority building control and in order to simplify procedures, an optional system of private certification of compliance with building regulations is provided for in the Housing and Building Control Act 1984 and was introduced in 1985. The British Board of Agrément, sponsored by the Department, assesses and issues reports and certificates relating to products and systems for use in the construction industry. The Government is now keen to see quality assurance extended to the construction process as well as the materials used. In November 1986 the Institute of Plumbing became the first body to have its register covered by the British Standards Institution's Public Register Inspection Maintenance Assessment (PRIMA) scheme.

Structure

Construction work is carried out both by private contractors and by public authorities which employ their own labour. In 1986 about 90 per cent of the work was done by private firms. Although there were about 95,000 firms employing two or more people, 95 per cent of them employed fewer than 25. Some large firms are vertically integrated, owning quarries and workshops, mechanised plant and standard builders' equipment; some undertake responsibility for projects from initial design to finished building. All but the smallest projects are generally carried out under professional direction, either by architects or, in the case of the more complicated civil engineering projects, by consulting engineers. The latter, acting on behalf of a client, may advise on the feasibility of projects, draw up plans and supervise the construction work.

The Property Services Agency (PSA), which is an integral part of the Department of the Environment, is responsible for the construction programmes undertaken directly by the Government, including work for the armed forces both in Britain and overseas. From 1 April 1988, government departments will be able to use agents other than the PSA for civil building projects costing more than £150,000.

Housing

During 1986 a total of 203,400 dwellings were started in Great Britain. Starts in the public sector were 31,400 and those for private owners 172,000. Some 191,500 dwellings were completed, 33,100 in the public sector and 158,400 in the private sector.

Projects

Among important construction projects in hand or recently completed in Britain Engineering were the Heysham and Torness nuclear power stations, the Thames Barrier, which forms part of London's flood defences, new air terminals at Heathrow and Gatwick, the new Lloyd's insurance building, the Queen Elizabeth II Conference Centre in London, the new British Library, the Docklands Light Railway and associated development in London's former docklands, and the M25 motorway. Future projects include the Channel Tunnel and the Dartford Bridge.

Research and The national research and advisory body on all aspects of construction and Advisory building is the Building Research Establishment, which is part of the Services Department of the Environment. It has four laboratories, including a fire research station, and is the site of a building energy management systems

Research is also carried out by the major construction and materials firms, universities, colleges of technology and research associations. The research associations also provide advisory services.

The Building Centre Group consists of five building centres throughout Britain, most of which provide exhibition and information services on materials, products, techniques and building services.

Overseas In 1986 British construction companies carried out work overseas worth some Construction £1,900 million. They won new contracts worth an additional £1,500 million and at the end of the year the total value of work outstanding stood at £2,300 million. Building material and components companies also exported goods to the value of £1,500 million. British consulting engineers, process engineers, architects and surveyors contributed nearly £1,000 million to the nation's invisible earnings. The industry's most important markets in the year were North America, Asia and Africa.

Major projects involving British companies during the year included the £300 million South Yarra development in Australia, the £288 million Samanalawewa dam project in Sri Lanka and a £425 million rural water supply project in Malaysia. Work continued on the Cairo Wastewater project and the Trans Gabon railway.

The interests of the various sectors of the construction industry overseas are promoted by the Export Group for the Constructional Industries, the Association of Consulting Engineers, the British Consultants Bureau (whose members include architects, surveyors and management consultants), the Building Materials Export Group, the Federation of Manufacturers of Construction Equipment and Cranes, and the British Water Industries Group.

Service Industries

In 1986 services contributed about 60 per cent of gross domestic product compared with 45 per cent in 1960 and accounted for 67 per cent of employees in employment compared with 48 per cent in 1960. Overseas trade in services, particularly financial services, has also grown, and in 1986 overseas earnings from services amounted to nearly half the value of exports of manufactures.

Between 1976 and 1980, total service employment rose by 800,000; it then fell for two years, but recovered again to grow from about 13·4 million in 1982 to 14·2 million in 1986. The net increase over the decade was 1·4 million jobs, compared with a net decline of nearly 2 million in production industries. Much of this was accounted for by growth in part-time (principally female) employment. Since the late 1970s employment has grown more rapidly in the private sector than in the public sector, a reversal of the pattern of the 1960s and the early 1970s, partially reflecting the Government's policy of restricting employment in public sector services. The fastest-growing sectors in the 1970s, measured by employment, were leisure and personal services, financial services and distribution, hotels and catering. In the 1980s the financial services have continued to grow strongly.

Among the reasons for the growth in services is the fact that as real incomes rise people tend to spend a greater proportion of income on personal, financial and leisure services. While, to some extent, consumers have exchanged services (such as public transport, laundries and cinemas) for goods (motor cars, washing-machines and television sets), this has generated demand for fresh services in the distribution, maintenance and repair of these goods. Increased consumer expenditure on the running costs of motor cars is a significant factor in the rise in consumer expenditure on services. Demand for British air travel, hotel and catering services has resulted from the increase in real incomes in other countries.

Other factors include a greater readiness to use banking services and the spread of home ownership, which has increased demand for legal and estate agency services. Demographic changes, such as the increase in the elderly as a component of the population, help to explain the growth of medical services. Shorter working hours tend to raise the demand for leisure services.

Changes in technology have also played a part in the growth of services.

Examples range from the computer services industry to the provision of cash and credit by means of cards and the growth of information systems such as viewdata and teletext.

A notable trend is a growth in franchising, an operation in which a company owning the rights to a particular form of trading licenses them to franchisees, usually by means of an initial payment with continuing royalties. Cleaning services, film processing, print shops, car rental, engine tuning and servicing, and fast food retailing have been among the major areas where franchising has developed.

DISTRIBUTION

There were over 4 million people engaged in the distributive and allied trades in Great Britain in mid-1986, together with a large number of owners of businesses. There were 900,000 people in wholesaling, just over 2 million in retailing, 1 million in hotels and catering, and 235,000 in the repair of vehicles and consumer goods. The distributive and allied trades accounted for about 14 per cent of national income in 1986.

WHOLESALE TRADES

In 1985 there were some 109,800 businesses engaged in wholesaling and dealing, with a turnover (including sales to other wholesalers and dealers) of some £171,000 million. The main areas in which wholesalers are dominant are food and drink (turnover £29,000 million in 1985), petroleum products (£31,300 million) and industrial materials (£20,200 million). The fastest-growing sectors in 1980–84 were dealing in agricultural commodities and livestock and in industrial and agricultural machinery.

London's wholesale markets play a significant part in the distribution of foodstuffs. New Covent Garden is the main market for fruit and vegetables, Smithfield for meat and Billingsgate for fish.

The co-operative movement in Britain has its own wholesale organisation, the Co-operative Wholesale Society (CWS), to serve the needs of retail societies; its turnover was £2,375 million in 1986–87. Retail societies are encouraged to buy from the CWS, which supplies the greater proportion of their requirements.

In the food and drink trade a number of large retailers carry out the functions of the wholesaler by having their own warehouses and buying and distributive organisations. Elsewhere in the trade voluntary groups have been formed by wholesalers with small independent retailers, in which the retailers are

encouraged by discounts and other incentives to buy as much as possible from the wholesaler. This has helped to preserve many smaller retail outlets for the wholesaler, including the traditional 'corner shops' and village stores, of value to local communities, and has given small retailers the advantages of bulk buying and co-ordinated distribution.

RETAIL TRADES Turnover of the retail trades has been growing slowly in real terms in recent years, despite the recession. In 1986 retail sales were 8 per cent higher than in 1985, representing a 5 per cent increase in volume. The indices for value and volume were 161·7 and 121·0 respectively in 1986 (1980 = 100). In 1984 there were an estimated 231,000 businesses in the retail trade in Great Britain each with a turnover of more than £18,700 (see Table 26). Their turnover was about £82,000 million and they invested £2,100 million. As the large multiple retailers (those with ten or more outlets) have grown in size and diversified their product ranges, there has been a decline in the number of retail businesses and outlets. The decline has been particularly evident among small independent businesses and retail co-operative societies. Shops selling durable household goods have experienced the fastest growth in turnover in recent years, while mixed retail businesses have recorded the slowest growth.

The largest multiple retailers in the packaged grocery market are the retail co-operatives, Sainsbury, Tesco, Asda, Dee Corporation, Argyll Stores, Safeway Food Stores, Fine Fare and Kwik Save Discount Group. Retail co-operative societies are voluntary organisations controlled by their members, membership being open to anyone paying a small deposit on a minimum share; at the end of 1986 the 100 retail societies had over 8 million members and more than 5,200 retail outlets. Turnover in 1986 amounted to in excess of £5,048 million. Retail co-operatives and the Co-operative Wholesale Society (see above) are members of the Co-operative Union as are a number of other co-operative bodies such as the Co-operative Bank. In 1986–87 Sainsbury had about 270 stores and sales were valued at £4,034 million. Tesco had some 337 outlets and the company's sales amounted to £3,807 million.

The leading mixed retail businesses are Marks and Spencer (with sales of \$4,221 million in 1986–87), Boots, F. W. Woolworth, the John Lewis Partnership, House of Fraser, W. H. Smith & Son and the Storehouse Group.

There are a number of discount stores operating on the principle of selling most or all of their goods at a reduced price. Electrical goods, furniture, carpets and do-it-yourself supplies are some of the main items sold by discount stores.

About 20 million people regularly shop by post. In 1985 sales by general mail order firms totalled some £2,950 million, representing 3·4 per cent of retail sales and 6·6 per cent of retail sales excluding food shops. The volume of mail order sales increased rapidly in the 1970s but fell off somewhat after 1980. Leading items sold by mail order are clothing, footwear, furniture, household textiles, and radio, television and electrical goods.

Trends

One of the most significant trends in retailing in recent years has been the increase in the proportion of turnover accounted for by large multiple retailers; they have 58 per cent of retail turnover. Other developments include an increase in very large self-service stores selling a wide variety of products, diversification by food multiples into selling a wider range of goods, the creation of specially designed shopping precincts, the growth of shops selling computers, software and video-cassettes, and an increasing emphasis on price competition.

Supermarkets, Superstores and Hypermarkets There are supermarkets in most towns and cities in Britain. The main multiple grocery companies have been steadily increasing the size of their main supermarkets. The trend to greater size has led to a growing number of

Table 26: Retail Trade in Great Britain 1984^a

	Number of businesses	Number of outlets	0 0	Turnover ^b (£ million)
Single-outlet retailers	201,633	201,633	813	24,268
Small multiple retailers Large multiple retailers (ten	28,207	73,670	349	10,604
or more retail outlets)	949	67,850	1,164	47,469
of which: Co-operative societies	114	5,813	108	4,349
Food retailers Drink, confectionery and	77,486	106,843	850	31,360
tobacco retailers Clothing, footwear and	41,992	57,344	260	8,686
leather goods retailers	28,684	56,020	285	7,476
Household goods retailers	39,379	57,144	282	12,000
Other non-food retailers	35,350	47,998	214	6,869
Mixed retail businesses	5,301	10,900	391	14,787
Hire and repair businesses	2,597	6,904	42	1,163
Total retail trade	230,789	343,153	2,326	82,342

Source: British Business.

b Includes value added tax

Note: Differences between totals and the sums of their component parts are due to rounding.

superstores and hypermarkets, self-service stores offering a wider range of food and non-food merchandise and which have at least 2,500 sq m (26,900 sq ft) and 5,000 sq m (53,800 sq ft) respectively of selling space. They are designed primarily for shoppers with cars, and substantial free car-parking space is usually provided. In Britain the first such store was opened in the mid-1960s and by January 1987 there were some 328 superstores and 47 hypermarkets, while planning permission for a further 83 superstores and four hypermarkets had been granted. Government policy on planning and large retail development was reaffirmed in 1985-86 when local planning authorities were urged to take account of the trend for new stores to be located outside existing shopping centres and of the benefits to the public of a wide range of shopping facilities. Although commercial competition is not a planning consideration, it was emphasised that authorities will, exceptionally, need to take into account the effect of the trend on the vitality and viability of established town centres. Since January 1987 local planning authorities have been required to consult the Department of the Environment before granting permission for retail developments of 250,000 sq ft (23,325 sq m) or more.

Shopping Centres Britain has a variety of new purpose-built shopping centres. The largest are the Manchester Arndale, the Metro-Centre in Tyneside and the centre in Milton Keynes, which cover more than 93,000 sq m (1 million sq ft) and are among the largest in Europe. Other large centres are at Town Square, Basildon, the Eldon Square Development in Newcastle upon Tyne, Brent Cross in London, the Mander Centre in Wolverhampton and the Luton Arndale.

^a Figures cover businesses above the threshold of value added tax (£18,700 at that time).

Diversification Many of the large multiple groups have diversified over the last few years to offer a much bigger range of goods and services than previously. This has been especially noticeable for the large food retailers, which often sell non-food products, such as beer, wines and spirits, clothing and household appliances, as well as packaged groceries. Another trend is that many superstores and large supermarkets offer fresh as well as packaged food, often with special counters or areas for fresh meat, fish, vegetables and bread baked on the premises. Some large retailers have in recent years begun to provide financial and estate agency services.

Promotions Retailers are placing greater emphasis both on price competition and quality as a means of promoting sales. With the growth of payments by credit card, certain of the large retailers have issued their own credit cards for regular customers in an attempt to increase sales, particularly of high-value goods.

Use of Laser-scanning electronic check-outs are already having a major impact on Technology retailing in Britain. Substantial savings are expected from improved stock control and a reduction of individual price marking in stores. Key Markets introduced the first operational laser-scanning electronic check-out in Britain at Spalding (Lincolnshire) in 1979. Computerised shopping services are being introduced in the home which enable people to order goods from retailers. Some large multiple retailers are using electronic order and invoice systems in dealing with their suppliers, following a legal change permitting tax invoices in forms other than paper. Small independent retailers, also, are using electronic ordering, pricing and delivery systems. High-speed labelling techniques are being adopted, including the use of electronic printers which can overprint labels, the use of pressure-sensitive glues and printing in foil instead of ink.

A single nationwide 'electronic funds transfer at the point of sale' (EFTPOS) system is to be established for the retail market in co-operation with the English and Scottish clearing banks. The system will use magnetically striped cards and terminals installed in retail premises to transfer funds directly from cardholders' accounts to the retailers' accounts. Various pilot projects are already in operation and a large-scale system with 2,000 terminals—in Leeds, Southampton and Edinburgh—is planned for the end of 1988.

Vehicle and **Petrol Retailing**

In June 1986 some 233,000 people were employed in Great Britain in the retail distribution of motor vehicles and parts and in petrol stations. In spite of the continuing increase in the number of road vehicles, the number of petrol stations is declining and at the end of 1986 there were some 20,641 (2.4 per cent fewer than in 1985), of which 31·3 per cent were owned by oil companies. There were about 11,746 outlets selling diesel fuel. Self-service stations are becoming increasingly important and in 1986 they accounted for 42.4 per cent of petrol stations. Some 200,000 people were employed in the repair of motor vehicles in 1986.

Hotels and Catering

The hotel and catering trades employed 1 million people in Great Britain in mid-1985: 256,000 in hotels and other residential establishments; 226,000 in restaurants, cafés and snack bars; 268,000 in public houses and bars; 143,000 in clubs; and 136,000 in canteens. A large number of self-employed people are also engaged in hotels and catering. There were 12,800 hotel businesses in Great Britain in 1985, with a turnover of £4,050 million. Many licensed hotels as well as most of the numerous guest houses are small, with fewer than 20 rooms. Of the major hotel business groups the biggest is Trusthouse Forte Ltd, which runs 800 hotels including 200 in Britain, and has catering and leisure interests. The total turnover of holiday camps and camping and caravan sites

was about £500 million in 1985. Among the largest firms running holiday centres (including holiday camps with full board, self-catering centres and caravan parks) are Butlins, Pontins, Ladbroke Holidays, Warners and Haven Leisure. There were over 41,600 businesses in Great Britain in 1985 with a total turnover of more than £4,250 million, which were engaged in the sale of food for consumption both on and off the premises. These include restaurants, snack bars, cafés, fish and chip shops and other establishments selling 'take-away' food. Britain has a very wide range of restaurants of which a substantial number specialise in Chinese, Italian, Indian and Greek foods. 'Fast-food' catering, in which establishments sell hot food such as hamburgers or chicken to be eaten either on the premises or elsewhere, is becoming increasingly significant. There are about 42,300 'pubs' (public houses, which mainly sell beer, wines and spirits for consumption on the premises) in Great Britain, with a total turnover of £7.336 million in 1985.

BUSINESS Business services include advertising, market research, management consul-SERVICES tancy, exhibition and conference facilities, computer services and auction houses. Most of these sectors have grown rapidly in recent years.

Advertising Advertising expenditure rose by 15.2 per cent in 1986 to £5,117 million, with that going to television increasing by 21.7 per cent, according to the Advertising Association. Advertising in the press accounted for 60 per cent of the total, television for 34 per cent, posters for 4 per cent and commercial radio and cinema for the rest. Advertising has been growing fastest in the free distribution press and directories. Advertising campaigns are planned mainly by advertising agencies, of which there are several hundred in Britain; in some cases they also provide marketing, consumer research and other services.

Computing Services

The industry comprises software houses, which provide professional services such as consultancy, the writing of programs to meet the computing needs of their clients, and, increasingly, packaged software designed for a wider market; computer bureaux, where the main emphasis is on processing customers' data; and systems houses, which specialise in the provision of complete systems (hardware and software).

The computing services industry is one of the fastest-growing sectors of the British economy: annual growth averaged 18 per cent between 1978 and 1986 and the turnover of the British market was approximately £2,100 million in 1986. The industry employs about 45,000 people, excluding those working on computer maintenance and on 'in-house' computer activities, who number several hundred thousand. Many of the computing service companies are subsidiaries of firms engaged in activities such as banking, insurance, manufacturing and distribution.

Management Consultancy

There are thought to be some 7,000 management consultants in Britain, of whom 3,000 are practising members of the Institute of Management Consultants. Among the largest management consultancy companies are the 29 members of the Management Consultancies Association, whose turnover amounted to £228 million in 1986. Revenue earned within Britain comprised £201 million, an increase of 42 per cent on the previous year, while overseas revenue amounted to £27 million. The Association reports a growing demand for services supporting the application of information technology, particularly micro-processing, to all aspects of business.

Market

The 30 members of the Association of Market Survey Organisations (AMSO) accounted for about 75 per cent of total turnover by market research companies in 1986. The turnover of AMSO members increased to £152 million from £136 million in 1985. The largest company, the AGB group, had a turnover of £31.7 million. Research on behalf of food and soft drinks companies accounted for 20 per cent of revenue. Research on behalf of financial institutions and groups with international interests has increased.

Exhibition and Conference Centres

With the steady increase in new and renovated facilities, some 80 towns and cities are well equipped to hold conferences and exhibitions. Among the most modern facilities are the National Exhibition Centre at Birmingham, the Wembley Conference Centre, the Queen Elizabeth Il Conference Centre and the Barbican Centre for Arts and Conferences in London, the Brighton Centre in Sussex, the Harrogate Centre in North Yorkshire, the Bournemouth International Centre in Dorset, St David's Hall in Cardiff, the Scottish Exhibition and Conference Centre in Glasgow, the G-MEX Centre in Manchester, the Royal Centre in Nottingham, the English Riviera Centre in Torquay, the Corn Exchange in Cambridge and the Aberdeen Exhibition and Conference Centre. Other large facilities are the Earls Court, Olympia and Wembley Arena sites in London. Britain is one of the world's three leading countries for international conferences (the others being the United States and France); the Union of International Associations, based in Brussels, estimated that about 9 per cent of the world's main international conferences were held in Britain in 1985. The value of domestic and international conference business in Britain is estimated at £750 million for 1985.

Auction Houses

Britain's chief auction houses are active in the international auction markets for works of art, trading on the acknowledged expertise of British valuers and dealers. The two largest houses, Sotheby's and Christie's, are established world-wide and had turnovers of £854 million and £403 million in 1986–87 respectively.

MISCEL-LANEOUS SERVICES

Some 117,000 people were employed in film, theatre, literary, musical, broadcasting and related services in Great Britain in mid-1986, 359,000 in sanitary services, 110,000 in research and development services and 311,000 in services connected with sport, recreation, gambling and betting. Other services provided included hairdressing and beauty parlours (113,000 employees), laundries, dyers and dry cleaners (65,900), photographic studios, religious organisations, tourist offices, learned societies, employers' and trade union organisations, and funeral services.

Film and Television

Recent years have seen further development of the independent programme production sector, and of specialised film and television services. New technical developments include origination on professional standard video as opposed to film, and an increasing use of computer-generated graphics and picture manipulation in both production and post-production work. Production of films for cinema (an activity particularly cyclical in nature) declined in the mid-1980s.

The Department of Trade and Industry conducts an annual inquiry into the value of overseas transactions relating to the production and exhibition of cinema and television material. For many years the inquiry has shown a surplus of receipts over expenditure. In 1985 receipts by film and television companies were £370 million, while expenditure was £206 million, a surplus of £164 million. Film companies' receipts totalled £260 million and television companies' receipts £110 million, the North American market accounting for about three-fifths of revenue in both cases. Some 316 film companies and 18 television broadcasting companies were covered in the 1985 inquiry.

AND

TOURISM Tourism is one of Britain's most important industries and is recognised as a major and growing source of employment. Spending by British residents and TRAVEL overseas visitors on tourism in Britain during 1986 amounted to around £12,000 million (excluding fares paid on travel to and from Britain). It is estimated that about 1.3 million jobs in Britain were supported directly or indirectly by tourism spending in 1986. The British Tourist Authority forecasts that around 200,000 new jobs will be created in the period 1987–92.

In 1986, 13.8 million overseas visitors to Britain (4 per cent less than in 1985, which was a record year) spent £5,457 million, virtually the same as in the previous year. British residents made 24.9 million trips abroad and spent £5,966 million, giving a deficit on the travel account of £539 million. About 60 per cent of overseas visitors to Britain came from Western Europe, 21 per cent from North America and about 19 per cent from elsewhere in the world. There was a 14 per cent increase in visits abroad by British residents in 1986; the majority of visits (88 per cent) were to Western Europe.

Some 2,850 travel agencies, with about 6,590 offices (over 90 per cent of the total), belong to the Association of British Travel Agents (ABTA). In general travel agents are small businesses but many ABTA members have more than one office. There are a few large firms (of which the biggest is Thomas Cook with over 335 branches). Computerised information and booking systems are being introduced in travel agencies. There are also 550 tour operator members of ABTA; some 250 companies are both retail agents and tour operators. ABTA operates financial protection schemes to safeguard its members' customers, maintains codes of conduct drawn up with the Office of Fair Trading, and offers a free conciliation service to help to resolve complaints against members and an independent arbitration scheme for tour operators' customers.

Official support for the promotion of tourism to and within Britain is provided by the British Tourist Authority and the tourist boards for England, Scotland, Wales and Northern Ireland. Funding for the tourist boards has been further increased for 1987-88 and the boards have been asked by the Government to encourage tourism in regions of the country where unemployment is high and where there is potential for development. Voluntary registration schemes exist for tourist accommodation throughout Britain and facilities offered by registered establishments are listed in the boards' accommodation guides. At the beginning of 1987 the boards for England, Scotland and Wales introduced a one- to five-crown classification scheme for hotels and other serviced accommodation, based on facilities offered, and a quality grading scheme for carayan. chalet and camping parks. Information on tourist facilities and accommodation is available from official information centres throughout Britain (most of which are administered by local authorities) and on videotex information services in Britain and overseas.

13 Energy and Natural Resources

Energy and non-fuel minerals make an important contribution to the British economy. The approximate value of minerals produced in 1985 was £27,498 million representing about 9 per cent of gross domestic product, of which crude oil accounted for 71 per cent, coal 14 per cent and natural gas 7 per cent.

All minerals in Great Britain are privately owned, with the exception of gold, silver, oil and natural gas (which are owned by the Crown), and coal and some minerals associated with coal. In Northern Ireland gold and silver are owned by the Crown, while rights to petroleum and other minerals are vested in the Government. On the United Kingdom Continental Shelf the right to exploit all minerals except coal is vested in the Crown. The exclusive right to extract coal, or license others to do so, both on land and under the sea, is vested in the British Coal Corporation. Normally, ownership of minerals belongs to the owner of the land surface but in some areas, particularly where mining has taken place, these rights have become separated. Mining and quarrying, apart from coalmining, are usually carried out by privately owned companies.

Water resources are normally sufficient for domestic and industrial requirements; supplies are obtained from surface sources such as mountain lakes and from underground sources by such means as wells and boreholes.

Energy

Britain has the largest energy resources of any country in the European Community and is a major world producer of oil, natural gas and coal. The other main primary sources are nuclear power and some water power; secondary sources are electricity, coke and very small quantities of town gas. Since 1980 Britain has been self-sufficient in energy in net terms as a result of the continued growth in offshore oil production, and self-sufficiency should be maintained for a number of years. Coal is the country's richest natural resource and is expected to maintain its role in meeting the country's energy needs. A major capital investment programme in the coal industry is in progress, Nuclear power provided about 20 per cent of electricity available from the British public supply system in 1986, and this proportion is expected to increase.

Privately owned companies predominate in offshore oil and gas production and oil refining, while publicly owned bodies are responsible for most coal production and electricity generation and distribution. In Great Britain the Secretary of State for Energy is responsible for these industries, except for electricity in Scotland which is the responsibility of the Secretary of State for Scotland. The Secretary of State for Northern Ireland is responsible for all energy matters there.

Energy Policy

The Government's energy policy is designed to ensure the secure, adequate and economic provision of energy to meet Britain's requirements. The Government

seeks to ensure that all economic forms of energy are produced, supplied and used as efficiently as possible, having regard also to the international application of the technologies involved. Oil and gas resources continue to be developed profitably. The Government attaches importance to the development of a competitive coal industry and to the safe and economic development of nuclear power. Particular attention is paid to achieving the most cost-effective use of energy through the adoption of energy efficiency measures.

Britain is actively engaged in international collaboration on energy questions, notably through its membership of the European Community and of the International Energy Agency (IEA, a body with 21 member countries attached to the Organisation for Economic Co-operation and Development). Since its establishment in 1974, the IEA has agreed a wide range of co-operative measures to reduce member nations' dependence on imported oil, and it continues to support the adoption of realistic energy pricing policies by all member countries, both to discourage wasteful use of energy and to stimulate new methods of utilising and saving it.

ENERGY CONSUMPTION

Inland primary energy consumption amounted to $335 \cdot 2$ million tonnes of coal equivalent in 1986 (see Table 27), $2 \cdot 5$ per cent more than in 1985. Energy consumption by final users in 1986 amounted to 57,860 million therms¹ on a 'heat supplied' basis, of which domestic users consumed about 30 per cent, industrial users 28 per cent, transport 28 per cent, and commerce, agriculture and public services 14 per cent.

Table 27: Inland Energy Consumption (in terms of primary sources)

million tonnes coal equivalent

	1976	1981	1984	1985	1986
Oil	134.2	110.9	135.2	115.0	112.6
Coal	122.0	118.2	79·0ª	105.3	113.5
Natural gas	58.8	72.1	76.5	82.3	83.6
Nuclear energy	12.9	13.7	19.5	22.2	21.3
Hydro-electric power	1.9	2.3	2.1	2.1	2.4
Net imports of electricity	_	_		1-	1.7
Total	329.8	317.2	312.3	326.9	335.2

Source: Department of Energy.

^a Consumption affected by the dispute in the coalmining industry during 1984–85.

Note: Differences between totals and the sums of their component parts are due to rounding.

ENERGY EFFICIENCY

The aim of obtaining the best value for money from energy consumed is an integral part of the Government's strategy to increase the efficiency with which energy is supplied and used throughout the economy. Studies have indicated that the potential for improvements in Britain's energy use resulting from cost-effective energy efficiency measures is at least 20 per cent, worth some £7,000 million a year. In 1983 the Government launched a campaign, led by the Energy Efficiency Office, aimed at achieving that improvement. The Office administers a wide range of schemes, publicity, advice and targeted assistance to highlight the means and financial benefits of using energy more efficiently, and 1986 was designated Energy Efficiency Year, to reinforce these programmes

 $^{^{1}}$ 1 therm = 105,506 kilojoules.

and initiatives. During the year, nearly 2,000 events were held throughout the country, some two-thirds of which were sponsored from outside government—by the fuel supply industries, the energy efficiency industries and other sectors with energy interests.

During 1986 the number of senior executives from industry, commerce and local government who had attended the Office's briefings reached 20,000. There are now about 10,000 energy managers in 77 groups nationwide who are responsible for promoting the benefits of improved energy efficiency, monitoring their companies' and local authorities' energy consumption and passing on

information about the latest developments in energy management.

This programme also includes financial assistance towards the cost of energy efficiency surveys in industry and commerce. The Office is supporting the development of monitoring and targeting systems among non-domestic energy users, with the aim of having systems on 1,000 sites by the end of 1990. Financial assistance is available towards selected energy efficiency demonstration projects which utilise new technologies or new applications of existing technologies; it is also available for selected research and development projects that help develop new or improved energy efficiency products, processes or systems. Regional energy efficiency officers provide help to companies and support for energy managers.

The Energy Efficiency Office has contributed to the cost of schemes in Edinburgh, Belfast and Leicester which have been exploring the technical and economic prospects of combined heat and power—the use of waste heat

generated in producing electricity to provide hot water and steam.

To ensure that the campaign's momentum was maintained after 1986, the Government embarked upon an action programme to achieve further progress with energy efficiency schemes and initiatives in 1987 and beyond.

OIL AND GAS

Britain's energy position has been transformed by the discovery of substantial oil and gas reserves offshore in the United Kingdom Continental Shelf (UKCS). The total area covered by production licences is some 100,000 sq km (39,000 sq miles) out of a total designated area of about 651,650 sq km (251,600 sq miles), over which Britain has exercised its rights to explore and exploit the seabed and subsoil. Expenditure on offshore and onshore exploration and development amounted to some £3,356 million in 1986. By the end of 1986, 3,062 wells had been or were being drilled in the UKCS (1,385 development wells, 1,109 exploration wells and 568 appraisal wells).

Offshore Supplies The Offshore Supplies Office of the Department of Energy is responsible for ensuring that British industry has a full and fair opportunity in the supply of goods and services to the UKCS; for supporting British firms' research and development projects for new products and techniques for use in oil and gas exploration; and for promoting Britain's offshore interests overseas. Britain's offshore supplies industry is the second largest in the world (after that of the United States). In 1986 goods and services valued at £2,231 million were ordered for UKCS developments, the British share of orders received being £1,834 million (82 per cent).

OIL

Before the 1970s Britain was almost wholly dependent for its oil supplies on imports, the only indigenous supplies coming from a small number of land-based oilfields. However, the first notable discovery of oil in the UKCS was made in 1969 and the first oil was brought ashore in 1975. Output of crude oil from the UKCS in 1986 averaged 2.5 million barrels (332,000 tonnes) a day, making Britain the world's sixth largest producer.

North Sea Fields

There were 32 offshore fields producing crude oil at the end of 1986, while seven more fields are under development. The largest producing fields are Brent and Forties; other significant finds may prove to have commercial potential after further appraisal. Production from most large fields is controlled from production platforms of either steel or concrete which have been built to withstand severe weather including gusts of wind of up to 260 km/h (160 mph) and waves of 30 m (100 ft).

Primary oil production, including condensates and petroleum gases, amounted to about 127 million tonnes in 1986 (see Table 28). Output is around its maximum, and production is forecast to decline slowly in the rest of the 1980s. Britain should remain a significant producer well into the 1990s and, on a smaller scale, into the twenty-first century. The Government's oil policy is intended to encourage exploration and development with the objective of maximising economic oil production for the foreseeable future. Remaining proven reserves of oil in the UKCS amount to between 710 and 2,050 million tonnes while the total remaining reserves of the UKCS could be as high as 4,438 million tonnes. The Petroleum Act 1987 empowers the Secretary of State for Energy to require those responsible to draw up programmes for the abandonment of offshore installations when the first fields cease production in the early 1990s.

Structure of the Oil Industry

There are several large oil companies operating in Britain or engaged in work in the UKCS. In total there are about 280 companies with interests in the North Sea. The two leading British oil companies are British Petroleum (BP) and Shell Transport and Trading, which are the two largest industrial companies in Britain in terms of turnover. The exploration and development of the UKCS is carried out by the private sector. The only state involvement is a small Oil and Pipelines Agency which in 1985 took over the residual functions of the British National Oil Corporation, which had been abolished. The Agency markets the crude oil received by the Government as petroleum royalty taken in kind, manages the Government's pipeline and storage system and holds the Government's rights under participation agreements with the oil companies.

Land-based Fields

Onshore production of crude oil is much less significant than offshore production. In 1986 it amounted to 504,000 tonnes, about 55 per cent of which came from Britain's largest onshore field at Wytch Farm (Dorset), which started production in 1979. In addition to minor production from various mining licensees, there are five other onshore fields, including Humbly Grove (Hampshire) and Welton (Lincolnshire); Stainton in Lincolnshire is under development. At the end of 1986, 101 new exploration licences were in force.

Refineries

At the beginning of 1987 the distillation capacity of Britain's 14 oil refineries stood at 90 million tonnes a year. Excess capacity is being eliminated, while existing refineries are being adapted to the changing pattern of demand by the construction of new upgrading facilities ('catalytic crackers') which are leading to a higher output of motor spirit and naphtha at the expense of fuel oil.

Consumption and Trade

Deliveries of petroleum products for inland consumption (excluding refinery consumption) in 1986 totalled some 69 million tonnes, including $21\cdot5$ million tonnes of motor spirit, $7\cdot5$ million tonnes of kerosene, $17\cdot1$ million tonnes of gas and diesel oil (including derv fuel used in road vehicles) and $12\cdot5$ million tonnes of fuel oil.

Exports of crude oil amounted to 82·1 million tonnes in 1986. Virtually all exports went to Britain's partners in the European Community and the IEA, the largest markets being the Netherlands, France, the Federal Republic of Germany

Table 28: Oil Statistics

for inland consumption

crude petroleum

Imports:

Exports (including re-exports):

refined petroleum products and process oils

and the United States. Some $20\cdot2$ million tonnes of petroleum products were also exported. Though self-sufficient, Britain continues to import other crude oils, to enable the full range of petroleum products to be made efficiently and economically. The main sources of imports in 1986 were Norway (which supplied about 39 per cent by value), Saudi Arabia (11 per cent), Egypt (10 per cent) and Nigeria (8·5 per cent).

million tonnes 1976 1981 1984 1985 1986 Oil production^a land 0.090.20.3 0.4 0.5offshore 11.5 89.3 125.7 127.3 126.5Refinery output 90.372.073.2 72.9 $74 \cdot 1$ Deliveries of petroleum products

81.6

3.3

16.6

66.3

52.5

14.2

81.4

75.9

16.4

69.8

79.6

18.9

69.2

82.1

20.2

crude petroleum 87.0 33.0 25.0 26.9 32.6 refined petroleum products and process oils 16.0 14.4 28.5 25.0 22.9 Sources: Department of Energy and HM Customs and Excise.

^a Crude oil plus condensates and petroleum gases derived at onshore treatment plants.

Oil Pipelines

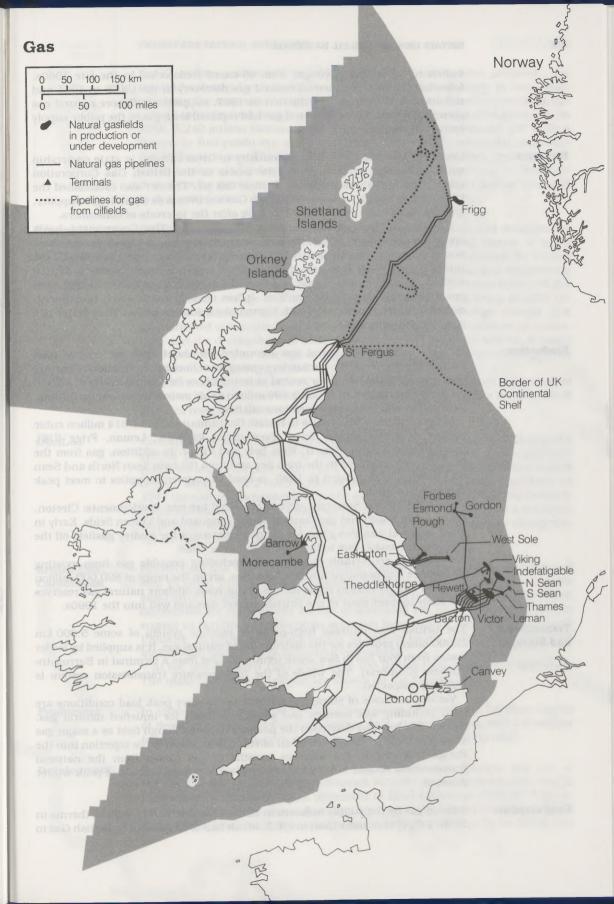
Oil pipelines brought ashore about 80 per cent of offshore oil in 1986. Some 1,660 km (1,031 miles) of major submarine pipeline brings oil ashore from the North Sea oilfields (see map, p 274). Major crude oil onshore pipelines in operation from harbours, land terminals or offshore moorings to refineries include those connecting Finnart to Grangemouth, Tranmere to Stanlow, Amlwch to Stanlow, and Cruden Bay to Grangemouth. Onshore pipelines also carry refined products to major marketing areas; for example, a 423-km (263-mile) pipeline runs from Milford Haven to the midlands and Manchester.

Research

The leading oil companies have extensive research and development programmes in support of oil exploration and production and on new and improved fuels. All aspects of production are covered, including the design of production facilities and enhanced oil recovery techniques. Research centres are at Sunbury-on-Thames (BP), Ellesmere Port in Cheshire and Sittingbourne in Kent (Shell), and Abingdon in Oxfordshire (Esso). The main government research and development effort in offshore technology is undertaken by the Department of Energy with the advice of the Offshore Energy Technology Board. In 1986–87 the Department spent some £24 million in support of offshore technology.

GAS

Public supply of manufactured gas in Britain began in the early nineteenth century in central London. For many years gas was produced from coal but during the 1960s, when growing supplies of oil were being imported, there was a



switch to producing town gas from oil-based feedstocks. In the late 1960s, following the first commercial natural gas discovery in the UKCS in 1965 and the start of offshore gas production in 1967, supplies of offshore natural gas grew rapidly and by 1977 natural gas had replaced town gas in the public supply system in Great Britain.

Structure

Under the Gas Act 1986, the gas industry in Great Britain, in state ownership since 1949, was privatised and the assets of the British Gas Corporation transferred to the new company, British Gas plc. The Act also established the Office of Gas Supply, to monitor British Gas's activities as a public gas supplier, and the Gas Consumers Council, to look after the interests of consumers.

British Gas has about 3 million shareholders. The Government holds approximately 3.5 per cent of the shares, which have been set aside for the share bonus for private shareholders who retain shares for three years. In 1986–87 the turnover of British Gas and its subsidiary companies amounted to £7,610 million, of which gas supply accounted for £6,967 million. Current cost operating profit was £1,005 million. It has recently made much investment, especially in the Rough and South Morecambe fields (see below). British Gas has some 86,000 employees.

Production

In 1986 indigenous natural gas accounted for about 76.5 per cent of total natural gas supplies, the remainder coming from Norway. Production of natural gas, excluding that flared or vented at terminals or fields, amounted to 45,310 million cubic metres, of which 3,496 million cubic metres were used for drilling, production and pumping operations offshore.

Net production (chiefly sales to British Gas) amounted to 41,814 million cubic metres. It comes mainly from seven major gasfields: Leman, Frigg (UK), Indefatigable, Viking, Hewett, West Sole and Victor. In addition, gas from the South Morecambe field in the Irish Sea and from the twin Sean North and Sean South fields, inaugurated in 1986, is used to augment supplies to meet peak demand in winter.

During 1986 the Secretary of State approved five new developments: Cleeton, Ravenspurn South and the South Valiant, Vanguard and Vulcan fields. Early in 1987 approval was also given for the development of the Audrey gasfield off the Lincolnshire coast, due to begin production in 1988.

Remaining recoverable gas reserves, including possible gas from existing discoveries and potential future discoveries, are in the range of 890,000 million to 2.836 million million cubic metres. Indigenous offshore natural gas reserves are likely to meet most of the British market demand well into the 1990s.

Transmission and Storage

The British Gas national high-pressure pipeline system of some 5,900 km (3,900 miles) provides for the distribution of natural gas. It is supplied by feeder mains from four North Sea shore terminals, and from a terminal in Barrow-in-Furness (Cumbria). The whole of the high-pressure transmission system is regularly inspected.

Various methods of storage of natural gas to meet peak load conditions are used including salt cavities and storage facilities for liquefied natural gas. British Gas has also developed the partially depleted Rough field as a major gas store. This, the first such use of an offshore field, involves the injection into the Rough reservoir in the summer months of gas drawn from the national transmission system for recovery at high rates during periods of peak winter demand.

Consumption

Sales of gas by the supply industry in Britain totalled 18,741 million therms in 1986, 1.9 per cent more than in 1985. About half of all gas sold by British Gas to

its 17 million consumers is for industrial and commercial purposes, the remainder being for household use. Gas is used extensively in industries requiring the control of temperatures to a fine degree of accuracy such as the pottery industry and certain processes for making iron and steel products. In 1986, 5,242 million therms of gas were sold to industry in Britain, 197 million therms to fuel producers and 2,950 million therms to commercial and other non-domestic users. The domestic load includes gas for cookers, space heaters, water heaters and refrigerators, but an increasingly large part of domestic demand is for gas for central heating. In 1986, 10,352 million therms were sold to domestic users.

Research

British Gas spends some £74 million a year on its research and development programme, carried out at five research stations throughout Britain. It has a joint research agreement with Japan and has carried out research for United States companies. The programme is investigating mechanical engineering design, materials technology, the instrumentation and electronics related to gas transmission, storage and offshore operations. Other areas being studied are improved industrial applications of gas, with major energy savings and sophisticated automatic control of processes; domestic and commercial utilisation; and the development of substitute natural gas from coal and oil. A major development is the 'intelligent pig', among the most advanced inspection vehicles for examining gas and oil pipelines in use.

An international consultancy service makes available advanced technological processes under licence; carries out audits of every aspect of the industry; and provides computer software and training.

COAL

Coalmining in Britain can be traced back to the thirteenth century. It played a crucial part in the industrial revolution of the eighteenth and nineteenth centuries and in its peak year, 1913, the industry produced 292 million tonnes of coal, exported 74·2 million tonnes and employed over a million workers. In 1947 the coal-mines passed into public ownership by means of the Coal Industry Nationalisation Act 1946, which set up the National Coal Board as a statutory corporation to manage the industry. In 1987 the Board's name was changed to the British Coal Corporation.

British Coal Corporation

British Coal has, with limited exceptions, exclusive rights over the extraction of coal in Great Britain, but is empowered to license private operators to work small mines and opencast sites. It also has powers to work other minerals, where discoveries are made in the course of searching for, or working, coal; and to engage in certain petrochemicals activities beneficial to the future of the coal industry. Retail sales remain largely in private hands, although British Coal makes bulk sales to large industrial consumers.

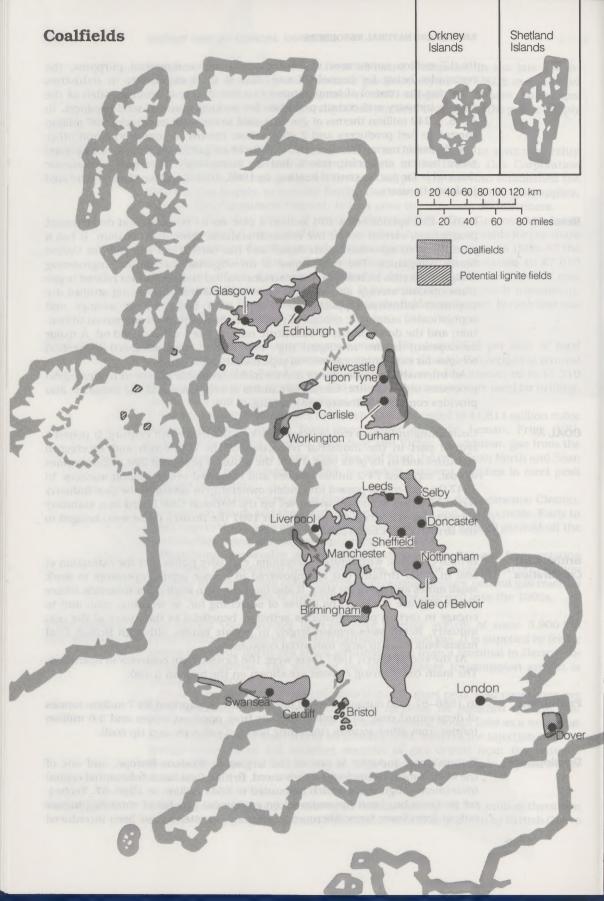
At the end of March 1987 there were 108 British Coal collieries in operation. The main coal-bearing regions are shown on the map on p 280.

Production

In 1986–87 total output of 106.9 million tonnes comprised 88.7 million tonnes of deep-mined coal, 14.6 million tonnes from opencast mines and 3.6 million tonnes from other sources (including licensed collieries and tip coal).

Development

Britain's coal industry is one of the largest in Western Europe, and one of the world's most technologically advanced. British Coal has a substantial capital investment programme, which amounted to £644 million in 1986–87. Technical progress has been concentrated on equipment capable of obtaining higher output from fewer faces. Microprocessor control systems have been introduced



and shield supports have been made available in all but the thinnest seam sections. New designs of power loader and face conveyor are being brought in whenever they are cost-effective. Production at the new mining complex at Selby in North Yorkshire (one of the world's most advanced deep mines) is planned to build up to 10 million tonnes a year. Investment of £400 million has been allocated to develop a new mine at Asfordby within the Vale of Belvoir (Leicestershire); the Vale contains recoverable reserves estimated at 510 million tonnes.

The first coal to be discovered on a significant scale in Northern Ireland is a substantial deposit of lignite (brown coal) on the eastern shore of Lough Neagh and under the lake bed. Further deposits have been discovered and are being appraised to determine their size and the feasibility of mining.

Consumption

In 1986–87 inland consumption of coal was 113·1 million tonnes of which 70 per cent was by power stations, 10 per cent by coke ovens and 7 per cent by domestic users. With a substantial proportion of coal being used by power stations for electricity generation, British Coal sales of coal to them totalled 79·5 million tonnes in 1986–87. Exports of coal in 1986–87 were 2·3 million tonnes, while imports amounted to some 10 million tonnes.

Research

In 1986—87 British Coal spent £48 million on research. It has two main research establishments: the Technical Department at Stanhope Bretby (Staffordshire), for work on mining methods and equipment and developing systems for remote and automatic control; and the Coal Research Establishment at Stoke Orchard (near Cheltenham), concerned with the utilisation of coal, including research and development on combustion techniques for industrial steam-raising and heating. This project has led to successful commercial exploitation, and development work continues. Agreements to exchange technical information have been signed by British Coal with several countries. Britain is responsible through a British Coal subsidiary for the management of a service which provides information on and analyses of coal topics under the auspices of the International Energy Agency.

ELECTRICITY

The first public supply of electricity in the world was in 1881, at Godalming (Surrey). In 1948 all municipal and private undertakings in Great Britain were acquired under the Electricity Act 1947 and vested in the British Electricity Authority and 14 regional boards, except in the north of Scotland where they became the responsibility of the North of Scotland Hydro-Electric Board (NSHEB), which had been set up in 1943. Two subsequent Acts (1954 and 1957) effected a measure of decentralisation and established the present structure of public corporations. Electricity from the public supply system is available to all premises in Britain except for some very remote rural households. The public supply industry employed over 150,000 people and invested some £1,670 million in 1986–87. The main transmission system (national grid) in Great Britain is one of the largest fully interconnected power networks in the Western world.

The Energy Act 1983 allows private generation to compete with the public supply industry. It entitles private generators of electricity to sell their electricity to the boards on terms reflecting costs fairly incurred by the boards, and allows them to use the public transmission and distribution system.

Structure

The Electricity Council is the central co-ordinating body of the supply industry in England and Wales. It has a general responsibility for promoting the development and maintenance of an efficient, co-ordinated and economical system of electricity supply. Electricity is generated and transmitted by the

Electricity Shetland Orkney Islands Islands Dounreav Peterhead Fasnakyle 20 40 60 80 100 120 km Foyers 20 40 60 80 miles Errochty Rannoch Conventional power stations (1,000 MW and over) Cruachan A Clunie Lochay Nuclear power stations Sloy Under construction Longannet Power-producing reactors of the UKAEA or BNFL **O**Torness nverkip -Cockenzie Hydro-electric power stations Junterston B Hunterston A (over 45-MW capacity) Pumped storage schemes Boundary of the SSEB Chapelcross Blyth B and NSHEB Hartlepool Calder Hall Heysham II Heysham I Ferrybridge C■ Eggborough Fiddler's ■ West Burton Cottam -▲ Dinorwig **▲** Ffestiniog Ratcliffe-on-Soar Trawsfynydd Rheidol Sizewell A Sizewell BO Tilbury Berkeley Thurrock Bradwell Pembroke ... Aberthaw B Grain Oldbury Didcot Kingsnorth Dungeness Bo. Hinkley Pt. A Hinkley Pt. B Fawley Dungeness A Winfrith

Central Electricity Generating Board (CEGB), which is responsible for the operation and maintenance of power stations and the national grid. Twelve area electricity boards are responsible for distribution and for the retail sale of electricity. In 1986-87 the income of the electricity supply industry in England and Wales was $\pounds11,119$ million.

In Scotland two boards, the NSHEB and the South of Scotland Electricity Board (SSEB), generate, distribute and sell electricity. The boundary separating their areas runs from Dumbarton on the Firth of Clyde to Newburgh on the Firth of Tay (see map, opposite). In 1986–87 the turnover of the SSEB and the NSHEB was £906 million and £324 million respectively.

In Northern Ireland generation, transmission and distribution are carried out by Northern Ireland Electricity, a publicly owned body.

Consumption

Sales of electricity in 1986 amounted to 247,895 gigawatt hours (GWh). Domestic users took 37 per cent of the total, industry 35 per cent and commercial and other users the remainder. About one-fifth of domestic sales is for space heating, one-sixth for water heating and one-tenth for cooking. Electricity is used in industry mainly for motive power, melting, heating and lighting. It is supplied to 24·5 million consumers of whom 21·7 million are in England and Wales, 1·7 million are supplied by the SSEB, 584,000 by the NSHEB and 556,000 are in Northern Ireland.

Generation

Generation by the public electricity supply industry in Britain amounted to 282,272 GWh in 1986. Conventional steam power stations provided over 78·4 per cent of the total, nuclear stations 19·1 per cent and gas turbine, hydro-electric and diesel plant 2·5 per cent. Public supply power stations consumed 116·2 million tonnes of coal equivalent in 1986, of which coal accounted for 71 per cent and oil 9 per cent. The output capacity of the 172 generating stations of the electricity boards at the end of 1986 totalled 62,885 megawatts (MW) including 52,363 MW run by the CEGB, 6,160 MW by the SSEB, 2,570 MW by the NSHEB and 1,726 MW by Northern Ireland Electricity. An analysis of electricity generation by and output capacity of the public supply system is given in Table 29.

Table 29: Generation by and Capacity of Public Supply Power Stations

	Electrici	ty generate	Domoont	Output	
	1976	1981	1986	Per cent 1986	capacity ^a (MW)
Nuclear plant	32,419	34,043	54,005	19	6,479
Other steam plant	217,495	220,259	221,391	78	48,865
Gas turbines and					
oil engines	487	509	557		3,458
Pumped-storage plant	1,381	1,003	2,394	1	2,788
Other hydro-electric plant	3,138	3,917	3,925	2	1,295
Total	254,920	259,731	282,272	100.0	62,885
Electricity supplied (net) ^b	235,756	242,106	261,181		

Source: Department of Energy.

At 31 December 1986.

b Electricity generated less electricity used at power stations (including electricity used for pumping at pumped-storage stations).

Generation of electricity outside the public supply system is relatively small (18,816 GWh in 1986). The major sources outside the fuel industries are the chemicals, engineering, paper, and iron and steel industries and the nuclear power plants of the United Kingdom Atomic Energy Authority (UKAEA) and British Nuclear Fuels plc. In 1986 these nuclear plants supplied 4,289 GWh of electricity to the public supply system.

The most recent large-scale power stations are based on units of 500 MW and 660 MW. Station capacities have increased and there are 15 stations each with a capacity of 2,000 MW or more including Kingsnorth (Kent), Europe's largest mixed-fuel station burning either coal or oil. The Drax coal-fired station (North Yorkshire), which has an output capacity of 4,000 MW, is the largest coal-fired station in Western Europe. The larger units have a higher thermal efficiency (the ratio of the net electrical energy output to the heat energy input) than earlier units, and their introduction, coupled with the closure of less efficient plant, has resulted in a gradual rise in overall thermal efficiency, leading to substantial savings in fuel consumption. Average thermal efficiency of conventional steam stations in England and Wales rose from 20.91 per cent in 1947–48 to 35.08 per cent in 1986–87. The Government is considering proposals for a lignite-fuelled power station in Northern Ireland, to come into use in the mid-1990s.

The pumped-storage station at Dinorwig (Gwynedd), the largest of its type in Europe, has an average generated output of 1,728 MW. (In pumped-storage schemes electricity generated in off-peak periods is used to pump water to high-level reservoirs from which it descends to drive turbines, rapidly providing a large supply of electricity at peak periods or to meet sudden increases in demand.)

The CEGB, together with Electricité de France, has constructed a 2,000-MW cross-Channel cable link, which started to operate in 1986, increasing the capacity for the transmission of electricity between the two countries.

The Government is keen to encourage combined heat and power (CHP) schemes. As part of a programme to study the potential for CHP/district heating in particular locations in Britain, the Government has given financial assistance to consortia from Belfast, Edinburgh and Leicester for the preparation of a prospectus for a combined CHP/district heating scheme. It is expected that all of these studies will be completed by the end of 1987.

Nuclear Power

Britain has been developing nuclear power for several decades and in 1956 the world's first industrial-scale nuclear power station, at Calder Hall (Cumbria), began to supply electricity to the national grid. The Government believes that nuclear power has a vital role in helping to meet Britain's long-term energy requirements. There are 14 nuclear power stations in operation controlled by the CEGB, while four other stations also feed electricity to the national grid: the two original Magnox stations (both with a net capacity of about 200 MW) operated by British Nuclear Fuels plc at Calder Hall and Chapelcross (Dumfries and Galloway); and two prototype stations run by the UKAEA—at Winfrith (Dorset) and a prototype fast reactor at Dounreay (Highland).

Nuclear Power Development Under the first commercial programme, nine Magnox stations with a total gross capacity of about 4,000 MW were commissioned between 1962 and 1971, the largest being Wylfa (Gwynedd), which has a capacity of 840 MW. The second series of orders was based on the Advanced Gas-cooled Reactor (AGR). Hinkley Point B (Somerset) and Hunterston B (Strathclyde) began operating in 1976, while three more AGRs began operating in 1984: Dungeness B (Kent), Hartlepool (Cleveland) and Heysham (Lancashire). All the AGRs are 1,320-MW units except Dungeness B (1,200 MW). Construction is in progress on two further 1,320-MW AGRs—a second station at Heysham and a station at Torness

(Lothian)—and these should be completed by 1988. In March 1987 the Secretary of State for Energy, following a public inquiry, granted consent for the CEGB to build a pressurised water reactor at Sizewell (Suffolk) for which the Nuclear Installations Inspectorate issued a safety licence in June 1987.

British Nuclear British Nuclear Fuels plc provides nuclear fuel services covering the whole fuel Fuels cycle: uranium conversion, uranium enrichment (through its shareholding in Urenco Ltd), fuel element fabrication, transport and reprocessing of spent fuel, and the manufacture of specialised fuel element components. All of its shares are held by the Government. The company is organised into four divisions, covering uranium enrichment, based at Capenhurst (Cheshire); fuel manufacture at Springfields (Lancashire); reprocessing (operations) at Sellafield (Cumbria) where valuable unused uranium and plutonium are recovered from the spent fuel; and reprocessing (engineering) at the headquarters at Risley (Cheshire). There is a large-scale investment programme in progress involving expenditure of some £3,600 million over the next ten years. The major part of this expenditure relates to the Sellafield site and comprises the refurbishment of facilities for treating spent fuel from Magnox power stations, the construction of a thermal oxide reprocessing plant (THORP) which will take spent fuel from Britain's AGRs and overseas reactors, and the construction of facilities to process and package radioactive waste. The remainder of the programme involves the construction of further centrifuge enrichment plant at Capenhurst, and refurbishment and construction of new plant at Springfields.

Nuclear Research The UKAEA carries out research and development to ensure that nuclear power is economic, safe and environmentally acceptable. Its work is undertaken by research establishments at Harwell (Oxfordshire), Risley, Winfrith, Springfields, Windscale (Cumbria), Dounreay and Culham (Oxfordshire). In addition, safety research is carried out at the Safety and Reliability Directorate at Culcheth (Cheshire). Work connected with the development of the fast reactor and its fuel cycle takes place principally at Dounreay and represents a major programme for the UKAEA.

The UKAEA operates as a trading fund, which allows it to function on a commercial basis. Under these arrangements the UKAEA's research and development work funded by the Department of Energy is on a customercontractor basis. The UKAEA also carries out work for a number of other customers including the electricity generating boards, British Nuclear Fuels plc, other government departments and industry.

Co-operation on nuclear energy between Britain and other countries takes place within a framework of intergovernmental agreements—such as that with Belgium, France, the Federal Republic of Germany and Italy setting out collaboration on the development of the fast reactor—and membership of bodies such as the International Atomic Energy Agency, and through direct links on research between the UKAEA and equivalent organisations overseas.

Britain takes part in the co-operative research programmes of the European Atomic Energy Community (Euratom), including one on establishing the feasibility of achieving controlled thermonuclear fusion. A major component of this programme is the Joint European Torus (JET) project at Culham, which started operating in 1983.

Nuclear Safety

The Government and the nuclear industry give high priority to safety and the industry has an excellent safety record. Responsibility for safety at nuclear sites rests with the operators who must protect their workers and the public by complying with the Health and Safety at Work etc. Act 1974, with conditions of their nuclear site licences under the Nuclear Installations Act 1965 and by keeping discharges within the limits and conditions set by authorisations granted under the Radioactive Substances Act 1960. In England authorisations are granted jointly by the Secretary of State for the Environment and the Minister of Agriculture, Fisheries and Food, and in Scotland and Wales by their respective Secretaries of State. The terms of the authorisations are designed to ensure that those most exposed to the effects of discharges receive less than the maximum dose limit recommended by the International Commission on Radiological Protection. Within the limits, operators of nuclear facilities are required to keep discharges as low as reasonably achievable and failure to do so makes them liable to prosecution. Compliance with the legislation is overseen by the Nuclear Installations Inspectorate of the Health and Safety Executive, by the Inspectorate of Pollution (set up in 1987) in England and Wales, and by the Industrial Pollution Inspectorate in Scotland.

Britain is playing a major part in international discussions on nuclear safety. The International Atomic Energy Agency has drawn up an outline programme which would include the establishment of two international conventions: one on the reporting and exchange of information on nuclear accidents with possible transboundary effects, and one on co-ordinated emergency response and assistance in the event of such an accident.

Research on Electricity

The Electricity Council draws up a general programme of research, some of it direct research carried out by the Council and electricity boards and some of it in co-operation with selected industrial research associations and through research contracts placed with universities and other organisations. Some of the work is done in collaboration with the two Scottish electricity boards and Northern Ireland Electricity which contribute towards its cost (£186 million in 1986–87). Collaboration on research between the supply industry and the plant manufacturers is co-ordinated by the Power Engineering Research Steering Committee. The research establishments run by the CEGB comprise the Central Electricity Research Laboratories at Leatherhead (Surrey), the Berkeley Nuclear Laboratories in Gloucestershire and the Marchwood Engineering Laboratories on Southampton Water. Research on distribution technology and electricity utilisation is undertaken at the Electricity Council Research Centre at Capenhurst (Cheshire) and by the area boards.

RENEWABLE SOURCES OF ENERGY

The Department of Energy is supporting research and development in the renewable energy technologies, to encourage the use of those which have been shown to be commercially attractive, and to increase understanding of the economics and potential of those which are promising but still uncertain. Renewable energy sources, however, are not expected to make a major contribution to energy supplies this century, although they may have a greater role in the twenty-first century. The Department of Energy's estimate is that some £17·25 million was spent in 1986–87 in support of its renewable energy programme; work is being concentrated on the most promising technologies, including wind energy, geothermal hot dry rocks, tidal energy, passive solar design and biofuels.

Wind power constitutes a resource of considerable national significance. In 1986 a vertical-axis wind turbine, 25 m (82 ft) in diameter and generating 160 kW, the first of its kind in the world, was inaugurated at Carmarthen Bay (Dyfed). The Department is supporting two other major projects: a 60 m (200 ft) diameter, 3-MW horizontal-axis wind turbine on Orkney, in collaboration with the NSHEB, expected to begin working later in 1987; and a 1-MW, 55 m (180 ft) diameter wind turbine at Richborough (Kent). The latter is also receiving support from the CEGB, the European Community and the private sector. The

Department of Trade and Industry is supporting, through its National Engineering Laboratory at East Kilbride, the operation of a test site for small-scale and medium-scale wind turbines at Eaglesham, near Glasgow. The Energy Research Group of the Science and Engineering Research Council is supporting a number of projects on the integration of wind and diesel electrical generation, which has particular relevance to small, isolated communities.

Under its geothermal hot dry rock programme, the Department is investigating the economic possibilities of extracting heat from rocks at great depth. Research, involving government expenditure of some £20 million since 1977, is mainly carried out by the Camborne School of Mines in Cornwall, where a project is being conducted to establish the technology for creating a suitable deep underground heat exchange zone from which the heat could be withdrawn.

In 1986 a £5.5 million extension to the tidal resource programme was announced. This includes advanced investigations into a Severn barrage on a line from near Cardiff to Weston-super-Mare (Avon); a contribution towards studies into a Mersey barrage; and generic studies, including construction techniques and the potential of similar sites around Britain.

Passive solar design is considered the best way to utilise solar energy in Britain and has already proved cost-effective in both domestic and non-domestic buildings, using their form and fabric to admit, store and distribute solar energy for heating and improving daylight. The Department of Energy's research and development programme has shown that by incorporating such features into both new and existing houses energy consumption can be significantly reduced. In recognition of the potential of, and importance of releasing, passive solar energy, the Department is increasing expenditure over the next two years. A major project initiated in 1987, with European Community backing and including the British glass manufacturer Pilkingtons plc, was the establishment of a test centre at Strathclyde University, which will facilitate experiments on passive solar design and equipment.

Biofuels offer possibly the largest contribution from the renewable energy resources in the mcdium term. The main work of the Department's programme is on the combustion of wastes, anaerobic digestion (particularly as applied to

the production and use of landfill gas) and energy forestry.

The Department also has a low-level research and development programme into wave encrgy, supporting an inshore project on the island of Islay following a fcasibility study at the Queen's University of Belfast.

Non-fuel Minerals

Although much of Britain's requirements of industrial raw materials is met by imports, non-fuel minerals produced in Britain make an important contribution to the economy. Output of non-fuel minerals in 1985 totalled 307 million tonnes, valued at £1,461 million. The total number of employees in the extraction industry was 36,000 in 1985. The locations of some of the more important minerals produced in Britain are shown on the map on p 288.

Exploration

Exploring for and exploiting indigenous metalliferous mineral resources to meet the needs of industry are being encouraged by the Government. The British Geological Survey is carrying out a long-term programme for the Department of Trade and Industry aimed at identifying areas with the potential for economic extraction of minerals.

Production

The tonnage extracted of some of the main non-fuel minerals produced in Britain is given in Table 30. In terms of value, production of common sand and gravel was estimated at £398 million in 1985, limestone and dolomite £359



million, clays £234 million, igneous rock £171 million, sandstone £57 million, salt £54 million, tin £47 million, potash £39 million, fluorspar £17 million, gypsum and anhydrite £16 million and chalk £13 million. Britain is a major world producer of several important industrial minerals including china clay, ball clay, fuller's earth, celestite and gypsum, and also produces significant amounts of limestone, dolomite, chalk, fluorspar, potash, salt, silica sands, fireclay, common clay and shale, barytes and talc, mostly for home consumption. Small amounts of diatomite, slate, calcspar, chert and flint, anhydrite and china stone are also produced. In 1985 the production of metal from non-ferrous ores totalled 15,500 tonnes, mainly tin and zinc from Cornwall and lead from northern England. The Cornish mines, the only significant tin mines in the European Community, produced some 5,000 tonnes in 1985, satisfying about half of Britain's demand. Small amounts of copper and silver were produced in association with tin and zinc. Planning permission has recently been granted for a large opencast tungsten mine at Hemerdon (near Plymouth).

Production of sand, gravel and crushed rock (from limestone, igneous rock and sandstone) as aggregates for use in construction constitutes two-thirds, by value, of Britain's output of non-fuel minerals. Britain is the world's second largest producer of marine-dredged sand and gravel (16·3 million tonnes in 1985).

Table 30: Production of Some of the Main Non-fuel Minerals

million tonnes

	1975	1980	1985
Common sand and gravel	124.6	104.5	107.7
Silica sand	6.1	5.7	4.2
Igneous rock	42.0	34.7	38.4
Limestone and dolomite	95.2	88.8	92.5
Chalk	17.9	14.0	12·0ª
Sandstone	13.4	12.6	13.2
Gypsum	3.3	3.4	3.1
Salt including salt in brine	7.6	7.2	7.1
Common clay and shale	27.8	19·8ª	18·9ª
China clay and ball clay	3.2	4.0	3.8
Fireclay	1.6	1.2	0.8ª
Iron ore	4.5	0.9	0.3
Potash	_	0.5	0.6
Fluorspar	0.2	0.2	0.2

Source: United Kingdom Mineral Statistics Data to 1985.

^a Great Britain only.

Water

Britain's water supplies are obtained partly from surface sources such as mountain lakes, streams impounded in upland gathering grounds and river intakes, and partly from underground sources by means of wells, adits and boreholes. Water for public supply in Britain amounted to about 19,500 megalitres (Ml) a day in 1986 and average daily supply per head was nearly 350 litres. About 99 per cent of the population in Great Britain and over 97 per cent in Northern Ireland are connected to the public water supply system.

In general, householders pay for their domestic water supply, sewerage and

sewage disposal services through charges based on the rateable value of their property, whereas industrial users are charged for their water supply according to actual metered consumption. Since 1981 optional metering for domestic users has been available throughout England and Wales, and a joint study by the Department of the Environment and the water industry has recommended a series of large-scale trials of compulsory domestic metering.

England and Wales

In England and Wales the Secretaries of State for the Environment and for Wales are jointly responsible for policy in relation to the conservation, augmentation, distribution and proper use of water resources and provision of water supplies; the provision of sewerage and sewage disposal services; the restoration and maintenance of the wholesomeness of rivers and other inland waters; and the use of inland waters for navigation and recreation. The Minister of Agriculture, Fisheries and Food and the Secretary of State for Wales are responsible for policy relating to land drainage, flood protection, sea defence, and the protection and development of fisheries.

Water Authorities

Nine regional water authorities in England and the Welsh Water Authority in Wales are responsible for the management of water services; the development of water resources; water distribution and supply; the prevention of pollution; sewerage; sewage treatment; river management; land drainage; sea defence; recreation; and freshwater fisheries. Water authorities' estimated revenue for 1987–88 is some £2,840 million. Their management boards are appointed by ministers. However, legislation is planned to privatise the water authorities' utility functions of water supply, sewerage and sewage treatment and disposal in England and Wales, with a view to removing government financial controls, improving services and involving the public and the workforce more closely in ownership of the industry. A new public body, the National Rivers Authority, will be set up to take over responsibility for the regulatory and river management functions, including pollution control and water quality regulation, water conservation and resource planning, fisheries, land drainage and flood protection.

District councils usually act as agents of water authorities for the design, construction, operation and maintenance of public sewers in their areas.

Statutory Water Companies

There are 29 statutory water supply companies, accounting for about onequarter of total supplies, which are operating under the Water Act 1973. Special arrangements govern the relationship of these companies to the water authorities.

Supplies

Some 26,300 Ml a day were abstracted in England and Wales in 1985, of which public water supplies accounted for 16,650 Ml a day. The Central Electricity Generating Board took some 4,400 Ml a day primarily for cooling in connection with electricity generation, other industry about 3,950 Ml a day and the remainder was used in agriculture and fish farming.

Water authorities have powers to restrict consumption when there are severe water shortages. Under the Drought Act 1976 they can limit or prohibit the use of water and, if necessary, restrict domestic water supplies.

Scotland

In Scotland responsibility for public water supply, sewerage and sewage disposal rests with the nine regional and three islands councils. In addition, the Central Scotland Water Development Board is primarily responsible for developing large water sources and supplying water in bulk to its five constituent member authorities, the regional councils in central Scotland.

Scotland has a relative abundance of unpolluted water from upland sources. An average of 2,200 Ml a day was supplied in Scotland in 1985–86. The Secretary of State for Scotland is responsible for the promotion of the conservation of water resources and the provision by water authorities of adequate water supplies, and also has a duty to promote the cleanliness of rivers and other inland waters and the tidal waters of Scotland.

Northern Ireland

The Water Service of the Department of the Environment for Northern Ireland is responsible for water supply and sewerage throughout Northern Ireland. The Department is also responsible for the conservation, cleanliness and planned development of Northern Ireland's water resources. Northern Ireland has abundant potential supplies of water for both domestic and industrial use. An average of 690 Ml of water a day was supplied in 1986.

Development Projects

Investment is taking place to ensure that there is an adequate water supply to meet future demand. The Thames Water Authority is constructing an 80-km (50-mile) distribution system to meet the growing demand for water in London. When completed in 1994, it will be the largest urban distribution system in the world. North West Water has embarked on a major 25-year programme of investment to clean up the polluted rivers of the Mersey Basin. In 1986–87 capital expenditure on water supply, sewerage and sewage disposal amounted to some £943 million in England and Wales, £101 million in Scotland and £26 million in Northern Ireland.

Research

The central research organisation for the water industry in Britain is the Water Research Centre. Its membership includes water undertakings, consulting engineers, manufacturers and overseas organisations. It has three laboratories: at Stevenage (Hertfordshire), which deals with water and waste water treatment; at Medmenham (Buckinghamshire), which is concerned with environmental protection (including water quality and pollution); and at Swindon (Wiltshire), which is concerned with instrumentation, water mains and sewers. Other organisations conducting research include Hydraulics Research Limited, universities, the Meteorological Office and several institutes of the Natural Environment Research Council.

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14 Agriculture, Fisheries and Forestry

Agriculture

British agriculture is noted for its high level of efficiency and productivity. About $2.5\,$ per cent of the working population are engaged in agriculture and the industry produces nearly two-thirds of Britain's food requirements compared with just under a half in 1960, and four-fifths of that which can be grown in a temperate climate compared with nearly two-thirds in 1960. Food accounted for 10 per cent of Britain's imports by value in 1986, compared with about a quarter in the 1960s. Gross output in 1986 was £12,198 million, about $3.8\,$ per cent of gross domestic product. Britain is also a major exporter of agricultural produce and food products, agrochemicals and agricultural machinery.

The Government aims to foster an efficient and competitive agriculture industry through the provision and sponsorship of research, development and advisory services, the provision of financial support where appropriate, measures to control disease, pests and pollution, and improved marketing arrangements for food and food products. It also encourages the industry to adopt high standards on animal welfare. The Agriculture Act 1986 gives agriculture ministers a responsibility to achieve a balance between the interests of agriculture, the economic and social interests of rural areas, conservation and recreation, and plans have been published to encourage alternative uses of farmland and a more diverse rural economy.

Land Use

Just over three-quarters of the land area is used for agriculture, the rest being mountain, forest or put to urban and other uses. The area of agricultural land has been declining, although there has been a reduction in the net rate of loss in recent years. There are 12 million hectares (30 million acres) under crops and grass. In hill country, where the area of cultivated land is often small, some 6 million hectares (over 15 million acres) are also used for rough grazing. Soils vary from the thin poor ones of highland Britain to the rich fertile soils of low-lying areas such as the fenlands of eastern England. The cool temperate climate and the even distribution of rainfall ensure a long growing season; streams rarely dry up and grassland is green throughout the year.

Farming

In 1986 there were some 260,000 farm holdings in Britain, of which 71 per cent in England, Scotland and Wales were wholly or mainly owner-occupied, while virtually all the farms in Northern Ireland are owner-occupied. It is estimated that 11 per cent of holdings in the largest size group accounted for about 55 per cent of output, while the smallest size of holding (which accounted for 44 per cent of farms) produced less than 3 per cent of output. In Wales and Northern Ireland, output from smaller farms is more significant than in the rest of Britain. The average area (including rough grazing) of full-time businesses is 106 hectares (262 acres).

The number of people engaged in agriculture is about 680,000. The labour force continues to decline slightly, and the level of mechanisation to increase. Labour productivity improved substantially between 1976 and 1986. Total farming income in 1986 was an estimated £1,411 million.

There are over 500,000 tractors and some 55,000 combine harvesters in use. A wide variety of other machines for harvesting and preservation of grass are also employed. Horticultural crops such as blackcurrants and brussels sprouts are frequently harvested by machine, and milking machines are used on the vast majority of dairy farms. The majority of farms have a direct electricity supply, the remainder having their own generators.

Although dairy herd monitoring and account analysis have been computerised for many years, the recent introduction of the microcomputer has produced major changes in farm business management. Budgeting and the monitoring of cash-flow and performance are now frequently computerised, while computer models of typical farms allow a wide range of crops and livestock to be considered, along with demands for labour, land, capital and buildings. The Government provides a topical information service to farmers and growers through the Prestel viewdata service.

PRODUCTION

Home production of the principal foods is shown as a percentage by weight of total supplies (that is, output plus imports minus exports) in Table 31.

Table 31: British Production as a Percentage of Total Supplies

Food product	1975–77 average	1986 estimate
Meat	83	89
Eggs	99	98
Milk for human consumption (as liquid)	100	100
	62	65
Butter	19	66
Sugar (as refined)	31	55
Wheat	61	117
Potatoes for human consumption	83	87

Source: Ministry of Agriculture, Fisheries and Food.

Livestock

About three-fifths of full-time farms are devoted mainly to dairying or beef cattle and sheep. The majority of sheep and cattle are reared in the hill and moorland areas of Scotland, Wales, Northern Ireland and northern and south-western England. Beef fattening occurs partly in better grassland areas, as does dairying, and partly on arable farms. British livestock breeders have developed many of the cattle, sheep and pig breeds with world-wide reputations, for example, the Hereford and Aberdeen Angus beef breeds, the Jersey, Guernsey and Ayrshire dairy breeds, Large White pigs and a number of sheep breeds. Because of developments in artificial insemination and embryo transfer, Britain is able to export semen and embryos from high-quality donor animals.

Table 32 shows the number of livestock and output of livestock products.

Cattle and

Most dairy cattle in England and Wales and a significant proportion in Scotland Sheep and Northern Ireland are bred by artificial insemination. The average size of dairy herds in Britain was 60 in 1986 while the average yield of milk per dairy cow was 4,933 litres (1,084 gallons). Average household consumption of liquid (including low-fat milks) per head in 1986 was 2·1 litres (3·7 pints) per week.

About two-thirds of home-fed beef production derives from the national dairy herd, in which the Friesian breed is predominant. The remainder is derived from suckler herds producing high-quality beef calves in the hills and uplands, where the traditional British beef breeds, such as Hereford and Aberdeen Angus, continue to be important. Imported breeds which have established themselves include the Charolais, Limousin, Simmental and Belgian Blue.

Britain has a long tradition of sheep production with more than 40 breeds and many crosses between them. Research has provided vaccine and serum protection against nearly all the epidemic diseases. Although lamb production is the main source of income for sheep farmers, wool is also important.

Grass supplies 60 to 80 per cent of the feed for cattle and sheep; grass production has been enhanced by the increased use of fertilisers, irrigation and methods of grazing control, and improved herbage conservation for winter feed. Rough grazings are used for extensively grazed sheep and cattle, producing young animals for fattening elsewhere.

Table 32: Livestock and Livestock Products

	1975–77 average	1984	1985	1986
Cattle and calves ('000 head)	14,259	13,213	12,911	12,533
Sheep and lambs ('000 head)	28,299	34,802	35,628	37,016
Pigs ('000 head)	7,759	7,689	7,865	7,937
Poultry ('000 head)	138,338	127,506	128,968	120,740°
Milk (million litres)	13,908	15,593	15,409	15,608
Eggs (million dozen)	1,140	1,022	1,022	1,021
Bcef and veal ('000 tonnes)	1,107	1,136	1,124	1,018
Mutton and lamb ('000 tonnes)	247	298	313	309
Pork ('000 tonnes)	602	713	742	760
Bacon and ham ('000 tonnes)	219	208	203	207
Poultry meat ('000 tonnes)	688	846	874	922

Source: Ministry of Agriculture, Fisheries and Food.

Pigs and Poultry Pig production occurs in most areas but is particularly important in eastern and northern England. There is an increasing concentration into specialist units and larger herds.

Output of poultry meat has continued to benefit from better husbandry and genetic improvements. Since 1975 production has increased by over a third and reached about 922,000 tonnes in 1986. Production of broilers from holdings of over 100,000 birds accounts for over a half of total production. In 1986, egg production was over 1,000 million dozen. About two-thirds of laying birds are in flocks of 20,000 or more. Britain remains broadly self-sufficient in poultry meat and eggs.

Animal Welfare

The welfare of farm animals is protected by regulations and it is an offence to cause unnecessary pain or distress to livestock on commercial farms. For example, there are regulations to control such operations as castration and tail docking, and requiring owners of intensive units to arrange for the daily inspection of their stock and the equipment on which it depends. There are advisory codes and recommendations for the welfare of all major species of farm

^aThis figure excludes turkeys.

animals and compliance is monitored by the State Veterinary Service. Among government proposals in 1986–87 were safeguards for the protection of sheep exported for slaughter; new regulations on the welfare of battery hens; a ban on singly penned veal-calf crates; and new codes of practice on the welfare of poultry and rabbits.

The Farm Animal Welfare Council, an independent body set up by the Government, keeps under review the welfare of farm animals on agricultural land, at markets, in transit and at the place of slaughter, and advises on any legislative changes it considers necessary.

Crops

The farms devoted primarily to arable crops are found mainly in eastern and central southern England and eastern Scotland. In 1986 cereals were grown on 4 million hectares (10 million acres), with a record area devoted to wheat. Total cereal production, at some 24·5 million tonnes, was the second highest ever. About one-third of the wheat crop is normally used for flour milling, and about one-third for animal feed. About 15 per cent of the barley crop is used for malting and distilling and about 40 per cent for animal feed. Exports of wheat and barley have increased substantially, accounting in recent years for about a quarter of total production. There has been a rapid increase in the oilseed rape crop; the seed is crushed to obtain vegetable oil and the solid matter left is used for animal feed.

Large-scale potato and vegetable production is undertaken in the fens (in Cambridgeshire and south Lincolnshire), the alluvial areas around the rivers Thames and Humber and the peaty lands in south Lancashire. Early potatoes are an important crop in south-west Wales, Kent and south-west England. High-grade seed potatoes are grown in Scotland and Northern Ireland.

Sugar from home-grown sugar beet provides about 50 per cent of requirements, most of the remainder being refined from raw sugar imported from developing countries under the Lomé Convention.

Table 33 gives figures on the area, harvest and yield of the main crops.

Horticulture

In 1986 the land utilised for horticulture was about 251,300 hectares (621,100 acres), of which vegetables grown in the open (excluding potatoes) accounted for 184,300 hectares (455,500 acres), orchards for 34,830 hectares (86,100 acres), small fruit for 15,630 hectares (38,610 acres), bulbs and flowers grown in the open for 5,440 hectares (13,450 acres) and hardy nursery stock for 7,030 hectares (17,360 acres). Crops grown in glasshouses accounted for 4,070 hectares (10,050 acres).

Field vegetables account for about 40 per cent of the value of horticultural output and are widely grown throughout the country. Most horticultural enterprises are increasing productivity with the help of improved planting material, new techniques and the widespread use of machinery. Some field vegetables, for example, are raised in blocks of compressed peat or loose-filled cells, a technique which reduces root damage and allows plants to establish themselves more reliably and evenly.

Glasshouses are used for growing tomatoes, cucumbers, lettuce, flowers, pot plants and nursery stock. Widespread use is made of automatic control of heating and ventilation, and semi-automatic control of watering. Energy-efficient glasshouses use thermal screens, while low-cost plastic tunnels extend the season for certain crops previously grown in the open.

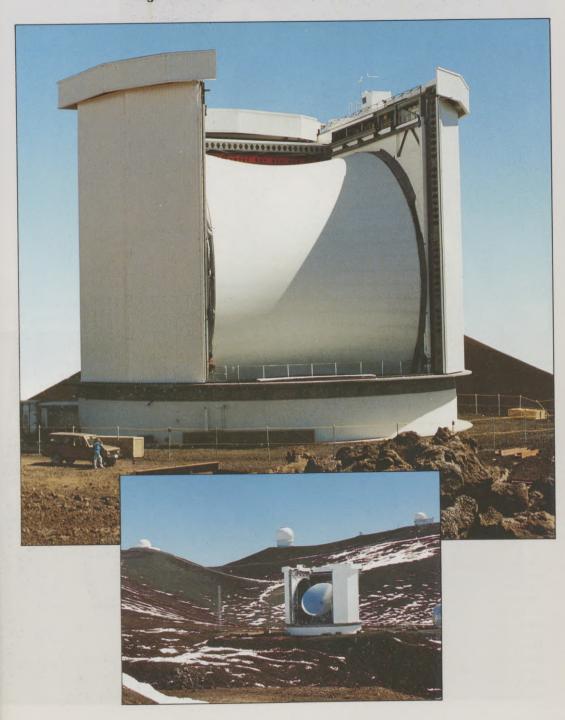
Under the European Community's Common Agricultural Policy (see p 298), a wide range of horticultural produce is subject to common quality standards.

EXPORTS

The Government is keen to encourage the growth of exports related to agriculture and their value is increasing in real terms; they amounted to £6,383

ASTRONOMY

The 15-m James Clerk Maxwell Telescope, on Mauna Kea, Hawaii, is designed for observation in millimetre and sub-millimetre wavelengths. Located in 'Millimetre Valley', below the main ridge (see lower picture), the telescope is protected from high winds and solar radiation by a woven membrane.

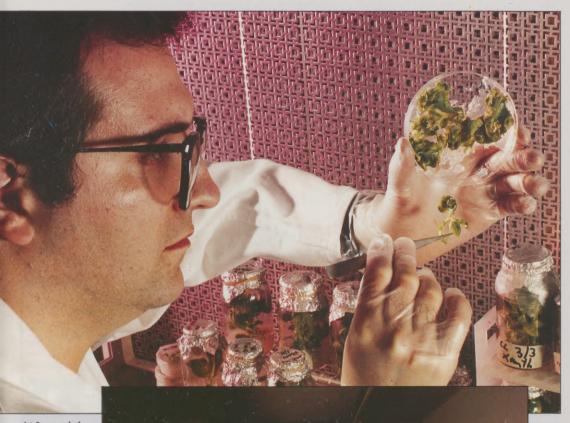


SCIENTIFIC RESEARCH



A precise model of the bed of the River Sabi, Zimbabwe, has been constructed at Hydraulics Research, near Oxford, to help assess the flow rate at varying water levels and thus provide the key to major irrigation projects.

This earthquake simulator at Bristol University is one of the most advanced in the world, and uses the latest techniques in servo-hydraulics and control engineering.



At Imperial College, London, work is in progress on giving crops in-built protection against specific viruses by implanting additional genes.

Research at
Cambridge
University is
showing that
superconductors
produced by
sputtering a
superconducting
single-crystal
ceramic film
on a substrate
can operate
at near room
temperature.

ADVANCES IN MEDICINE

Dr R.J.W. Rees, head of the British team which has discovered a vaccine suitable for immunising people against leprosy. Trials with the vaccine have begun in northern Malawi, where the disease is endemic.

These driers at the new Blood Products
Laboratory will produce 90 million units a year of Factor VIII for the treatment of haemophiliacs. The Laboratory will ensure that England and Wales become self-sufficient in blood products.

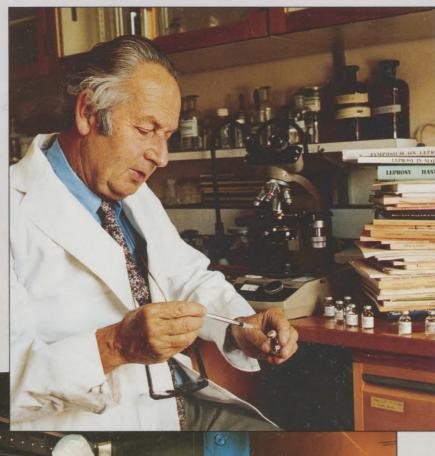




Table 33: Main Crops

	1975–77 ^a average	1984	1985	1986 forecast
Wheat		11 - 12		
Area ('000 hectares)	1,115	1,939	1,902	1,997
Harvest ('000 tonnes)	4,834	14.958	12,050	13,910
Yield (tonnes per hectare)	4.34	7.71	6.33	6.96
Barley				
Area ('000 hectares)	2,313	1,979	1,966	1,917
Harvest ('000 tonnes)	8,897	11,064	9,740	10,010
Yield (tonnes per hectare)	3.85	5.59	4.95	5.22
Oats				
Area ('000 hectares)	221	106	134	97
Harvest ('000 tonnes)	783	517	615	505
Yield (tonnes per hectare)	3.54	4.89	4.59	5.16
Potatoes				
Area ('000 hectares)	220	198	192	179
Harvest ('000 tonnes)	5,320	7,398	6,890	6,445
Yield (tonnes per hectare)	24.18	37.36	35.88	36.00
Oilseed Rape				
Area ('000 hectares)	47	269	296	299
Harvest ('000 tonnes)	107	923	895	965
Yield (tonnes per hectare)	2.28	3.43	3.03	3.23
Sugar Beet				
Area ('000 hectares)	203	196	202	201
Harvest ('000 tonnes)	5,857	9,017	7,715	8,120
Yield (tonnes per hectare)	29.50	45.90	38.30	40.40

Source: Annual Review of Agriculture 1987.

^aThe hot, drought-affected summers of 1975 and 1976 had an impact on yields in those years. *Note*: Differences between totals and the sums of their component parts are due to rounding

million in 1986, of which exports of food and drink accounted for £5,368 million, with the main markets being Western Europe, North America and the Middle East. Exports include speciality products such as fresh salmon, Scotch whisky, biscuits, jams and conserves, as well as beef and lamb carcasses and cheese. Food from Britain, a national marketing organisation responsible for improving the marketing of British produce in the domestic and overseas markets, was set up in 1983. The British Food Export Council represents its export arm for fresh and processed food and drink, and identifies suppliers for customers, organises programmes of visits and meetings for overseas customers, and, with the British Overseas Trade Board, co-ordinates British pavilions at the world's major agricultural exhibitions. The British Agricultural Export Council provides a similar service for the agricultural and horticultural supply industries; products and services offered by its members include all types of machinery, seeds, fertilisers, chemicals, feedingstuffs, livestock and semen, veterinary preparations and equipment, and consultancy. In 1986, Britain exported some 72,400 wheeled agricultural and forestry tractors, maintaining its position as the world's largest exporter.

One of the world's largest agricultural events, the annual Royal International

Agricultural Show, held at Stoneleigh in Warwickshire, provides an opportunity for overseas visitors to see what British agriculture has to offer. A typical attendance for the four open days is 200,000, including 16,000 from overseas. Virtually every British agricultural machinery manufacturer is represented at the show, which is also the most important pedigree livestock event in the country. Other major agricultural displays include the annual Royal Smithfield Show, held in London, which exhibits agricultural machinery, livestock and carcasses, and the annual Royal Highland Show, held in June at Ingliston near Edinburgh. There are also several important regional shows.

MARKETING

Agricultural products are marketed by private traders, producers' co-operatives and marketing boards, the latter being producers' organisations (each including a minority of independent members appointed by agriculture ministers) with certain statutory powers to regulate the marketing of milk, wool and potatoes. For the most part the boards buy from producers or control contracts between first buyers; the Potato Marketing Board, however, maintains only a broad control over marketing conditions leaving producers free to deal individually with buyers. For home-grown cereals, meat and livestock, apples and pears, there are marketing organisations representing producer, distributor and independent interests.

Food from Britain is responsible for improving the marketing of food and agricultural products, both in the domestic market and abroad. It has introduced a 'Foodmark' symbol under which producers are able to guarantee the quality of fresh and lightly processed foods to the consumer.

Co-operatives

Substantial investment—over £100 million in new fixed assets in 1976–86—is being made by agricultural and horticultural co-operatives concerned with marketing and storing products. A number of central co-operative grain stores have been established, and new vegetable groups have been formed to meet the demand from retailers for a continuous supply of fresh, quality produce; fruit marketing co-operatives are also expanding. Food from Britain provides a full range of advisory services for co-operatives and the Government assists their development with grants.

ROLE OF THE GOVERNMENT

Four government departments have joint responsibility—the Ministry of Agriculture, Fisheries and Food, the Department of Agriculture and Fisheries for Scotland, the Welsh Office and the Department of Agriculture for Northern Ireland.

Common Agricultural Policy

The stated aims of the European Community's Common Agricultural Policy, which accounts for about two-thirds of the Community's budget, are to increase agricultural productivity and thereby to ensure that the agricultural community has a fair standard of living, to stabilise the agricultural market, to guarantee regular supplies of food and to provide these supplies at a reasonable price.

Decisions on the level of price support are taken annually by the Council of Ministers on the basis of proposals presented by the European Commission. For many commodities these measures consist of a minimum intervention price at which agencies of the member states will purchase production, thereby putting a floor in the market, and levies made on imports to maintain internal support prices. Schemes may be introduced for subsidised disposal of stocks to consumers within the Community where this can be done without disrupting internal markets. The export of surpluses is facilitated by the provision of export refunds to enable Community exporters to sell on world markets at the going price. There is also provision for certain direct payments, including beef and sheepmeat premiums, to producers.

The support prices, as well as rates of levy, export refunds and other aids, are set in European Currency Units and are converted into the currencies of the member states at fixed rates of exchange (commonly called 'green rates') which do not vary automatically in line with changes in market exchange rates. The green rates can thus be out of line with the market rate of exchange between each currency and the European Currency Unit, giving rise to different real support price levels in the different member states. Monetary compensatory amounts, based on the percentage difference between the green and market rates of each currency, are applied to prevent distortions in trade. They operate as import subsidies and export levies for countries whose currencies' market rates are below the green rates, and as import levies and export subsidies in the opposite case.

In order to reduce the costs of the agricultural policy, the British Government has sought to obtain improvements, in particular by bringing support prices more into line with market forces and by containing the costs of the policy. In December 1986, during Britain's Presidency of the Community, major steps in the process of reform were taken. It was agreed that Community milk production should be reduced by 9.5 per cent over two years, and that recourse to intervention in the beef sector should be restricted. This latter measure ensures an effective reduction of 13 per cent in beef support prices. Britain seeks further action to extend reforms to the cereals and other sectors.

The Community's agricultural expenditure is channelled through the European Agricultural Guidance and Guarantee Fund. The Fund's guarantee section finances market support arrangements, while the guidance section provides funds for structural reform, for example, farm modernisation and investment, and payments to assist certain farmers to change to alternative enterprises.

Grants and Subsidies

Expenditure in Britain in 1986–87 on price guarantees, grants and subsidies Guarantees, and on Common Agricultural Policy market regulations was estimated to be £282 million and £1,296 million respectively. About £1,331 million was reimbursed from the Community budget.

Potatoes and wool are not covered by the Common Agricultural Policy; price guarantees for potatoes are operated through the Potato Marketing Board and the Department of Agriculture for Northern Ireland, and a price stabilisation fund for wool is administered by the British Wool Marketing Board.

> Producers also receive support through certain capital and production grants, some based on Community decisions. Grants are available to assist farmers and horticulturists with farm improvement plans, and there is special financial help for hill and upland farmers in the form of headage payments on cattle and sheep (known as compensatory allowances). Community assistance may also be made to help to improve facilities for the marketing and processing of agricultural products and to provide a premium payment to specialised beef producers, while launching aid is available to production and marketing groups in the horticultural sector.

Smallholdings and Crofts

Local authorities provide some 6,410 statutory smallholdings in England and 960 in Wales. They make loans of up to 75 per cent of required working capital to their tenants. Land settlement in Scotland has always been carried out by the Government, which, while now seeking to dispose of holdings to sitting tenants, still owns and maintains about 119,000 hectares (293,000 acres) of land settlement estates, comprising some 1,570 crofts and holdings.

Within the crofting areas of Scotland (in Strathclyde, Highland, Western Isles, Orkney and Shetland) much of the land is held by tenants known as crofters. Crofting is administered by the Crofters Commission, and benefits from government grants for land improvements and some other agricultural work.

Tenancy Legislation

The agricultural holdings legislation protects the interests and rights of landlords and tenants, with provision for arbitration in the event of a dispute. Most agricultural tenants have the right to contest a notice to quit, which is then ineffective unless the landlord obtains consent to its operation from an independent body (in England and Wales the Agricultural Land Tribunal and in Scotland the Scottish Land Court). On termination of tenancy, the tenant is entitled to compensation in accordance with a special code. There are provisions for succession of a close relative on the death of a tenant but this does not apply in England and Wales to new tenancies which have come into effect since 12 July 1984.

Practically all farms in Northern Ireland are owner-occupied, but, under a practice known as 'conacre', occupiers not wishing to farm all their land let it annually to others. About one-fifth of agricultural land is so let, and is used mainly for grazing.

Agriculture and Protection of the Countryside

Agriculture ministers have a general duty to seek to achieve a reasonable balance between the needs of an efficient and stable agriculture industry and other interests in the countryside, including the conservation of its natural beauty and amenity and the promotion of its enjoyment by the public. In addition, they are specifically required to further conservation of the countryside in the administration of capital grant schemes for farmers in national parks and in sites of special scientific interest designated by the Nature Conservancy Council.

The Government has designated nine farming areas in Britain, which are of particular importance for their landscapes, historic significance and value as natural habitats, as 'environmentally sensitive areas'. The areas are: in England, the Broads (in Norfolk and Suffolk), the Pennine Dales (in Durham, North Yorkshire and Cumbria), the Somerset Levels and Moors, the eastern South Downs (mainly in West Sussex) and West Penwith (in Cornwall); in Wales, the Cambrian Mountains; in Scotland, Loch Lomond (in Strathclyde and Central Regions) and Breadalbane (mainly in Tayside); and in Northern Ireland, the Mourne Mountains. Designating orders for seven further areas are to be laid at the end of 1987: Breckland (Norfolk and Suffolk), the North Peak (Greater Manchester, West Yorkshire, Derbyshire and South Yorkshire), the Suffolk river valleys (Suffolk and Essex), the Test Valley (Hampshire), the Shropshire borders-Clun (Shropshire), the western South Downs (West Sussex and Hampshire), and Llewyn (Gwynedd). Farmers in these areas will be offered incentive payments to continue with more traditional farming methods and maintain the beauty and value of their farms. In England and Wales the Agricultural Development and Advisory Service (see p 301) advises farmers on, and actively promotes, aspects of conservation such as wildlife habitats, landscape features and farm buildings, and encourages the industry to adopt high standards of pollution control.

The Farm and Countryside Initiative, launched in 1986 by the Ministry of Agriculture, Fisheries and Food and the Department of the Environment, as part of the Manpower Services Commission's Community Programme, aims to provide long-term unemployed people in England with work to benefit rural communities. Similar schemes operate in Scotland and Wales.

In February 1987 government plans to encourage alternative uses of farmland, increase diversity on farms and in the rural economy generally, and enhance environmental protection were announced. These describe how the Government's policies towards farming are being adjusted to reflect the changing scene and potential in the rural economy as a whole. Expansion of the traditional forestry programme to reach 33,000 hectares (82,000 acres) a year, the introduction of a farm woodland scheme, development of novel crops and

livestock, and diversification of farm enterprises are among the measures proposed.

Safety at Work

The Agricultural Inspectorate of the Health and Safety Executive is responsible for enforcing regulations on the health and safety of workers in agriculture. These cover such matters as the guarding of field and stationary machinery, workplaces, the fitting of safety cabs to tractors, and the use of chemicals.

Professional, Scientific and Technical Services In England and Wales the Government's Agricultural Development and Advisory Service (ADAS), reorganised in 1986—87, provides a wide range of professional, scientific, technical and veterinary services for agriculture and its ancillary industries. Most types of advice and servicing are on a fee-paying basis through subscriptions, individually priced consultancies, advisory contracts and special schemes and services. Advice to farmers on conservation, rural diversification and animal welfare is available free. Similar services are provided in Scotland by the Department of Agriculture and Fisheries, the Scottish Agricultural Colleges and a section of the State Veterinary Service. In Northern Ireland these services are available from the Department of Agriculture's advisory service.

Information and advice are given on business management, cropping, horticulture, livestock, land management, design, research and development, and product marketing, and through analytical laboratory tests and special product services. They identify problems requiring further investigation and carry out the necessary research and development. They also advise the Government on the scientific, technical and business implications of policy proposals and assist in implementing policies concerning animal and plant health, disease and pest eradication, food hygiene, animal welfare, land drainage and other capital grant schemes, and safeguarding agricultural land in relation to other land uses. The Service runs two Central Agricultural Laboratories, 19 experimental husbandry farms and horticulture stations, six regional laboratories with three sub-centres, and three veterinary laboratories. A diagnostic service for the practising veterinary surgeon is provided by 19 veterinary investigation centres.

CONTROL OF DISEASES AND PESTS Animals England, Scotland and Wales are free from many serious animal diseases. If they were to occur, diseases such as foot-and-mouth disease and swine vesicular disease would be combated by a slaughter policy applied to all infected animals and those exposed to infection, and by control over animal movements during the outbreaks. Rigorous measures are being taken to eradicate sheep scab and warble fly. The incidence of bovine tuberculosis is very low: cattle (except for certain categories) are tested at regular intervals; those reacting to the test are slaughtered, compensation being paid to the owners. Significant progress has been made towards eradicating Aujeszky's disease in pigs. Because of compulsory measures to eradicate brucellosis, begun on an area basis in 1972, England and Wales were declared free of the disease for all practical purposes in 1981, following a similar declaration for Scotland in 1980. In 1984 vaccination replaced slaughter as the means of controlling Newcastle disease in poultry.

Strict controls are exercised on the import of animals, meat and meat products, live poultry and other captive birds, and poultry meat, so as to prevent the introduction of animal or poultry diseases. Special measures apply to prevent the introduction of rabies, and dogs, cats and certain other mammals are subject to import licence and six months' quarantine. There are severe penalties for breaking the law. There have been no cases of rabies outside quarantine in Britain since 1970.

Northern Ireland has been kept free from the major animal diseases, including rabies, foot-and-mouth disease and swine vesicular disease, and in 1982 the

incidence of brucellosis was reduced to the point where the country was officially declared brucellosis-free.

Professional advice and action on the control of animal disease and the welfare of farm livestock is the responsibility of the government veterinary services, which have laboratory facilities and investigation centres performing specialist research work and advising private practitioners responsible for treating animals on the farm.

Plants

The agricultural departments are responsible for limiting the spread of plant pests and diseases and for preventing the introduction of new ones. They also issue the health certificates required by other countries to accompany plant material exported from Britain. Certification schemes are operated to encourage the development of healthy, vigorous and true-to-type planting stocks.

Pesticides

The supply and use of pesticides is controlled under the Food and Environment Protection Act 1985 and the Control of Pesticides Regulations 1986 made under it. All pesticides supplied for use in Britain must have been approved under statutory arrangements for their safety, efficacy and, where appropriate, humaneness in use. The storage, sale, supply, use and advertisement of pesticides will be progressively controlled and the regulations will be supported by statutory codes of practice to give advice on recommended safe practice to those who supply, store or use pesticides. The Act also enables ministers to specify how much pesticide residue may be left in food, crops and feedingstuffs. Consultations on proposals to introduce a system of statutory maximum residue limits are in progress.

Veterinary Medicinal Products

The manufacture, sale and supply of veterinary medicinal products is prohibited except under licence. Licences are issued by the agriculture ministers, who are advised on safety, quality and efficacy by the Veterinary Products Committee comprising independent experts.

AGRICULTURAL AND FOOD RESEARCH

The agriculture departments, the Agricultural and Food Research Council (AFRC) and private industry share responsibility for research, much of which is carried out in a network of research institutes, specialist laboratories and experimental farms, although some research is undertaken by appropriate university departments.

The AFRC, an autonomous body, receives funds from the science budget through the Department of Education and Science and income from work commissioned by the Ministry of Agriculture, Fisheries and Food, by industry and other outside bodies. The Council's programme of research is carried out at eight institutes which specialise in animal disease, animal physiology and genetics, grassland and animal production, arable crops, horticulture, plant sciences, food, and agricultural engineering. The Council also funds a number of units, groups or departments in universities whose work is integrated with the main AFRC programme, and, through its research grants scheme, supports projects in universities, polytechnics and colleges. In addition to commissioning research with the AFRC and other organisations, the Ministry carries out research and development work in the laboratories, experimental husbandry farms and horticulture stations of ADAS and in its food science laboratories. The five Scottish agricultural research institutes, funded by the Department of Agriculture and Fisheries for Scotland, cover broadly similar areas of research to those of the AFRC institutes, but the research is directed primarily to the needs of northern Britain. Development work in Scotland is carried out by the three agricultural colleges. Research in Northern Ireland is carried out by the Department of Agriculture in association with the Queen's University of Belfast; three agricultural colleges also cover applied research in agricultural science and food technology.

Agricultural research is also conducted or sponsored by private industry, in particular by related industries such as agrochemicals and agricultural machinery. The Government's policy is to increase the contribution by the agriculture industry as a whole towards the cost of research from which it benefits. The main aim of agricultural research is to maintain an efficient and competitive industry in Britain consistent with high standards of animal welfare and care for the environment.

About 80 per cent of food research is financed by the food industry. Government-funded research is directed primarily to aspects of consumer protection such as diet, and to basic research supporting the food industry's efforts to improve its competitiveness, for example by making food better to see and to taste and by process control.

The total government-funded programme of research and development in agriculture and food amounts to some £200 million a year. The work of the AFRC and the agriculture departments is co-ordinated into national programmes, primarily on the recommendations of the Priorities Board for Research and Development in Agriculture and Food, which advises on the research needs of the industries and the allocation of available resources between and within areas of research.

Recent research developments include a mechanism for harvesting cereal, seed and herbage crops by stripping them on site. In the field of genetic manipulation, reconstituted sheep embryos transferred to foster ewes have resulted in the birth of normal lambs with the genetic constitution of the donor nucleus. Animals with desirable characteristics can thus be quickly multiplied. The technique of inserting a gene from one animal into the germline cells of another has been developed, resulting in the birth of 'transgenic' lambs. Study continues into the efficient use of nitrogen fertilisers, plant breeding (including programmes to introduce disease resistance) and alternatives to straw burning.

Some 85 per cent of the British wheat acreage and about half the potato acreage are planted with varieties bred by the publicly financed research programme. Investigations into biological control methods have led to the development of new microbial pesticides, which are reducing reliance on chemical pesticides.

EDUCATION AND TRAINING

University and other degree and postgraduate courses provide training in the scientific and technological aspects of agriculture and horticulture, the emphasis being on science and economics. The agriculture departments give postgraduate awards annually for a range of subjects relating to food and agriculture. There are also degree and postgraduate courses in veterinary medicine. Science-based sandwich courses, leading to a Business & Technician Education Council (BTEC) Higher National Diploma and available at agricultural colleges, are designed for students wishing to enter farming or horticulture with a good knowledge of the managerial and technological aspects of the industry. The three-year BTEC National Diploma, also organised on a sandwich basis, is a general course in agriculture with some colleges offering special subjects such as arable farming, livestock production, dairy farming and farm mechanisation. In Scotland, the Scottish Agricultural Colleges provide a variety of courses.

In Great Britain the Agricultural Training Board runs the Agricultural and Horticultural Training Scheme, for mature as well as young workers, which can lead to the issue of craft certificates or to a full apprenticeship. In Northern lreland training is provided by the Department of Agriculture.

Fisheries

Britain is one of Europe's most important fishing nations. The fishing industry provides about 66 per cent of British fish supplies, and is an important source of employment and income in a number of ports. Cod, haddock, whiting, herring, plaice and sole are found in the North Sea off the east coasts of Scotland and England; mackerel, together with hake and other demersal fish, off the west coast of Scotland; sole, plaice, cod and whiting in the Irish Sea; and mackerel, sole and plaice off the south-west coast of England. Nephrops, crabs, lobsters and other shellfish are found in the inshore waters all around the coast. In 1986 there were 15,900 fishermen in regular employment and nearly 6,250 occasionally employed. The Government aims to encourage the development of a viable, efficient and market-orientated fisheries industry within the framework of the European Community's Common Fisheries Policy. The main concerns of government fisheries policy are conservation and exploitation of sea fish stocks, financial support for fleet modernisation and other measures, the improvement of the industry's technical and economic performance, the development of a viable fish farming industry, and protection of the aquatic environment.

Fish Caught

In 1986 demersal fish (caught on or near the bottom of the sea) accounted for about 54 per cent by weight of total British landings, pelagic fish (caught near the surface) for 34 per cent and shellfish for 12 per cent. Landings of all types of fish (excluding salmon and trout) by British fishing vessels totalled 717,000 tonnes. Haddock and cod represented 22 and 19 per cent respectively of the total value of demersal and pelagic fish landed, while whiting (5 per cent), plaice (4 per cent), mackerel (4 per cent) and sole (4 per cent) were the other most important sources of earnings to the industry.

The British fish farming industry is a substantial and expanding business mainly concerned with the production of salmon and trout although shellfish and eel farming are growing. Estimated production in 1986 was 11,000 tonnes of trout and 10,000 tonnes of salmon.

Imports of fresh, frozen, cured and canned fish and shellfish in 1986 totalled 415,000 tonnes, those of fish meal 236,000 tonnes and those of fish oils 170,000 tonnes. Exports and re-exports of fish and fish products amounted to 351,000 tonnes. Following a British initiative, member states of the European Community banned from January 1982 the import of primary whale products in order to help to conserve whale populations.

The Fishing Fleet

In 1986 the British fishing fleet consisted of some 7,810 inshore vessels under $24\cdot 4$ m (80 ft) in length and 210 deep-sea vessels longer than $24\cdot 4$ m. Among the main ports from which the fishing fleet operates are Aberdeen, Peterhead, Fraserburgh (Grampian), Lerwick (Shetland), Kinlochbervie, Ullapool (Highland), North Shields (Tyne and Wear), Grimsby (South Humberside), Lowestoft (Suffolk), Brixham (Devon), and Newlyn (Cornwall). The deep-sea fleet has been reduced in number as fishing opportunities and the profitability of operations in distant waters have declined.

Administration

The fisheries departments are responsible for the administration of legislation concerning the fishing industry and for fisheries research. The safety and welfare of crews of fishing vessels and other matters common to shipping generally are provided for under legislation administered by the Department of Transport.

The Sea Fish Industry Authority provides financial aid for the purchase of new fishing vessels, vessel improvements, the provision and improvement of processing plants, cold stores and ice plants, and towards the formation of

fishermen's co-operatives. Other functions include research and development, training, dissemination of information, publicity and promotion.

Fishery Limits

Community countries, and certain non-Community countries having fishery agreements with the Community, may fish up to Britain's 12-mile limit. Designated countries may also fish in specified areas of Britain's 6-to-12-mile zone. No foreign vessels may fish within Britain's 6-mile limit.

Common Fisheries Policy

With the extension of fishery limits to 200 miles in the mid-1970s, new arrangements became necessary to control Community fishing in the greatly extended area. Britain has a particularly strong interest in such control, since a sizeable proportion of the total catch within the 200-mile limits of member states is taken in British waters, while the loss of fishing opportunities in distant waters (such as Iceland) has reduced the British industry's total catch more than that of other Community states.

In 1983 member states reached an agreement on a common fisheries policy providing for new arrangements on access to coastal waters applicable for a period of at least 20 years. Other features included a revised marketing regime, regulations covering technical conservation measures such as mesh sizes for nets, the allocation of catch quotas among member states within each year's total allowable catch, effective enforcement of the rules and financial aid to promote the adaptation and development of the Community fishing fleet and the fish farming industry.

In 1986 Britain, particularly during its tenure of the Presidency of the European Community, was influential in promoting decisions which will strengthen technical measures to conserve fish stocks in Community waters; introduce more effective monitoring of member states' compliance with Community fishing policy; implement a ten-year structural policy for the Community's fishing industry, involving a commitment of about £500 million over the first five years; and adopt reciprocal fisheries agreements with non-Community countries while consolidating existing ones.

Fishery relations between the European Community and other countries are governed by long-term framework agreements including reciprocal agreements with Norway, the Faroe Islands and Sweden and non-reciprocal agreements with several other countries. Annual Community quotas have also been established in international waters in the north-west Atlantic and around Svalbard.

Fisheries Research

The Ministry of Agriculture, Fisheries and Food has a research directorate comprising laboratories dealing with marine and freshwater fisheries, shellfish, marine pollution, fish farming and diseases. Work on the utilisation of fish is undertaken by a research station at Torry, Aberdeen. There are also two seagoing research vessels. In Scotland the Department of Agriculture and Fisheries maintains laboratories on marine and freshwater fisheries research as well as three seagoing vessels. Department of Agriculture laboratories in Northern Ireland monitor marine and freshwater fisheries.

Freshwater Fisheries

The most valuable freshwater fish are salmon and sea-trout. Sea fishing for salmon is prohibited in waters outside a limit of six miles from the coasts of the British Isles. In Scotland, salmon fishing is a private right. In England and Wales, water authority licences are required for coastal and estuary netting.

Forestry

Woodland covers an estimated $2\cdot 2$ million hectares (5·5 million acres) in Great Britain: about 7·3 per cent of England, $14\cdot 2$ per cent of Scotland and $11\cdot 8$ per

cent of Wales. The Government supports the continued expansion of forestry in order to reduce dependence on imports of timber and to provide employment in forestry and related industries.

The area of productive forest in Great Britain is 2·1 million hectares (5·1 million acres), 43 per cent of which is managed by the Forestry Commission and the rest by private owners. The rate of new planting in 1985–86 was 4,300 hectares (10,700 acres) by the Commission and some 19,000 hectares (46,950 acres) by private woodland owners mainly in Scotland. Most planting is of conifers in upland areas though the planting of broadleaved trees is encouraged on suitable sites. An increasing proportion of new planting is being done by private owners. During 1985–86 the Commission grant-aided some 850 hectares (2,100 acres) of new broadleaved planting under its various schemes.

Total employment in state and private forests in Great Britain was estimated at about 30,500 in 1986, with a further 9,200 people engaged in processing home-grown timber.

British woodlands meet only 12 per cent of the nation's consumption of wood and wood products. At present only just over half of the Commission's woodlands are in production. Home timber production, however, is expected to double over the next 20 years.

The Forestry Commission and Forestry Policy

The Forestry Commission is the national forestry authority in Great Britain. The Commissioners give advice on forestry matters and are responsible to the Minister of Agriculture, Fisheries and Food and the Secretaries of State for Scotland and Wales. In pursuing timber production, forestry policy also takes into account amenity, environmental and employment criteria, and the Commission's activities include wildlife conservation, the landscaping of plantations and the provision of facilities for recreation. The Commission has also encouraged the establishment of new timber-using industries. Forestry research is carried out by the Commission at two research stations. Aid is also given for research work in universities and other institutions, including the Commonwealth Forestry Institute in Oxford. To rationalise its holdings and achieve greater efficiency and commercial effectiveness, the Commission has reduced its land and plantations by selling 114,000 hectares (281,000 acres) since 1981. The Commission is financed partly by the Government and partly by receipts from sales of timber and other produce and from rents.

Private Forestry

A substantial number of private woods are in ownerships of under 100 hectares (250 acres) in extent. The Government encourages private forestry through appropriate tax reliefs. There is also a forestry grant scheme under which the Commission aids planting by private owners. A special scheme encourages the planting of broadleaved trees by the payment of higher levels of grant.

Forestry Education and Research

Degree courses in forestry and associated studies are provided at three universities and there are supervisory, craft and managerial level courses. The Forestry Training Council, set up by the Forestry Commission, assists the development of systematic training and the co-ordination of training in the state and private sectors.

Forestry in Northern Ireland

The Department of Agriculture may acquire land for afforestation and give financial and technical assistance for private planting. The state forest area has grown steadily since 1945. By 1986, 73,000 hectares (182,000 acres) of plantable land had been acquired, of which 57,000 hectares (140,000 acres) were planted. There were about 13,500 hectares (33,000 acres) of privately owned forest. Some 570 professional and industrial staff work in state forests.

15 Transport and Communications

Major improvements in the movement of passengers and freight have resulted from the construction of a network of motorways, the extension of fast inter-city rail services (such as those operated by high-speed trains), the modernisation of many ports, the use by airlines of more efficient and quieter aircraft, and expansion schemes at many airports. The Channel Tunnel, on which construction is expected to begin later in 1987, will have a significant impact on travel between Britain and the continent of Europe. Communications are benefiting from developments in microelectronics, computer and satellite technology, and advances in materials, for example, the application of optical fibres in telecommunications.

Transport policy rests on the fundamental aims of promoting economic growth and higher national prosperity, and ensuring a reasonable level of personal mobility, while improving safety, minimising damage to the environment and using energy economically. Britain is taking an active part in the development of a common transport policy by the European Community, this being seen as essential for the application of the Treaty of Rome's competition rules and the completion of the Community's internal market by 1992. While some sectors of transport and communications operations remain publicly owned, the Government is arranging for the introduction of private capital into other sectors as part of its policy of reducing state involvement as much as possible. This is also part of the Government's wider aim of increasing competition, so ensuring value for money, in transport services, both within Britain and internationally. Measures to increase competition have been taken in a number of sectors such as the bus industry and airline services.

Inland Transport

Passenger and freight traffic is carried mainly by road. At the end of 1986 there were 21·7 million vehicles licensed for use on the roads of Great Britain, of which 18·8 million were private cars and light goods vehicles, 0·6 million other goods vehicles, 1·1 million motor cycles, scooters and mopeds, and 125,000 public road passenger vehicles (including taxis). Private ownership of cars has been growing rapidly for many years and the car is the most popular form of transport, with car and taxi travel accounting for some 82 per cent of passenger mileage within Great Britain. Buses and coaches account for about 8 per cent of passenger mileage, rail for 7 per cent and air 0·6 per cent. Road haulage has a dominant position in the movement of inland freight, accounting for about 84 per cent of tonnage carried and for about three-fifths of tonne-km. Railways, inland waterways, coastal shipping and pipelines are important in carrying certain types of freight, particularly bulk goods.

ROADS

Motor vehicle traffic in Great Britain is continuing to grow, having risen by 5 per cent in 1986 to some 297,650 million vehicle-km. In 1986 the road network totalled some 374,000 km (232,400 miles), of which 2,956 km (1,837 miles) were trunk motorways (see Table 34). Although motorways and trunk roads account for 4 per cent of road mileage, they carry 30 per cent of road traffic including nearly 40 per cent of heavy goods vehicle traffic.

Table 34: Road Length (as at April 1986)

Trunk roads Public (including Trunk roads motorways) motorways a England 266,984 10,353 2,505 Scotland 50,753 3,130 218 Wales 32,670 1,775 120 Northern Ireland 23,731 594 113 Britain 374,138 15.852 2,956

Sources: Department of Transport, Northern Ireland Department of the Environment, Scottish Development Department and Welsh Office.

^a In addition, there were 101 km (63 miles) of local authority motorway in England and 24 km (15 miles) in Scotland. In April 1987 some 21 km (13 miles) of trunk motorway were under construction in England and 3 km (2 miles) in Scotland.

Developments

New and improved roads have resulted in much shorter travelling times, particularly for long-distance journeys and those between cities, and have brought considerable benefits to industry, commerce and road haulage operators, and increased personal mobility. The Government's programme to improve motorways and other trunk roads (which form a basic network linking major centres of population, industrial areas and ports) is intended to assist economic growth by reducing transport costs, removing through traffic (especially lorries) from unsuitable roads in towns and villages, and enhancing road safety.

Following a review of the motorway and trunk road programme in England in 1987, 82 new schemes with a total cost of £689 million were added to the programme, increasing it to some 370 schemes worth some £5,000 million. The programme's aim is to improve the network and cater for the traffic expected in the 1990s. Bypasses and relief roads account for about 50 per cent of the schemes in the construction programme, which also includes projects intended to increase the traffic capacity of major through routes and to improve junctions on heavily used roads.

Much of the London area has benefited from the M25 London orbital route, completed in 1986. Work on a privately financed project costing £86 million to provide a new bridge across the Thames between Dartford and Thurrock to handle the increase in traffic forecast on the M25 is expected to begin in 1988, subject to parliamentary approval.

In Wales the priorities are improvements to the coast road in north Wales (including the construction under the Conwy estuary of the first immersed tube road tunnel to be built in Britain) and the upgrading of roads which are important for industrial redevelopment.

The programme in Scotland includes planned extensions to the M74, M8 and M80 motorways, the improvement of strategic routes beyond central Scotland to areas such as the north east and some of the west-coast routes, and the construction of more bypasses.

In Northern Ireland the emphasis is on building new links to the motorway network, constructing more bypasses, and improving roads in the Belfast area and other urban areas.

Administration

Responsibility for trunk road motorways and other trunk roads in Great Britain rests in England with the Secretary of State for Transport, in Scotland with the

km

Secretary of State for Scotland and in Wales with the Secretary of State for Wales. The costs of construction, improvement and maintenance are paid for by central government. The highway authorities for non-trunk roads in England are the county councils, the metropolitan district councils, the London borough councils and the Common Council of the City of London. In Wales the authorities are the county councils, and in Scotland the regional or islands councils. In Northern Ireland the Northern Ireland Department of the Environment is responsible for the construction, improvement and maintenance of public roads.

Research into all aspects of road construction, traffic engineering and safety, and into problems associated with transport is carried out by the Transport and Road Research Laboratory, the research arm of the Department of Transport.

Road Safety

Although Great Britain has one of the highest densities of road traffic in the world, it has a good record on road safety, with one of the lowest road accident death rates in the European Community. In 1986, 5,400 people were killed on the roads, about 69,000 seriously injured and 247,000 slightly injured. The number of deaths was the third lowest since 1954, although since then motor vehicle traffic has risen by nearly 370 per cent.

A number of factors, such as developments in vehicle safety standards and improvements in infrastructure (including motorways, bypasses and pedestrianisation of city centres), have contributed to the long-term decline in casualty rates. The most significant recent reduction in casualties has come from the compulsory wearing of seat belts for front-seat passengers of cars and light vans. This reduction has been estimated at a minimum of 200 deaths and 7,000 serious injuries a year. Regulations require rear seat belts or child restraints to be fitted to new cars registered since 1 April 1987. The standard of conduct for road users is set out in the *Highway Code*, revised in March 1987.

Comprehensive regulations govern the design of vehicles, their use on the roads, and the maintenance and testing of their mechanical condition. Under a national 'type approval' scheme in Great Britain, all new cars must be of a type that has been certified as meeting the required standards, and there is a similar scheme for new goods vehicles. Private cars and light vans which are three or more years old must be tested annually at private garages authorised as test stations. (In Northern Ireland private cars six or more years old are tested at official vehicle inspection centres.) Heavy goods vehicles are subject to annual tests carried out at special testing stations.

Minimum ages are laid down for driving: 16 for riders of mopeds and disabled drivers of specially adapted vehicles; 17 for driving cars and other passenger vehicles with nine or fewer seats (including that of the driver), motor cycles and goods vehicles not over 3·5 tonnes gross laden weight; 18 for goods vehicles over 3·5 but not over 7·5 tonnes; and 21 for passenger vehicles with over nine seats and goods vehicles over 7·5 tonnes. All drivers of motor vehicles, except new residents holding certain non-British licences, are required to pass the driving test before being granted a full licence to drive. Learners must display 'L' plates on their vehicle and be accompanied while driving (with certain exceptions) by a qualified driver. There are national speed limits of 60 mph (97 km/h) on single carriageway roads and 70 mph (113 km/h) on dual carriageway roads (including motorways), unless a lower limit is indicated. In built-up areas there is a general limit of 30 mph (48 km/h).

Under the Transport Act 1981, breath testing has become the main means of determining a driver's alcohol level; the statutory limit of breath alcohol concentration for drivers is 35 microgrammes of alcohol in 100 millilitres of breath. Several measures have been introduced to improve the safety of motor

cyclists, including the restriction of learner drivers to the less powerful machines, a two-part motor-cycle driving test and a limit on the duration of the motor-cycle provisional licence.

In July 1987 the Government issued for consultation a major review of road safety policy, which proposed an objective of reducing road casualties by one-third over the next 10 to 15 years. It suggested that the main task would be to reduce casualties among vulnerable road-users (pedestrians, cyclists and motor cyclists), particularly in urban areas, and that resources should be redirected towards measures which were demonstrably cost-effective in terms of casualty reductions. The principal elements would be vehicle safety engineering, and road construction and improvements while additional research is also planned in areas such as road user behaviour.

Traffic in Towns

Traffic management schemes have been introduced in most urban areas to minimise congestion, create a better environment and improve road safety. They may include computerised traffic control systems, one-way systems, bus priority measures, parking controls and pedestrian and cyclist facilities. Many towns have shopping precincts which are specially designed for pedestrians and from which motor vehicles are excluded for all or part of the day. In most town centres on-street parking is controlled and waiting limits apply. City centres often have zones where payment is required for on-street parking. In parts of central London wheel clamps are used to immobilise illegally parked vehicles.

Urban traffic control systems, with traffic signals controlled by a central computer, are in operation in over 50 urban areas in Britain. Systems developed by the Department of Transport and British firms have achieved international repute and are the most commonly used in the world. A recent enhancement of these systems, which continuously measures and responds to the flow of traffic, is already in operation in over 30 urban areas; among the locations in Britain are London, Coventry, Southampton, Cambridge, Worcester, and around Heathrow Airport.

Cyclists are particularly vulnerable in congested traffic conditions. Accordingly, most local authorities are implementing facilities to increase safety and convenience for cyclists.

ROAD HAULAGE

Road haulage traffic by heavy goods vehicles amounted to 101,000 million tonne-km in 1986. There has been a move towards larger and more efficient vehicles carrying heavier loads—about 75 per cent of the traffic, in terms of tonne-km, is carried in vehicles of over 25 tonnes gross laden weight. Much of the traffic is moved over short distances, with 78 per cent of the tonnage being carried on hauls of 100 km (62 miles) or less, although the growth in road haulage has been concentrated on long-distance traffic. Public haulage (private road hauliers carrying other firms' goods) accounts for 68 per cent of freight carried in Great Britain in terms of tonne-km.

The environmental problems caused by lorries have become a matter of public concern. The Government has introduced a number of measures to bring economic benefits and increased protection to the environment and the public. Safeguards on the design of lorries include restrictions on their dimensions, while a number of measures have been taken to improve the enforcement of lorry weights and safety. More bypasses are being built to keep lorries away from residential areas. There is a programme of research and development, involving vehicle and engine manufacturers, to reduce the noise from heavy lorries to less than half the 1981 level and produce a quiet heavy vehicle for the 1990s. To encourage the use of railways and inland waterways for the carriage of freight, grants of up to 60 per cent are available towards the cost of construction or modernisation of privately owned facilities where there are significant environmental benefits by the removal of heavy goods vehicle traffic from the roads.

Structure of the Industry

Road haulage is predominantly an industry of small, privately owned businesses. Many of the 129,000 holders of an operator's licence in 1986 had only one vehicle and the average size of a vehicle fleet is only about four. The biggest operator in Great Britain is the National Freight Consortium set up by a consortium of managers and employees to acquire the National Freight Company from the Government.

Licensing and Other Controls

Those operating goods vehicles over 3.5 tonnes gross weight (with certain special exemptions) require an operator's licence, obtained on showing good repute and ability to maintain vehicles properly and control loading and drivers' hours. Licences are divided into restricted licences for firms carrying their own goods and standard licences, subdivided into 'national only' and 'international', for hauliers operating for hire or reward. (In Northern Ireland operators carrying their own goods do not require a licence.) Proof of professional competence is required to obtain a standard licence. Regulations lay down limits on the hours worked by drivers of goods vehicles, and there are also minimum rest periods. Tachographs (which automatically record speed and distance covered, driving time and stopping periods) must be fitted and used in most goods vehicles over 3.5 tonnes gross weight in Great Britain.

International Road Haulage

International road haulage has grown rapidly and about 26 million tonnes a year are carried in road vehicles to and from the continent of Europe and the Irish Republic. Some 924,000 road goods vehicles were conveyed by ferry to the Continent in 1986, of which nearly half were unaccompanied trailers. The average length of haul for British registered vehicles is some 900 km (562 miles) in each direction, compared with 73 km (45 miles) for internal road haulage. International road haulage is governed mainly by bilateral agreements which are in force with 27 other countries. Many place no restriction on the number of British lorries entering the country concerned, although some agreements only allow an annual quota. In 1986 the European Community (which also has a quota of permits allowing haulage anywhere within the Community) agreed to the principle of full liberalisation of international road haulage within the Community, and to its proposed implementation by 1992.

PASSENGER SERVICES

There has been a long-term decline in the use of local bus services, mainly because of the growth in ownership of private cars. In 1985–86 buses or coaches carried some 5,635 million passengers on local services in Great Britain, 21 per cent fewer than in 1976. However, the Transport Act 1985 contains a number of measures which are stimulating competition in local bus services and increasing private sector participation in the industry.

These measures follow the reforms enacted in the Transport Act 1980, which removed restrictions on operating long-distance express coach services and excursions, allowing free competition between operators. This had a noticeable effect on long-distance express coach services, bringing about reductions in fares, the provision of more services and an increase of 40 per cent in the number of passengers carried.

Structure

Major changes in the structure of the passenger transport industry are being implemented as a result of the Transport Act 1985. The Act provides for the privatisation of the National Bus Company (the largest single bus and coach operator in Britain), which operated through some 70 subsidiaries in England and Wales. Each subsidiary is being sold separately, with a preference for a buy-out by the local management or employees. By August 1987, 41 subsidiaries had been sold, of which 26 had been bought out by management or employee

teams. Negotiations are in progress for the sale of a number of other subsidiaries.

The Transport Act 1985 also contains measures to encourage competition in services formerly run directly by municipal authorities and by passenger transport executives in Greater Manchester, Merseyside, South Yorkshire, Tyne and Wear, West Midlands and West Yorkshire in England and Strathclyde in Scotland. Passenger transport executives and local authorities which ran municipal bus undertakings have set up public transport companies, operating under the Companies Acts, to which their bus undertakings have been transferred.

Other public sector operators include the Scottish Transport Group (with some 3,400 vehicles), which operates the main bus services in Scotland outside the major cities and also runs ferries to the islands off the west coast of Scotland; while in Northern Ireland almost all road passenger services are provided by subsidiaries of the Northern Ireland Transport Holding Company. Citybus Ltd operates services in the city of Belfast and Ulsterbus Ltd operates most of the services in the rest of Northern Ireland. These companies have some 300 and 950 vehicles respectively.

London Regional Transport (LRT) is a nationalised industry, established under the London Regional Transport Act 1984, with its board members appointed by the Secretary of State for Transport. Within LRT five separate wholly owned subsidiaries have been established: London Buses Ltd (operating some 5,200 buses), London Underground Ltd, LRT Bus Engineering Ltd, Docklands Light Railway Ltd and London Transport International Services Ltd (which provides consultancy services). Financial support is provided by central government with a contribution from London's ratepayers. LRT is required to involve the private sector in the provision of services where this is more efficient, and has been set targets for reductions in operating costs and revenue support.

There are some 5,600 privately owned undertakings (of which the majority have fewer than five vehicles)1 comprising about 30,300 vehicles; only a small proportion of these operators provide scheduled local bus services.

Double-deck buses are the main type of vehicle used for urban road passenger transport in Britain and there are some 25,000 in operation. In addition, there are 42,900 single-deck buses and coaches, and 79 trams (at Blackpool and Llandudno which have Britain's only remaining tramway systems).

Under the Transport Act 1985 the system of road service licensing (under which a local bus operator needed a road service licence before starting operations) was abolished in Great Britain (except London) in 1986. Under the new system, operators have to register their services with the traffic commissioners (one for each of the nine traffic areas of Great Britain), and must give six weeks' notice for new registration, variation or cancellation of services. Local authorities and passenger transport executives then identify gaps and examine the need for additional services which they consider to be socially necessary and are prepared to subsidise, and are required to invite applications for operating these services by open competitive tender to ensure that value for money is obtained.

The initial indications are that, while the level of bus services has been generally maintained, many local authorities have achieved substantial savings in subsidies to public transport. Innovations in public transport have occurred, most notably a considerable increase in minibus services, now operating in over 200 towns and cities.

In addition, two grants are designed to encourage services in rural areas: a rural innovation grant, administered in England by the Development Commis-

¹Excluding former National Bus Company subsidiaries.

sion and in Scotland and Wales by the appropriate Secretary of State; and a transitional grant, payable on a sliding scale for four years to bus operators.

Taxis

There are about 39,000 licensed taxis in Great Britain, mainly in urban areas; London has some 14,200. In London and a number of other cities taxis must be purpose-built to conform to very strict requirements and drivers must have passed a test of their knowledge of the area. Hire cars with drivers may be booked only through the operator and not hired on the street; in some areas outside London hire cars are licensed.

The Transport Act 1985 provides for new arrangements for the operation of taxis and hire cars, with the intention of increasing their role in public transport. Restrictions by local authorities on granting taxi licences have been relaxed so that a licence can be refused only if a local authority is satisfied that there is no unfulfilled demand for taxis in its area. Operators of licensed taxis are able to provide shared-ride services at separate fares. Taxi operators are also able to run regular local services and can tender in competition with bus operators for the services being subsidised by local authorities. In addition, they may apply for a 'restricted' bus operator's licence, allowing them to run one or two minibuses without having to obtain a full bus operator's licence.

By August 1987, 37 local regular bus services were being run by taxi operators; a shared taxi scheme in London will become fully operative by October 1987.

RAILWAYS

Railways were pioneered in Britain, and the Stockton and Darlington Railway, opened in 1825, was the first passenger public railway in the world to be worked by steam power. Under the Transport Act 1947 the four large railway companies in Great Britain were brought under public ownership, and in 1962 the British Railways Board was set up to manage railway affairs and subsidiary activities. In Northern Ireland the Northern Ireland Railways Company Ltd, a subsidiary of the Northern Ireland Transport Holding Company, operates the railway service on some 320 km (200 miles) of track.

Operations

In 1986–87 the Board's turnover, including financial support and income from other activities but excluding internal transactions, was £3,184 million, of which £1,428 million was derived from rail passenger services and £557 million from rail freight services. British Rail received £786 million in grants towards its operations as compensation for the public service obligation to operate parts of the rail passenger system which would not otherwise cover their costs. The grant payable to British Rail has been gradually reduced since 1983, and new objectives announced by the Secretary of State for Transport in 1986 involve improvements in the quality of service provided and a reduction in government support for passenger services.

At the end of March 1987 the Board employed some 167,000 people. Statistics of British Rail's operations are given in Table 35.

Passenger Services The passenger network (see map, p 314) comprises a fast inter-city network, linking the main centres of Great Britain; local stopping services; and commuter services in and around the large conurbations, especially London and south-east England. British Rail runs about 1,500 InterCity expresses each weekday, serving about 150 business and leisure centres. Journey times on inter-city routes have been reduced substantially as more track has been made suitable for high-speed operations and as a result of faster trains, notably the InterCity 125s, operated by diesel trains, travelling at maximum sustained speeds of 125 mph (201 km/h). InterCity 125 trains provide nearly half of InterCity train mileage and are the world's fastest diesel trains. They operate from London to

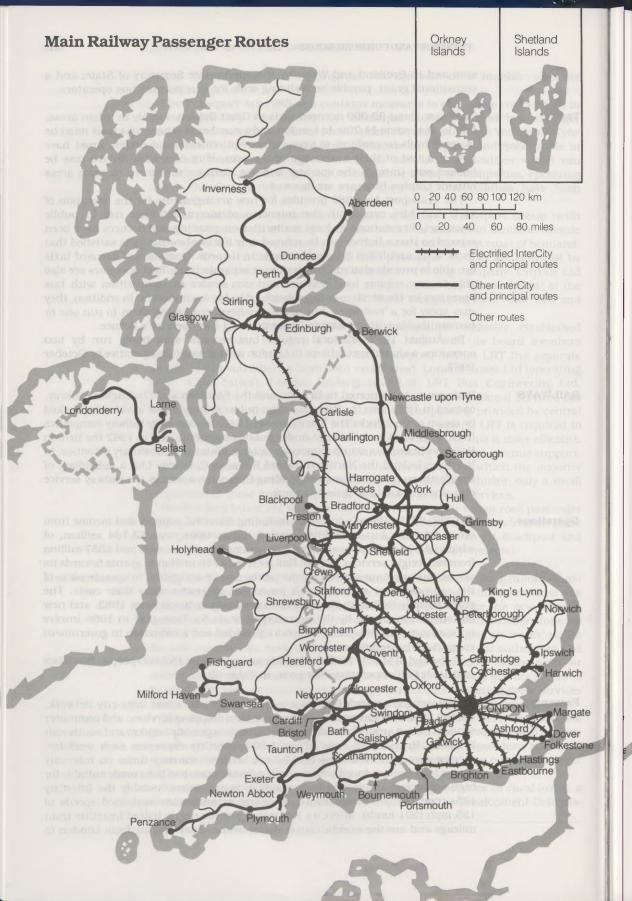


Table 35: Railway Operations

	1980	1983	1985–86	1986–87
Passenger journeys (million)	760	695	686	689
Passenger-km (million)	30,300	29,500	30,300	30,819
Freight train traffic (million tonnes)	153	145	140	138
Trainload and wagonload traffic				
(million net tonne-km)	17,640	17,144	16,047	16,565
Assets (at end of period):				
Locomotives	3,379	2,850	2,581	2,441
High Speed Train power units	142	197	197	197
Other coaching vehicles	21,074	16,963	16,164	15,336
Freight vehicles ^a	119,507	54,510	39,007	33,649
Passenger stations	2,366	2,363	2,385	2,405
Freight depots	409	263	137	125
Route open for traffic (km)	17,645	16,964	16,729	16,670

Source: British Railways Board.

the west of England and south Wales; to the East Midlands; to Yorkshire, north-east England and eastern Scotland; and on cross-country services through the West Midlands, linking south-west England or south Wales with north-west England or north-east England and Edinburgh.

About 25 per cent of route-mileage is electrified including British Rail's busiest InterCity route, linking London, the West Midlands, the North West and Glasgow. A number of electrification schemes are in progress. The most significant is a scheme costing £306 million at 1984 prices to electrify the east-coast main line between London and Edinburgh (including the line from Doncaster to Leeds), involving electrification of some 636 km (395 miles). The first main stage, from Hitchin to Peterborough, has been completed, and since May 1987 commuter services between King's Cross and Peterborough have been operated by electric trains. The line to Leeds will be electrified by 1988, with completion of the scheme to Newcastle upon Tyne and Edinburgh in 1991. An £80 million scheme to electrify services between Glasgow and Ayr, with a branch to Ardrossan, was completed in 1986. During 1987 electrified services on the London-Colchester route were extended to Norwich and Harwich, while electrified services were also introduced between Bishop's Stortford and Cambridge; a second line to Cambridge, from Royston, is being electrified and electric services are planned to start in mid-1988.

British Rail has developed ways of reducing costs on its local passenger services including the installation of automatic level crossings and radio signalling. Substantial investment is being undertaken to replace the fleet of diesel multiple-unit trains by two new types of vehicle with greater reliability and low maintenance costs: a lightweight 'Pacer' railbus (with a bus-type body) and a medium-weight 'Sprinter' diesel multiple-unit.

Freight

The most important freight commodities handled are coal and coke, iron and steel, building materials and petroleum. Over 90 per cent of rail-freight revenue is obtained from traffic in bulk commodities, most of it in trainloads.

Greater efficiency is being obtained with the introduction of new types of wagon with larger capacities and capable of higher speeds, and of new, more powerful locomotives, the latest of which can haul loads of 1,000 tonnes at

^a In addition, a number of privately owned wagons and locomotives are operated on the railway network for customers of British Rail; some 14,100 wagons and four locomotives were authorised for working on the network at the end of March 1987.

speeds of up to 130 km/h (81 mph). A network of some 130 daily scheduled 'Speedlink' high-speed freight services has been established between the major industrial centres. Other developments, such as the concentration of freight traffic at fewer but better-equipped terminals and a computer-based total operations processing system, which monitors all consignments and freight train and wagon movements in Great Britain, have contributed to a significant increase in productivity and competitiveness.

Other Activities

British Rail has several other subsidiary activities. British Rail Engineering Ltd (BREL), whose income amounted to £452 million in 1986–87, is one of the largest railway general engineering companies in Europe. Its main functions are major overhauls of British Rail's rolling stock, and the design and manufacture of railway vehicles and equipment for British Rail and other customers in Britain and overseas. Heavy maintenance of British Rail stock has become the responsibility of British Rail Maintenance Ltd, which has taken control of several former BREL works. The Railway Technical Centre at Derby is the largest of its type in the world. Transmark provides consultancy services overseas on railway and associated operations. Travellers-Fare is responsible for catering facilities at 163 stations, while InterCity catering provides restaurant and buffet facilities on most InterCity trains.

In order to concentrate its resources on running the main railway business, British Rail has privatised its hovercraft subsidiary, and its harbour and ferry subsidiary, and sold or leased its 29 hotels to other operators since 1981. Since 1980 British Rail has also sold surplus property worth over £420 million and has attracted substantial private sector funds for commercial development schemes in connection with railway and station improvements. British Rail has also adopted a policy of competitive tendering for its rolling stock needs, and has invited private sector firms to play a greater role in train and station catering.

Other Urban Railways

Over 760 million passenger journeys were made on London Underground trains in 1986–87. Trains operate on 408 km (254 miles) of railway, of which about 167 km (104 miles) are underground, and serve 273 stations, with some 460 trains operating in the peak periods. Substantial investment is in progress, particularly on station modernisation and ticketing facilities. The Docklands Light Railway, a £77 million project for a 12-km (7·5-mile) route with 15 stations, financed by London Regional Transport and the London Docklands Development Corporation, began operating in August 1987.

Other public rail services in Great Britain are the Glasgow Underground and the Tyne and Wear Metro, a 56-km (35-mile) light rapid transit system with over 40 stations.

Private Railways

There are over 40 small privately owned passenger-carrying railways in Great Britain, mostly operated on a voluntary basis and providing limited services for tourists and railway enthusiasts. The main aim of most of these railways, such as the Bluebell Railway in East Sussex, is the preservation of steam traction.

Channel Tunnel

Britain and France have agreed to facilitate the construction of a fixed link across the Channel and have chosen the project submitted by the Channel Tunnel Group/France Manche (now known jointly as Eurotunnel) for twin single-track rail tunnels with a vehicle shuttle service for cars, coaches and heavy goods vehicles. The project, estimated to cost some £2,700 million at 1986 prices, will be the largest civil engineering project in Europe to be financed and constructed by the private sector. It is expected to bring substantial benefits to industry and to travellers through the quicker carriage of both passengers and freight.

The 50-km (31-mile) link will carry through rail services and a drive-on, drive-off vehicle shuttle service using specially designed shuttle trains. Journey time for the shuttle trains between the two terminals, Cheriton (near Folkestone) and Fréthun in France, will be some 35 minutes, with trains travelling at a maximum speed of 160 km/h (100 mph). The terminal at Cheriton will cover 140 hectares (350 acres) and will contain a rail loop for the shuttle trains to run into the tracks beside the platforms. Road improvements in Kent are planned which will ensure good access to the tunnel terminal. Through rail passenger and freight services will be operated by British Rail and their continental partners. In May 1987 agreement was reached on the payments to be made to Eurotunnel by British Rail and by Société Nationale des Chemins de Fer Français for the use of the tunnel. British Rail envisages investment of nearly £400 million in new passenger and freight rolling stock, track and signalling improvements, a new international passenger terminal at Waterloo (London), freight facilities and a train maintenance depot. The Government has been concerned to ensure that the environmental damage caused by construction is minimised, and a number of measures have been taken, while a planning control framework will deal with environmental matters during construction.

The Channel Link Treaty with France, signed in 1986, contains provisions to safeguard the public interest of both countries in matters such as safety and the environment, deals with matters of national jurisdiction, provides arrangements for arbitration in the event of disputes over interpretation of the Treaty between the governments and the concessionaires, sets out the private sector nature of the scheme, and provides for compensation to the promoter in the event of political interference or cancellation by the Government. A concession agreement between Britain, France and the Channel Tunnel Group/France Manche was also signed in 1986. It gives the concessionaires the right to build and operate the tunnel for a period of 55 years, after which ownership would revert to the governments. The Channel Tunnel Act 1987 authorised construction, in accordance with the Treaty, and allowed the ratification of the Treaty and the coming into operation of the concession agreement, both in July 1987. Construction work is expected to begin later in 1987 with a view to services through the tunnel being inaugurated in 1993.

INLAND WATERWAYS The inland waterways of Great Britain are popular for recreation, make a valuable contribution to the environment and play an important part in land drainage and water supply. They are also used to a limited extent for freight-carrying. An official survey of inland waterway freight traffic reported that in 1985, 64 million tonnes of freight were carried on inland waterways and estuaries, covering some 2,400 million tonne-km (1·3 per cent of freight traffic by tonne-km in Great Britain). About 46 per cent (in tonne-km) was carried in the South East, mainly on the River Thames. Of the 3,200 km (2,000 miles) of canal and river navigations controlled by the publicly owned British Waterways Board, some 550 km (340 miles) are maintained as commercial waterways. The Board also operates docks, warehouses and inland freight terminals. Freight traffic on its waterways is conveyed by the private sector. In 1986–87 the Board's turnover amounted to £19·6 million and it received government grants of £44·2 million to maintain its waterways to statutory standards.

Ports

There are over 300 ports in Great Britain, but many are small harbours of only local significance and do not handle cargo regularly. Most port authorities operate with statutory powers under private Acts of Parliament. They are of three broad types: trusts, local authorities and statutory companies.

Major ports controlled by trusts include Clyde, Dover, Forth, London, Medway, Milford Haven, and Tees and Hartlepool. Local authorities control many small ports but also the much larger ports of Bristol, Portsmouth and the oil ports in Orkney and Shetland.

Associated British Ports, established under the Transport Act 1981 as a statutory corporation, wholly owned by Associated British Ports Holdings PLC (a private sector company), owns and operates 19 ports including Southampton, Grimsby and Immingham, Hull, Newport, Cardiff and Swansea. Other port undertakings owned by statutory companies include Felixstowe, Liverpool and Manchester.

Port Traffic

In 1986 traffic through the ports of Great Britain amounted to 453 million tonnes comprising 150 million tonnes of exports, 149 million tonnes of imports and 154 million tonnes of domestic traffic (which included offshore traffic, landings of sea-dredged aggregates and material shipped for dumping at sea). About 61 per cent of the traffic was in fuels, mainly petroleum and petroleum products. Some 72 per cent of the 12·8 million tonnes of traffic (9·7 million tonnes of imports and 3·1 million tonnes of exports) which entered or left Northern Ireland by sea in 1986 represented traffic with the rest of Britain.

Britain's main ports, in terms of total tonnage handled, are given in Table 36. Offshore oil developments have had a substantial effect on port traffic by greatly increasing the flow through certain North Sea ports, such as Tees and Hartlepool and the Forth ports, creating oil ports at Flotta in Orkney and Sullom Voe in Shetland, and reducing oil traffic at many traditional oil-importing terminals. Two other significant changes have affected traffic at British ports in the last 20 years. First, traditional major ports, such as London, Liverpool and Manchester, have lost general (non-bulk) cargo traffic to ports like Dover and Felixstowe which have developed specialised facilities to meet a world-wide switch from conventional handling methods to container and roll-on modes. While non-fuel traffic has been growing only slowly, container and roll-on traffic has more than trebled since 1970 to 60 million tonnes in 1986 and now accounts for about 70 per cent of non-bulk traffic. The leading ports for container traffic are Felixstowe, London and Southampton and for roll-on traffic

Table 36: Traffic through the Principal Ports of Great Britain a

million tonnes

1 1 1 1 1 1			1	- 111	10		
- 19	1965	1975	1980	1984	1985	1986	
Sullom Voe			28.5	59.7	59.0	57.2	
London	64.6	50.3	54.2	48.0	51.7	53.7	
Grimsby/Immingham	8.3	22.0	22.2	26.8	29.1	32.0	
Tees and Hartlepool	12.1	20.2	39.4	32.6	30.6	30.7	
Milford Haven	24.8	44.9	39.3	32.1	32.5	29.0	
Forth	6.1	8.4	28.8	29.8	29.1	28.8	
Southampton	24.4	25.3	23.9	27.4	25.2	25.7	
Orkney	_	0.4	15.4	16.1	16.1	15.9	
Felixstowe	_	4.1	5.4	9.3	10.1	10.8	
Liverpool	31.7	23.4	12.3	10.8	10.4	10.7	
Medway	22.3	21.7	17.2	11.5	10.4	10.4	
Dover	1.4	3.7	6.7	9.0	9.3	9.9	

Source: Department of Transport.

^a Belfast and Larne are the main ports in Northern Ireland and handled 6.8 million tonnes and 3.7 million tonnes respectively in 1986.

are Dover (Britain's leading seaport in terms of the value of trade handled), Felixstowe, Grimsby and Immingham, and Harwich. Secondly, ports on the south and east coasts have increasingly gained traffic at the expense of those on the west coast as the emphasis of Britain's trade has switched towards the continent of Europe.

Development

Modernisation of Britain's ports has been carried out primarily to accommodate the growth in container and roll-on traffic, to speed the handling of bulk commodities, and as a result of the changing nature and direction of Britain's trade. Many ports have modernised facilities and improved productivity by changing port layout, introducing new handling equipment and reducing manning levels. Most major new developments have been at east- and south-coast ports. For example, at Felixstowe a £42 million container terminal, completed in 1986, has raised the port's container-handling capacity by about 50 per cent. Extra capacity for ferry services is being provided at Dover, Portsmouth and Ramsgate, and a new freight ferry terminal at Dartford on the Thames began operations in 1986.

Purpose-built terminals for oil from the British sector of the North Sea have been built at Hound Point on the Forth, on the Tees, at Flotta and at Sullom Voe (one of the largest oil terminals in the world). Three of the four jetties at Sullom Voe can handle oil tankers of up to 350,000 deadweight tonnes, and the fourth jetty handles the export of liquefied petroleum gases and can accommodate vessels with a capacity of up to 75,000 cubic metres. A £54 million terminal at Braefoot Bay in the Firth of Forth handles tankers carrying natural gas liquids brought by pipeline from the plant at Mossmorran (Fife). Supply bases for offshore vessels have been built at a number of ports, mostly on the east coast of Scotland.

Shipping

In common with the fleets of other developed countries, the British fleet has been adversely affected by the world recession in shipping and increasing international competition. It has declined substantially from a peak of 53·4 million deadweight tonnes 1(33·7 million gross tonnage) in 1975 to 16·9 million deadweight tonnes (11·6 million gross tonnage) in 1986. A large tonnage of ships, particularly of tankers, has been scrapped or sold, while a number of shipowners have transferred their fleets to overseas registries, although some of these registries (such as Bermuda and the Isle of Man) are part of the British registry system.

In July 1986, $14\cdot 2$ million deadweight tonnes of trading vessels of 100 gross tonnes and over were both owned and registered in Britain: 533 vessels totalling 6 million tonnes being usually employed as dry bulk cargo, liner or cellular container ships; and a further 227 vessels of $8\cdot 2$ million tonnes as oil, chemical or gas carriers. The merchant fleet figure of $16\cdot 9$ million deadweight tonnes also includes non-trading vessels, such as fishing vessels, tugs and dredgers, and shipping registered in Britain but owned in other Commonwealth countries.

British cargo liner tonnage is dominated by a relatively small number of large private sector groups and container consortia. The representative body for the majority of shipowners is the General Council of British Shipping, although certain sectors have their own associations.

Services

About 94 per cent of Britain's overseas trade by weight, 79 per cent by value, is carried by sea, while the proportion of passengers travelling to or from Britain by sea is more than one-third, compared with about one-half in the early 1960s.

 $^{^{1}}$ Deadweight tonnage denotes the maximum load which a vessel can carry before submerging the load-line. Gross tonnage indicates the total capacity of the enclosed space on a ship.

Cargo Services

In 1986 British seaborne trade amounted to 298 million tonnes (valued at £121,870 million) or 1 million million tonne-km (657,000 million tonne-miles). Ships registered in Britain carried 21 per cent by weight, 16 per cent in terms of tonne-mileage and 36 per cent by value. Tanker cargoes accounted for over half this trade by weight, but only 11 per cent by value, and foodstuffs and manufactured goods accounted for three-quarters by value.

Many of the deep-sea liner services from Britain are operated by container ships. There are many roll-on services, accommodating passengers and their cars and, in some cases, commercial vehicles, between Britain and the continent of Europe and several freight-only roll-on services to the Irish Republic, the continent of Europe, and to some more distant countries.

British shipping companies operating liner services have associated with each other and with the companies of other countries operating on the same routes in a series of 'conferences' designed to secure standardisation and stability of rates, and to maintain frequency and regularity of services. Conferences serve all the major trades to and from Britain. In 1985 Britain acceded to the United Nations Convention for Liner Conferences, a code of conduct governing relations among shipping companies that are members of conferences.

Passenger Services Almost all of the 26.8 million passengers who arrived at or departed from British ports in 1986 travelled to or from the continent of Europe or the Irish Republic. Remaining long-distance passenger ships are used for cruising and in 1986 some 54,000 passengers embarked on pleasure cruises from British ports.

Traffic from the southern and south-eastern ports accounts for a substantial proportion of traffic to the continent of Europe. The main British operators are Sealink UK Ltd and P and O.

Cross-Channel hovercraft services are provided by Hoverspeed Ltd (owned by Sealink), which operates five hovercraft on routes between Dover and Boulogne, and Dover and Calais. A hovercraft crossing takes about one-third of the time taken by ships, and hovercraft carry about 15 per cent of the traffic on the short-sea crossings to France.

Passenger and freight ferry services are also operated to many of the offshore islands, such as the Isle of Wight, Orkney, Shetland and a number of other Scottish islands.

Role of the Government

The Department of Transport is the government department responsible for most matters connected with merchant shipping, including Britain's relations with other governments and international organisations on shipping matters. The general policy is one of minimum intervention by the Government and the encouragement of free and fair competition. Under the Merchant Shipping Acts the Department does, however, administer many regulations for marine safety and welfare, and for preventing and cleaning up pollution from ships. The Acts also contain certain reserve powers for protecting shipping and trading interests from measures adopted or proposed by overseas governments.

The first stage of a European Community shipping policy has involved agreement by the Community's transport ministers in 1986 on four regulations. These will liberalise the Community's international trade, establish a competition regime for shipping and enable the Community to take action to combat protectionism from other countries and to counter unfair pricing practices.

Safety at Sea The Coastguard Service, administered by the Department of Transport, is responsible for initiating and co-ordinating civil marine search and rescue action around Britain. It can call upon the lifeboats of the Royal National Lifeboat Institution (a voluntary body which operates 262 lifeboats), Ministry of Defence aircraft (including helicopters from 11 airfields around the coast), a

long-range civilian helicopter based at Sumburgh (Shetland), and any other ships or aircraft available to assist in search or rescue action. In 1986 the Coastguard Service took action in 5,300 incidents (including cliff rescues) in which over 8,960 people were assisted.

The lighthouse authorities (for England and Wales the Corporation of Trinity House, for Scotland the Northern Lighthouse Board and for Ireland the Commissioners of Irish Lights) control about 370 lighthouses, many minor lights and buoys, and a number of lightships, some of which are being replaced by unattended sea marks or by light towers. In Britain there are 49 pilotage authorities for the 93 pilotage districts and about 1,300 licensed pilots. Trinity House is the largest pilotage authority, licensing some 500 pilots in 40 districts in England and Wales. In some cases the harbour authority (which may also be the local council) is the pilotage authority. However, the Pilotage Act 1987 provides for the abolition of the pilotage authorities and for the transfer of their responsibilities to harbour authorities.

Compliance with traffic separation schemes around the shores of Britain is mandatory for all vessels of countries party to the 1972 International Collision Regulations. The most important scheme affecting British waters is in the Dover Strait, the world's busiest seaway. Britain and France operate radar surveillance of the strait to keep watch on ships not conforming to the scheme and, through the Channel Navigation Information Service, broadcast navigational information to ships in the strait.

Civil Aviation

Britain's substantial civil air transport industry is continuing to develop to meet the increasing demand for air travel, particularly international travel. The airline industry is the most rapidly growing other than that of the United States, and the airlines are re-equipping their fleets with the most modern aircraft. Many airports are being substantially modernised and expanded.

Role of the Government

The Secretary of State for Transport is responsible for international matters (including negotiation of air service agreements with more than 100 other countries, the licensing and control of public transport operations into Britain by overseas operators and British participation in the activities of international aviation bodies), airports policy, amenity matters (such as aircraft noise), aviation security policy and investigation of accidents.

The Government's civil aviation policy aims to encourage a sound and competitive multi-airline industry in Britain, to promote competition in international and internal services, and to maintain high standards of safety. It has liberalised airline services within Britain, and in its negotiations with other countries on bilateral air service agreements it is proposing the adoption of more liberal measures. New agreements with a number of other members of the European Community have already resulted in greater competition, leading to increased traffic and lower fares. The Government has taken the lead in encouraging airline competition within the Community, as a first step towards meeting the Community's objective that by 1992 air transport should be part of a single internal market. The measures proposed would lead to much cheaper off-peak fares and greater freedom for airlines in setting business fares.

Civil Aviation Authority The Civil Aviation Authority (CAA) is an independent statutory body, responsible for the economic, technical and operational regulation of the industry. It is also responsible for air traffic control at certain British airports and, jointly with the Ministry of Defence, for the provision by the National Air Traffic Services of air navigation services. Members of the CAA board are appointed by the Secretary of State for Transport.

Under the Civil Aviation Act 1982 its primary objectives are to ensure that British airlines provide air services to satisfy all substantial categories of public demand at the lowest charges consistent with a high standard of safety and an economic return for efficient operators, and to further the reasonable interests of air transport users. Other duties are to ensure that British airlines compete effectively on international routes, to secure the most effective use of airports in Britain, to have regard to the need to minimise the adverse effects of civil aviation on the environment, and, under the Airports Act 1986, it has various responsibilities for economic regulation of airport companies.

Air Traffic In 1986 a total of some 57.4 million passengers travelled by air (international terminal passengers) to or from Britain, 8·5 per cent more than in 1985. In 1986 the value of Britain's overseas trade carried by air was some £30,200 million and the proportions carried by air amounted to approximately 21.5 per cent of the value of exports and 16.8 per cent of imports. Air freight is important for the carriage of goods with a high value-to-weight ratio, especially where speed of movement is essential. Precious stones, live animals, medicinal and pharmaceutical products, clothing, leather and skins, and scientific instruments are major categories where a relatively high proportion of exports is sent by air.

Airline **Operations**

Total capacity offered on all services by British airlines amounted to 14,243 million available-tonne-km in 1986: 10,655 million tonne-km on scheduled services and 3,588 million tonne-km on non-scheduled services. The airlines carry 25 million passengers a year on scheduled services and 20.2 million on charter flights. With the sale by the Government of its shares in British Airways in February 1987, the civil airline industry is entirely in the private sector.

British Airways

British Airways Plc is one of the world's leading airlines, and in terms of passengers carried on international scheduled services it is the largest in the world. During 1986-87 British Airways' turnover was £3,263 million (including £3,054 million from airline operations). Its route network, covering some 555,000 km (344,900 miles) of unduplicated scheduled route, is among the largest in the world. The airline serves some 145 destinations in 68 countries and in 1986 carried over 20 million passengers. International scheduled services are operated to the rest of Europe, the Middle East, the Far East, Australasia, East and South Africa, North America, South America and the Caribbean. Within Britain it runs some 1,350 services a week to 14 towns and cities. Scheduled Concorde supersonic services are operated from London (Heathrow) to New York and to Miami via Washington, crossing the North Atlantic in about comprised 34 Boeing 747s, 43 Boeing 737s, 25 Boeing 757s, 19 Lockheed TriStars, 26 BAC One-Elevens, 9 HS 748s and 7 Concordes; 37 aircraft were on order—17 Boeing 747s, 11 Boeing 767s and 9 Boeing 757s.

Other Airlines

The other main scheduled airline is British Caledonian Airways, which operates a fleet of 26 aircraft and carried 2·4 million scheduled service passengers in 1986. Its scheduled services are primarily to the continent of Europe: North, West and Central Africa; the United States; the Middle East; and Hong Kong. British Airways has recently put in an offer for all the share capital of British Caledonian, and this has been referred to the Monopolies and Mergers Commission.

Other operators of scheduled passenger services include British Midland, Dan Air Services, Air UK and Virgin Atlantic. Britannia Airways, Dan Air Services, Monarch Airlines, Air Europe and Orion Airways are the leading airlines operating charter passenger services.

Helicopters

Helicopters are engaged on a variety of work, but are mainly employed on the large-scale operations connected with the development of Britain's offshore oil and gas resources. Light aircraft and helicopters are also involved in other activities, such as charter operations, search and rescue services, cropspraying, and aerial survey and photography. The two main helicopter operators in Britain are Bristow Helicopters and British International Helicopters, with 65 and 29 helicopters respectively.

Safety

The CAA is responsible for air safety, both airworthiness and operational safety. Its Operations Division deals with the preparation and application of safety requirements concerning airline and private aviation operations, flight crew licensing and training, aerodromes, and fire and rescue services. The Airworthiness Division is responsible for the airworthiness standards of aircraft registered in Britain, the licensing of aircraft maintenance engineers and the approval of work schedules to which British transport aircraft are maintained.

Every company operating aircraft used for public transport must possess an Air Operator's Certificate, which is granted by the CAA when it is satisfied that the operator is competent to secure the safe operation of its aircraft. The CAA's flight operations inspectors (who are experienced airline pilots) check that satisfactory operating standards are maintained.

Each member of the flight crew of a British registered aircraft must hold the appropriate official licence issued by the CAA. Except for pilots with acceptable military or other qualifying experience, all applicants for a first professional pilot's licence must have undertaken a full-time course of ground and flying instruction which has been approved by the CAA.

Air Traffic Control and Navigation Services

Responsibility for civil and military air traffic control over Britain and the surrounding seas rests with the National Air Traffic Services (NATS). The Controller of the NATS reports to both the CAA and the Ministry of Defence. At some 19 civil aerodromes, including most of the major British airports, the NATS provides the navigation services necessary for the operation of aircraft taking off and landing, and integrates them into the flow of traffic within British airspace. To provide its services, the NATS uses radar, some 100 navigational beacons, landing aids, air/ground communications and an extensive telecommunications network.

Airports

Of the 137 licensed civil aerodromes in Britain, about one-fifth each handles more than 100,000 passengers a year. Eleven handle over 1 million passengers a year and these are shown in Table 37. In 1986 Britain's civil airports handled a total of 76·6 million passengers (75·2 million terminal passengers and 1·4 million in transit), and 881,000 tonnes of freight. London's Heathrow airport is the world's busiest airport for international travel and is Britain's most important airport for passengers and air freight, handling 31·7 million passengers and 537,000 tonnes of freight in 1986. Gatwick is the world's second busiest international airport.

Ownership and Control

Seven airports—Heathrow, Gatwick and Stansted in south-east England, and Glasgow, Edinburgh, Prestwick and Aberdeen in Scotland—are owned and managed by BAA plc, the successor company to the statutory British Airports Authority. Together they handle about 75 per cent of air passengers and 85 per cent of air cargo traffic in Britain. The Government's shares in BAA plc were sold in July 1987.

Many of the other public airports are controlled by local authorities, and the Act also provides for the larger airports—those with a turnover exceeding £1

Table 37: Passenger Traffic at Britain's Main Airports

million passengers 1976 1981 1984 1985 1986 London (Heathrow) 23.2 26.4 29.2 31.3 31.3 London (Gatwick) 5.7 10.714.0 14.9 16.3Manchester 4.7 2.8 6.0 6.1 7.5 Glasgow 2.0 2.3 2.7 2.7 $3 \cdot 1$ Birmingham $1 \cdot 1$ 1.5 1.7 1.6 $2 \cdot 1$ Luton 1.8 2.0 1.8 1.6 2.0 Belfast (Aldergrove) 1.6 1.6 1.1 1.4 1.9 Edinburgh 1.0 1.21.5 1.6 1.6 1.7 Aberdeen 0.8 1.6 1.8 1.5 1.0 Newcastle upon Tyne 0.6 0.9 $1 \cdot 1$ 1.2East Midlands 0.5 0.7 1.1 0.9 $1 \cdot 1$

Source: Civil Aviation Authority.

Note: Statistics relate to terminal passengers only and exclude those in transit.

million in at least two of the previous three years—to be formed into companies. By mid-1987, 13 major local authority airports were operating as companies under the Companies Act 1985. The Government is encouraging the introduction of private capital into the new companies.

Under the Airports Act 1986 the CAA has responsibility for the economic regulation of major airport companies including the BAA plc airports and the larger local authority airports. These powers will enable the CAA to take appropriate steps to remedy practices considered to be against the public interest, in particular any abuse of an airport's monopoly position.

All airports used for public transport and training flights must be licensed by the CAA. Stringent requirements, such as the provision of adequate fire-fighting, medical and rescue services, suitable physical characteristics and visual aids, must be satisfied before a licence is granted. Strict aviation security measures are in force.

Development

The Government's policy is to promote a strong and competitive British airline industry by providing airport capacity where it is needed and by making effective use of existing resources, especially at Heathrow, Gatwick and Stansted. It is also encouraging the maximum use of regional airports.

A fourth major terminal at Heathrow was opened in 1986, raising the airport's capacity from 30 million to 38 million passengers a year. Gatwick's current capacity is some 16 million passengers a year, but the second terminal, the first phase of which is due to open in 1988, will eventually raise this to 25 million passengers. Following a public inquiry, planning permission was granted in 1985 for the expansion of Stansted airport to an eventual capacity of 15 million passengers a year; in 1986 work began on the first phase, which would provide capacity of some 7 million to 8 million passengers a year.

Facilities have also been improved at regional airports, with major terminal or runway improvements undertaken at Manchester, Birmingham, Leeds/Bradford and Newcastle upon Tyne airports. The Government is ready to assist in developing further opportunities for new routes and services; it is encouraging the development of Manchester as a 'regional hub' airport and the airport's expansion will include a second terminal.

Communications

The telecommunications services sector is one of the most rapidly growing of the economy. The British Telecommunications Act 1981 separated the Post Office into two corporations, one for postal and banking services and the other for telecommunications (British Telecommunications, trading as British Telecom), and provided for a limited relaxation of the statutory monopoly in telecommunications. The Telecommunications Act 1984 strengthened competition in a number of ways. It removed British Telecom's exclusive privilege of running public telecommunications systems and instituted new arrangements requiring those running telecommunications systems (including British Telecom) to be licensed by the Secretary of State for Trade and Industry. This authority may be delegated to the Director General of Telecommunications. Under the terms of its licence. British Telecom is required to provide a universal telecommunications service throughout the country to meet all reasonable demands, to provide services in rural areas and certain essential services, such as public emergency services, public call box services and maritime emergency services. Mercury Communications Ltd was licensed as the second national fixed-link operator; its licence conditions reflect the expanding nature of its operations.

In 1982 a general licence for 'value added network services' was issued, permitting a wide variety of commercial services (other than the basic service of conveying or switching a message) to be run in competition with British Telecom over the public telecommunications networks. The licence was the first of its kind and has placed the British system among the most liberal in the world. By early 1987 the Department of Trade and Industry had licensed over 200 operators offering some 800 services, ranging from viewdata and conference calls to electronic mail and retrieval systems. The value of the market is estimated at some £150 million a year. Further liberalisation of the licensing arrangements for value added and data services has taken effect with the introduction in April 1987 of a new, more liberal, class licence, which opens up the provision of data services to full competition. The new licence contains provisions on fair trading and on 'Open Systems Interconnection' (to facilitate the interworking of the computer products of different manufacturers) in furtherance of the Government's commitment to provide for the adoption of the latter in Britain. These provisions apply only to large operators, thus enabling small companies to enter the market with the minimum of regulation necessary to protect privacy and confidentiality.

The Office of Telecommunications, a non-ministerial government department established under the Telecommunications Act 1984, is the independent regulatory body for the telecommunications industry. It is headed by the Director General of Telecommunications, whose functions are to ensure that licensees comply with the conditions of their licences; to promote effective competition in the telecommunications industry; to provide advice to the Secretary of State for Trade and Industry on telecommunications matters; and to investigate complaints about services. The Director General also has a duty to promote the interests of consumers in respect of prices, quality and variety in telecommunications services.

Under the 1984 Act British Telecom was reconstituted as a public limited company and a majority of the ordinary voting shares were sold to private investors in 1984. It has over $1\cdot4$ million registered shareholders and 87 per cent of its 230,000 employees are also shareholders.

BRITISH TELECOM British Telecom serves some 17.3 million residential and 4.3 million business telephone customers. It operates one of the world's largest public telecommunications networks, with over 22 million telephone exchange lines, more

than 110,000 telex connections, 77,700 public payphones and a wide range of specialised voice, data, text and visual services. The inland telephone and telex networks are fully automatic. International services are also highly developed, and international direct dialling is available from any telephone line in Britain to 175 countries, representing 93 per cent of the world's telephones. Automatic telex service is available to over 200 countries.

In 1986–87 the company made a pre-tax profit of £2,067 million on a turnover of £9,424 million. Expenditure on capital equipment and other assets totalled £2,107 million, of which £500 million went on modernising exchanges with digital equipment. About £180 million was spent on research and development.

Network Modernisation

British Telecom is investing some £1,000 million a year in the modernisation and expansion of its network to meet the increasing demand for basic telephone services and for more specialised services. By March 1987 the company had over 193,000 km (120,000 miles) of optical fibre cable laid in its trunk network in Britain, accounting for some 50 per cent of the trunk network, a higher proportion than any other world operator. There were more than 500 digital exchanges in service. About half of its customers are served by modern local exchanges of various types. The combination of digital exchange switching and digital transmission techniques, using optical fibre cable and microwave radio links, is substantially improving the quality of telephone service for residential and business customers, as well as making possible a wider range of services through the company's main network.

General Services

British Telecom provides numerous facilities and services including a free facility for emergency calls to the police, fire, ambulance, coastguard, lifeboat and air—sea rescue services; a free directory inquiries service; and various other chargeable operator-connected services, such as transfer charge and alarm calls. The operator-handled Freefone service, enabling users to contact organisations at the called customer's cost, has been supplemented since mid-1985 by automatic 'LinkLine' facilities, enabling callers to contact organisations anywhere in Britain, either free or at local call rates.

British Telecom provides a number of customer-dialled recorded telephone information services, now known as Guidelines, including Timeline (formerly known as the Speaking Clock). The company also provides value-added recorded services in various centres at higher call charges, and makes its network facilities available for similar premium services provided by other organisations operating under the general value added network services licence.

Under a public payphone service modernisation programme, costing some £160 million, all public payphones have been equipped with push-button equipment. A number of cashless call developments are being carried out including the Cardphone service, using prepaid encoded cards, which was initially introduced in main railway stations, airports and other heavily used sites, but has been extended to many other parts of Britain. More than 7,000 cardphones are in service. There are over 300,000 rented payphones on premises to which the public has access and these are also being upgraded with modern push-button equipment.

Prestel, British Telecom's public viewdata service, was the first of its kind to enable a wide variety of computer-stored information to be called up on a special television receiver via the telephone. By mid-1987 there were some 70,000 terminals attached to Prestel, 55 per cent in businesses and 45 per cent in homes. Through its 'Gateway' links with other databases, a wide range of other services, such as home shopping and banking services and holiday booking and reservation facilities, has become available.

There has been rapid growth in British Telecom's mobile communications services including the jointly owned cellular radio network (see p 328). Its radiopaging service is the largest of its kind in the world.

Services

International British Telecom International is the company's division handling international networks and services. It is the second largest shareholder in the International Telecommunications Satellite Organisation (of which 114 countries are members) and in the International Maritime Satellite Organisation, with interests in a number of other consortia.

A digital international telephone exchange is in service in London and two more are on order. The world's first international undersea optical fibre cable, between Britain and Belgium, began operating in 1986 and by 1990 Britain will be connected to a network of high-capacity undersea optical fibre cables. Work will begin on laying the first transatlantic optical fibre cable (TAT 8) in September 1987 and a further high-capacity transatlantic optical fibre cable (TAT 9) should be in operation by 1991. This will have twin branches to Britain and France from the main cable and will be the first to incorporate an undersea junction.

By the end of March 1987 companies sending computer data world-wide from Britain were able to use international 'Packet SwitchStream' services to 75 networks in 51 countries.

High-speed international satellite links to and from Britain are being expanded. The main business systems terminal at British Telecom International's 'Teleport' earth station in London's Docklands became operational at the end of 1985 and 'SatStream' private circuit digital links, using small-dish satellite earth stations, have been extended to cover North America and Western Europe. An 'International KiloStream' service, offering digital private circuits for voice, text and visual services, is available to the United States, Australia and Japan.

Direct-dial maritime satellite services have been introduced for vessels world-wide, and limited in-flight operator-controlled telephone call facilities have been introduced via Portishead Radio Station near Bristol. Trials of an automatic service via satellite for aircraft passengers will start in autumn 1987 prior to the introduction of the service on transatlantic routes in 1988 using specially equipped British Airways aircraft.

Digital transmission techniques have been introduced for services to the United States, Japan, Hong Kong and Australia via the Madley earth station near Hereford. The service to Japan includes the world's first wholly digital intercontinental public telephone service, giving faster connections and clearer speech.

British Telecom's overseas consultancy service, Telconsult, was engaged on 150 projects in 60 countries during 1986–87.

MERCURY

Mercury Communications Ltd, a subsidiary of Cable and Wireless plc, operates under licence as the second telecommunications carrier in Britain, enabling the company to offer a wide range of services, both nationally and internationally. A 900-km (560-mile) trunk network has been established, centred on Birmingham, linking major cities including London, Bristol, Manchester and Sheffield, with microwave spurs in operation or planned to connect the network to Glasgow, Edinburgh, Aberdeen, Wales and the south coast of England. The network uses digital high-quality communications techniques, based on optical fibre cable laid alongside railway tracks. Services to business customers began in 1986, and services for small businesses and residential customers became available in Derby and Nottingham in April 1987 and have been extended to a number of other areas from summer 1987. Mercury also provides an increasing

range of enhanced services including telex, packet data services, electronic messaging, wide-area radiopaging and message switching. In May 1987 it launched Europe's first 'Centrex' service, which will enable business customers to have all the facilities normally available on private automatic branch exchanges obtainable instead from equipment located at Mercury's public exchanges.

International services are provided by two satellite communications centres in London's Docklands and Oxfordshire, serving North America, Australia, Europe, the Middle East and the Far East. Mercury's international links will include a new private transatlantic optical fibre cable, due to enter service in mid-1989, which will form part of the 'global digital highway' planned by Cable and Wireless.

BROADBAND CABLE SYSTEMS By mid-1987 ten companies had been licensed to run local broadband cable systems. At present they mainly provide television programmes, but some will also provide interactive services, including voice telephony services (which will have to be provided in co-operation with British Telecom or Mercury).

OTHER
PUBLIC
TELECOMMUNICATIONS
OPERATORS

The Government has taken two major initiatives to encourage the expansion of mobile radio telecommunications services. First, Racal Vodafone Ltd (part of the Racal Electronics Group) and Telecom Securicor Cellular Radio Ltd (a joint venture between British Telecom and Securicor) have been licensed to run competing national cellular radio telephone systems, which started in 1985 and are now available to over 80 per cent of the population of Britain. By 1987 the companies had invested £200 million in establishing their networks, and further substantial investment is being undertaken to provide increased capacity to meet the rapidly growing demand from cellular radio telephone users, estimated at some 170,000 in mid-1987. Secondly, Britain is cooperating in the development of common standards and technical specifications for a European digital cellular radio telephone network, which is expected to be introduced in 1991.

In the non-cellular sector, parts of the radio spectrum have been reallocated for use by two national and a number of regional private mobile radio operators, which are expected to inaugurate their services later in 1987. A number of other frequencies have been released for use by five national wide-area radiopaging operators.

CABLE AND WIRELESS

Cable and Wireless plc provides or manages a wide range of telecommunications activities, mostly overseas in nearly 50 countries. Its main business is the provision and operation of public telecommunications services of 36 countries and territories under franchises granted by the governments concerned, while it also provides and manages telecommunications services and facilities for public and private sector customers, and undertakes consultancy work. It owns, operates or has been a consultant on over 40 satellite earth stations, and owns a fleet of seven cableships for laying and maintaining submarine telecommunications cables.

THE POST OFFICE The Post Office, founded in 1635, pioneered postal services and was the first to issue adhesive postage stamps as proof of advance payment for mail. The Royal Mail provides deliveries to 23.5 million addresses and handles 46 million letters and parcels each working day (over 12,000 million items a year). Mail is collected from over 100,000 posting boxes, as well as from post offices and large postal users. The Post Office has a monopoly on the conveyance of letters, but under the British Telecommunications Act 1981 the Secretary of State for Trade and Industry has the power to suspend the monopoly in certain areas or for certain

categories of mail and to license others to provide competing services. The Secretary of State has relaxed the monopoly on letters subject to a minimum fee of £1, and has issued general licences enabling mail to be transferred between document exchanges and allowing charitable organisations to carry Christmas and New Year cards.

All the 80 offices equipped with mechanical handling equipment are in operation and are gradually taking over the work of hundreds of sorting offices handling letters manually. Each address in Britain has a postcode and the British system is the most sophisticated in the world, allowing mechanised sorting down to part of a street on a postman's round and, in some cases, to an individual address. Some 31 large parcel centres, each serving a group of counties, have taken over the work of 1,200 offices which handled parcels manually.

As well as postal and Girobank services, post offices handle a wide range of transactions. In much of its counter service the Post Office acts as agent for government departments and local authorities. The Post Office is introducing new technology into its counter services to reduce costs and raise productivity, while providing an improved range of services to customers. There are nearly 22,000 post offices, of which some 1,500 are operated directly by the Post Office and the remainder on an agency basis by sub-postmasters.

Specialist Services The Post Office provides a range of specialist services. Datapost, a door-to-door delivery service, has overnight links throughout Britain and provides an international service to 90 countries. 'Datapost Sameday' provides a rapid delivery within or between more than 100 cities and towns in Britain. 'Intelpost', the world's first international public facsimile transmission service sending letters and other documents electronically, provides high-speed mail links between more than 100 post offices in Britain as well as to and from 32 other countries. The Philatelic Bureau in Edinburgh handles about one-third of the Post Office's philatelic business, much of it involving sales to overseas collectors or dealers. The British Postal Consultancy Service offers advice and assistance on all aspects of postal business to overseas postal administrations, and nearly 40 countries have used its services since 1965.

16 Employment

As a major industrial country, Britain has a labour force with high levels of technical and commercial skill. However, in common with other industrialised countries, it has suffered in recent years from high levels of unemployment, although this has been falling for more than a year. The Government has taken a number of steps to improve the operation of the labour market with the aim of creating the most suitable economic climate in which business can flourish and create more jobs. These include increasing the flexibility of the labour market, removing burdens on employers and making training more relevant to the economy's needs.

TRENDS IN THE LABOUR MARKET

The total workforce in June 1986 was 27.8 million, of whom 21.6 million (11.9 million men and nearly 9.7 million women) were classed as employees in employment (see Table 38). Britain has one of the highest proportions of people of working age in jobs or seeking work among all the major industrialised countries, and the employed labour force (which rose by over 1 million between March 1983 and the end of 1986) is continuing to grow as the population of working age increases and as more women look for work. Recent trends have included the continuing growth in the proportion of the workforce accounted for by women, as more married women have sought work, especially in part-time employment; and a substantial increase in self-employment. Between 1979 and 1986 the number of self-employed people is estimated to have risen by 40 per cent to 2.6 million, representing 9.5 per cent of the working population.

Pattern of Employment

There have been substantial changes in the nature and location of employment, with a marked shift, as in other industrialised countries, from manufacturing to service industries. Between 1955 and 1986 the proportion of employees in employment engaged in service industries rose from 45 per cent to 67 per cent as higher living standards and technological developments stimulated the growth of many service industries. During the period 1978 to 1986 the number of employees in service industries rose by 1.3 million (10 per cent) to 14.5 million (see Table 39). Employment in most service industries, with some exceptions. such as transport, has grown considerably. The largest rise in this period was in the banking, finance and insurance sector (by 40 per cent to $2 \cdot 2$ million), while other sectors with significant increases included hotels and catering (22 per cent), wholesale distribution and repairs (10 per cent), and medical and other health services (9 per cent). Manufacturing industry accounted for 40 per cent of employees in employment in 1955, but by 1986 the proportion had fallen to 24 per cent. Between 1978 and 1986 employment in manufacturing fell by 28 per cent to 5.2 million. Nearly all manufacturing industries have experienced a decline in employment as markets for manufactured goods have changed and as new technology has brought greater efficiency and, in some cases, reduced the demand for labour.

Unemployment

Britain, like most other industrialised countries, has been affected by relatively high levels of unemployment during the 1980s. However, unemployment

reached its peak in 1986 when, on a seasonally adjusted basis (excluding school-leavers), it totalled over $3\cdot 2$ million in June, $11\cdot 6$ per cent of the working population. Subsequently there has been a significant decline in unemployment and by August 1987 it had fallen to $2\cdot 8$ million, $10\cdot 2$ per cent of the working population. The highest levels of unemployment have been concentrated in areas with the greatest dependence on traditional manufacturing industries, but the recent fall in unemployment has occurred in most regions.

Table 38: Manpower in Britain 1976-86

thousands

Year (June)	Employees in employ- ment ^a	Self- employed	Unem- ployed ^b	Armed forces	Working population ^c
1976	22,557	1,952	1,179	336	26,110
1977	22,631	1,907	1,251	327	26,224
1978	22,789	1,907	1,226	318	26,358
1979	23,173	1,906	1,141	314	26,627
1980	22,991	2,013	1,452	323	26,839
1981	21,891	2,119	2,270	334	26,740
1982	21,414	2,170	2,626	324	26,677
1983	21,067	2,221	2,867	322	26,594
1984	21,238	2,496	2,999	326	27,090
1985	21,509	2,610	3,114	326	27,624
1986	21,594	2,627	3,180	322	27,772

Sources: Department of Employment and Northern Ireland Department of Economic Development.

a Part-time workers are counted as full units.

^b Figures are adjusted for discontinuities and seasonal factors, and exclude school-leavers.

^c Not seasonally adjusted and including school-leavers.

EMPLOYMENT STRATEGY

The Government's employment strategy is to maintain an economic, financial and industrial climate in which businesses can operate successfully and create jobs. It is taking action to improve the labour market by encouraging better training, removing regulatory barriers which hinder recruitment by firms, and providing an extensive range of employment and training measures for those most affected by unemployment (particularly the long-term unemployed and the young) to help them into productive work.

Help for the Unemployed

In 1987–88 expenditure on the Government's employment and training measures is planned to reach £3,100 million and over 1 million opportunities will be available on employment and training schemes—for a description of youth training and adult training measures, see pp 336–8.

Enterprise Allowance Scheme

The Enterprise Allowance Scheme, introduced for an experimental period in 1982 and extended to the whole of Great Britain in 1983, helps unemployed people wishing to start their own business but who would be deterred by the prospect of losing unemployment or supplementary benefit once they began. Entrants, who must have at least £1,000 to invest in the business, receive an allowance of £40 a week for a year while they start the business. Over 254,000 people have benefited from the scheme. Provision for the scheme has been increased, to some £200 million in 1987–88, and the number of places available will rise to 102,500 in 1987–88 and 110,000 in 1988–89, compared with some 60,000 in 1985–86. During 1986–87 enhanced advice training and counselling

Table 39: Employees in Employment

Industry or service	Thousands (as at June)				
(1980 Standard Industrial Classification)	1978	1981	1985	1986	Per cent (1986)
Primary sector	1,112	1,073	930	868	4.0
Agriculture, forestry and fishing	395	363	341	329	1.5
Energy and water supply	717	710	589	539	2.5
Manufacturing ^a	7,281	6,222	5,365	5,239	24.3
Construction	1,199	1,130	1,022	992	4.6
Services	13,196	13,466	14,192	14,495	67.1
Wholesale distribution					
and repairs	1,096	1,137	1,194	1,208	5.6
Retail distribution	2,102	2,092	2,086	2,110	9.8
Hotels and catering	892	943	1,061	1,085	5.0
Transport	1,051	987	911	904	4.2
Postal services and					
communications	415	438	434	437	2.0
Banking, finance and insurance	1,569	1,738	2,083	2,203	10.2
Public administration	1,995	1,899	1,962	1,984	9.2
Education	1,622	1,615	1,619	1,656	7.7
Health	1,212	1,293	1,312	1,316	6.1
Other services	1,242	1,322	1,530	1,592	7.4
Total	22,789	21,891	21,509	21,594	100.0

Sources: Department of Employment and Northern Ireland Department of Economic Development.

^a In June 1986 employment in the main sectors of manufacturing industry included 766,000 in office machinery, electrical engineering and instruments; 731,000 in mechanical engineering; 577,000 in textiles, leather, footwear and clothing; 572,000 in food, drink and tobacco; 497,000 in timber, wooden furniture, rubber and plastics; 480,000 in paper products, printing and publishing; 347,000 in chemicals and man-made fibres; and 255,000 in motor vehicles and parts.

Note: Differences between totals and the sums of their component parts are due to rounding.

arrangements were introduced to improve the survival, growth and job generation prospects of businesses started under the scheme.

Community Programme The Community Programme provides up to a year's employment for long-term unemployed adults and aims to improve their prospects. Projects undertaken involve work of benefit to local communities and are run by sponsoring bodies, primarily local authorities or voluntary organisations, but with funds provided by the Government. The programme has expanded significantly and by March 1987 had some 244,000 participants engaged on about 12,000 projects. In 1986–87 over £1,000 million was spent on the programme.

In Northern Ireland similar assistance for the long-term unemployed is provided through the Action for Community Employment scheme and Enterprise Ulster, which together provided an average of some 7,350 jobs throughout 1986–87 at a cost of some £36 million.

Jobclubs

'Jobclubs', introduced in 1985, are a further way in which unemployed people are being helped to obtain work, by providing people with coaching and expert advice on job-seeking techniques and by providing free facilities (such as stationery, stamps and the use of telephones and typewriters) to enable them to undertake an intensive search for a job. About 60 per cent of people leaving

Jobclubs enter employment. By March 1987 some 1,000 Jobclubs were in operation, of which over half were located at 'jobcentres', and the remainder were run by a range of private sector organisations, voluntary bodies and local enterprise agencies; the number of Jobclubs is being expanded.

Job Release Scheme The Job Release Scheme enables older workers (disabled men aged 60 to 63, men aged 64 and women aged 59) to retire early with an allowance provided that their employer replaces them with an unemployed person. Since its establishment in 1977 some 310,000 workers have taken early retirement under the scheme.

Restart Programme Various initiatives to help the long-term unemployed have been undertaken. Under the Restart Programme, in-depth interviews were carried out at job-centres between July 1986 and March 1987 for everyone unemployed for a year or more, while in nine pilot areas interviews were held with people unemployed for six months or more. Interviewees were encouraged to identify any particular problems which had hindered their search for employment and to consider a range of opportunities. These included a place on the Community Programme, an introduction to the Enterprise Allowance Scheme, training courses including the new Job Training Scheme (see p 337), a place in a Jobclub, voluntary work, a place on a one-week Restart course designed to improve motivation and assist with job-hunting techniques, and a referral for more specialist help, for example, from a Disablement Resettlement Officer.

From March 1987 Restart has been extended, so that everyone after being unemployed for six months is required to attend a Restart interview, and an interview is then available every six months. By April 1987, $1\cdot3$ million people had been interviewed and it is estimated that about $2\cdot6$ million interviews will be held in 1987–88.

Another feature of Restart is the Jobstart Allowance, of £20 a week, which is available for up to six months to eligible long-term unemployed applicants who accept a full-time job with gross pay of less than £80 a week. Its purpose is to encourage long-term unemployed people, particularly those on high levels of benefit, to take jobs which they might not have considered otherwise. Over 8,000 people received the allowance in 1986-87 and it is expected that 24,000 will obtain it in 1987-88.

Other Schemes Other schemes include the Voluntary Projects Programme (with a similar Community Volunteering Scheme in Northern Ireland), which allows unemployed people to take voluntary work without losing entitlement to state benefits; the Community Industry Scheme, which provides temporary job opportunities for personally and socially disadvantaged young unemployed people aged 17 to 19; the New Workers Scheme, introduced in 1986 to complement the extended Youth Training Scheme by giving employers a financial incentive to recruit those aged 18 to 20 at wages reflecting their relative inexperience; and Jobshare, which is designed to encourage employers to create part-time jobs for unemployed people.

EMPLOYMENT SERVICES In Great Britain responsibility for employment policy and for the payment of unemployment benefit rests with the Department of Employment, while advice on manpower policy issues is provided by the Manpower Services Commission (MSC), a body on which employers, trade unions, local authorities and educational interests are represented. The MSC is separate from the Government but accountable to the Secretaries of State for Employment, Scotland and Wales. Most of its activities are financed from public funds. It is advised by a

EMPLOYMENT 335

network of area manpower boards on which employers, employees and other local interests are represented.

The main public employment services (other than the careers service) are operated through a network of about 1,000 local jobcentres which handle all except professional, scientific, technical and managerial occupations. Responsibility for running jobcentres will be transferred from the MSC to the Department of Employment in October 1987. Facilities for job-seekers are being increased. with a number of new small jobcentres being located in libraries and local authority establishments. New technology is helping to provide job-seekers with direct access through computer terminals to information on training and employment.

Registration for employment is voluntary for all unemployed people aged over 18, whether or not they wish to claim benefits, while those aged under 18 are required to register at the careers service as a condition of claiming benefit. In the year to March 1987, 2.6 million vacancies were notified and 1.9 million people were placed in employment (including job-seekers who were placed in a job more than once during the year).

In Northern Ireland the Department of Economic Development's Employment Service, through its network of 28 'jobmarkets', provides a guidance and placement service for all age groups, offering a range of services for employers and employees, as in Great Britain. Its facilities include Jobclubs and Restart courses. A computerised vacancy information system is planned to be introduced in jobmarkets in 1988.

Services for People with Disabilities

The public employment service provides a resettlement service to disabled people. Disablement Resettlement Officers give practical help in job placement to individuals with disabilities, as well as advising on rehabilitation and training courses and on the comprehensive range of special schemes available. The Disabled Persons (Employment) Act 1944 requires employers who employ 20 or more people to include 3 per cent registered disabled people within their workforce. The Disablement Advisory Service gives employers advice and guidance on making full use of the skills and abilities of disabled workers, by adopting appropriate employment practices. As part of the 'Fit for Work' campaign to improve the employment prospects of disabled people, a scheme of annual awards for firms which excel in carrying out constructive policies on the employment of people with disabilities is run by the MSC; this will become the responsibility of the Department of Employment.

The MSC runs a network of 27 Employment Rehabilitation Centres, which provide courses designed to improve physical capacity, restore confidence and guide participants towards the type of work or training that would be most likely to lead to a permanent job. Three experimental Assistance towards Employment Centres have also been set up to provide vocational assessment, counselling, jobsearch training and a placement service. Sheltered employment for the severely disabled is provided in Great Britain by Remploy Ltd and in Northern Ireland by Ulster Sheltered Employment Ltd, both non-profit-distributing companies, and by some local authorities and voluntary bodies.

Professional and Executive Recruitment

Professional and Executive Recruitment, a specialist branch of the MSC, will be transferred to the Department of Employment in October 1987. On a fee-paying basis it helps employers looking for professional, managerial, scientific or technical staff and assists people seeking employment at this level. It operates nationally, through a network of offices, and offers a comprehensive recruitment service based on a weekly jobs newspaper which is issued to all enrolled job-seekers, for whom the service is free. In Northern Ireland the Professional

and Executive Personnel Service is part of the general employment service offered by jobmarkets.

Careers Service

Under the Employment and Training Act 1973 local education authorities must provide a careers service to include vocational guidance for people attending all educational institutions (except universities, which have their own careers service) and an employment service for those leaving them. Authorities may also provide an employment service, mainly for young people in their early post-school years.

The careers services in Wales and Scotland are the responsibility of the respective Secretary of State. In Northern Ireland it is an integral part of the Department of Economic Development.

The MSC Careers and Occupational Information Centre publishes material to help people looking for jobs to make an informed choice, and distributes careers literature to some 15,000 schools, careers offices and other centres.

TRAINING SERVICES

Over half of the occupational training in Britain is carried out and funded by employers. Statutory industrial training boards operate in seven industries to ensure adequate training by raising a levy from employers and disbursing grants for approved training. The majority of boards may exempt employers whose training is satisfactory from payment of most of the levy. In other industries, non-statutory training bodies, membership of which is voluntary, take responsibility for the development and encouragement of training.

The Government funds training through the MSC, which has developed a comprehensive strategy to help to improve the supply of trained manpower needed by the economy, to provide opportunities for people to acquire new skills, and to improve the effectiveness of training generally. Its strategy is based on three important objectives: better arrangements for skill training to agreed standards; improving the vocational education and training of all young people; and opening up more opportunities for adults to train.

Development of Youth Training

The Youth Training Scheme, introduced in Great Britain in 1983, was expanded in 1986 so that it now offers two years of training for 16-year-old school-leavers (including at least 20 weeks off-the-job training) and one year for 17-year-old school-leavers, with a minimum of seven weeks off-the-job training. The scheme is primarily employer-based and is open to both employed and unemployed young people. All trainees have the opportunity to obtain a vocational qualification or credit towards such a qualification, and receive a certificate recording their training experience and any qualifications. Broadly based training is provided in the first year, with more specific training thereafter. In 1987–88 about 370,000 people are expected to enter the two-year programme and by 1988–89, when it is fully in operation, about 440,000 people are likely to be in training at any one time, up to 200,000 more than under the original programme. Government funding is planned to rise from \$929 million in 1986–87 to \$1,055 million in 1987–88 and to \$1,140 million by 1989–90.

In Northern Ireland the Youth Training Programme (YTP), launched in 1982 and administered jointly by the Northern Ireland Department of Economic Development and the Department of Education, caters for the vocational, education and training needs of those aged 16 or 17. It offers a two-year programme to 16-year-old school-leavers, with the first year involving off-the-job training, further education and work experience. The second year is spent in employment with training (under the 'YTP Workscheme') or in more specialised, project-based full-time training; 17-year-old school-leavers may participate for one year in either the YTP Workscheme or a full-time training scheme. In

337 **EMPLOYMENT**

1987-88 the YTP will provide some 9,400 full-time training places, while provision is also made for up to 5,000 entrants on the YTP Workscheme.

The Technical and Vocational Education Initiative, administered by the MSC in Great Britain in co-operation with local education authorities, is intended to stimulate the provision of technical and vocational education for 14- to 18-year-olds. Projects provide an integrated course of full-time education leading to nationally recognised qualifications. Most education authorities are operating or have applied to run such schemes, and by mid-1987, 95 projects were in operation, covering some 65,000 students. The results of these pilot projects have been encouraging, and the initiative will be extended from September 1987 to give all those in full-time education aged between 14 and 18 the opportunity to experience the wider curriculum available.

Vocational Qualifications Following the report of a review group, a major reform of the system of vocational qualifications is being implemented. A new national framework of such qualifications, to be called the National Vocational Qualification, will be fully operational in England, Wales and Northern Ireland by 1991. A National Council for Vocational Qualifications has been set up and will be responsible for developing and monitoring the framework and accrediting qualifications of bodies offering awards within it. Scotland is not involved in the system at present, as its framework has already been reformed, through its '16+ Action Plan'.

Adult

The MSC's adult training programmes have been restructured to provide help Training for a substantially greater number of people, and training has been more closely directed towards the skills needed by employers. The number participating in the adult training programmes rose from some 100,000 in 1983–84 to over 450,000 in 1986–87.

Its most recent programme, for retraining and updating the skills of unemployed people, is the new Job Training Scheme. When fully operational, it will provide 250,000 training opportunities a year for people who have been unemployed for six months or more. Priority is being given to those aged under 25, with the aim being for the trainee to obtain a recognised vocational qualification. Training is carried out by colleges, private training providers and at the nationwide network of 60 skillcentres under the control of the MSC's Skills Training Agency. About 500 courses are available in a wide range of occupations. Greater emphasis is being given to training for those running or hoping to start small businesses. The MSC's Training for Enterprise Scheme, which has been considerably expanded, offers short, practical courses in basic business management skills to those who want to become self-employed or are running small businesses.

The MSC also provides support to encourage employers' training efforts to help improve the skills of the workforce and to develop more and better training. A programme of local grants to employers provides help for training employers' workforces or new recruits, and the National Priority Skills Scheme is run through industrial training organisations to help to tackle key skill needs. The adult training strategy aims to develop a better and more responsive training system, by using its own training programmes to demonstrate to employers and individuals the benefits of good training and by encouraging training providers to be responsive to labour market needs and modern training methods. The Skills Training Agency provides a wide range of training services to employers, designed to equip selected employees with new or improved skills of direct and immediate benefit to their companies. This training, specially tailored to the employer's needs, is carried out either at a skillcentre or on the company's own premises, using the Agency's Mobile Training Service. The Agency also provides training for overseas clients, either training students in Britain or sending instructors abroad.

Training for unemployed people in basic work-related skills is available under the Wider Opportunities Training Programme. The programme is aimed at those groups at a disadvantage in the labour market, such as ethnic minorities, women returning to work, and people with limited English or with literacy and numeracy difficulties. A pilot training loans scheme, designed to encourage adults to undertake vocational training of their choice, was launched for a three-year period in 1986.

Increased use of open learning methods and materials is being supported through the Open Learning Programme, with the aim of making vocational training available to everyone who can benefit from it in a form which can be adapted to meet their own study circumstances. By April 1987, over 50,000 people had participated in the Open Tech Programme, which ran for five years from April 1982 and was directed at technicians, supervisors and managers. The availability of 'distance' learning will be extended when the Open College, which will provide courses below degree level to help people to improve their vocational competence, begins broadcasting in September 1987. The College is a company limited by guarantee and registered as a charity. Its aim is to reach an audience of up to 1 million students in its first five years.

CONDITIONS OF EMPLOYMENT

Employment protection legislation provides a number of safeguards for employees. For example, most employees are entitled to receive from their employers written information on their terms and conditions of employment, while minimum periods of notice when employment is to be terminated are laid down for both employers and employees. Employees with a minimum period of service of two years are entitled to lump-sum redundancy payments if their jobs cease to exist (for example, because of technological improvements or a fall in demand) and their employers cannot offer suitable alternative work, the cost being partly met from a fund subscribed to by both sides of industry. Protection against unfair dismissal is provided by machinery under which an employee who has been in continuous employment, normally for two years or more, may complain against an employer of unfair dismissal, and, if successful, obtain reinstatement, re-engagement or compensation. Other rights for employees include limited payment when work is not available for reasons other than as a result of a strike, lock-out or other industrial action, and maternity rights for female employees. However, the Government is keeping under review the legislation affecting terms and conditions of employment. Its aim is to ensure that the obligations placed on employers do not involve significant costs which discourage recruitment.

Legislation forbids any employment of children under 14 years of age, and employment in any industrial undertaking of children who have not reached the statutory minimum school-leaving age (16).

Immigrant Workers

In general, people coming to Britain for employment need a work permit issued by the Department of Employment. Among other conditions, work permits are issued only for work requiring a recognised professional qualification, or a high degree of skill or experience, where the Department is satisfied that the worker is necessary and there is no suitable worker in Britain or in other European Community countries to fill the post. In general, the age limits for permits in most categories are 23 to 54 years. People coming for certain kinds of specialist employment (for example, ministers of religion and representatives of the overseas media) and the self-employed do not require work permits but may require entry clearances issued by a British Consulate or High Commission.

Permits are also issued under the Training and Work Experience Scheme for

nationals of countries outside the European Community who are undertaking limited periods of training or work experience leading to the acquisition of a particular skill or qualification and to young people from outside the European Community to undertake short periods of employment to broaden their work experience and, if appropriate, to improve their knowledge of English.

European Community workers entering another member state have the same rights as nationals of that state as regards facilities of the national employment services, pay and conditions, trade union rights, vocational training facilities, access to housing, and social security and industrial injury benefits.

Equal Opportunities

The Race Relations Act 1976 makes it unlawful to discriminate on grounds of colour, race, nationality (including citizenship) or ethnic or national origin, in employment, training and related matters. The Department of Employment operates a Race Relations Employment Advisory Service with advisers based in the main areas where there are large ethnic minority communities. Its general aim is to promote equal opportunity in employment and its advisers offer help and guidance to employers and unions on a wide range of issues which arise in the employment of a multiracial workforce. The Commission for Racial Equality's code of practice gives practical guidance to employers and others on the best arrangements for implementing policies to eliminate racial discrimination and to enhance equality of opportunity.

The Sex Discrimination Act 1975 makes it unlawful to discriminate on the grounds of sex or of being married in employment, training and related matters. The employment provisions were amended by the Sex Discrimination Act 1986, to bring British legislation fully into line with a European Community directive on equal treatment. The Equal Pay Act 1970, as amended in 1984, requires that a woman doing the same or broadly similar work as a man, or work which has an equal value, should receive equal pay and conditions of employment.

Earnings

Pay rates are often determined by national collective bargaining (see p 345), normally on an annual basis. However, the Government's view is that pay determination should increasingly be conducted at local level and should depend primarily on performance, merit, company profitability and local supply and demand for labour. In March 1987 the Government announced that it would introduce a new income tax relief for employees receiving profit-related pay under registered schemes; it is expected that this will lead to a greater degree of pay flexibility.

Basic rates of pay vary widely, and in private industry rates paid locally often exceed the rates specified in national agreements. Higher rates are usually paid for overtime and shift work, and weekly earnings may be further increased by incentive bonus schemes.

According to the latest available information from the Department of Employment's New Earnings Survey, the average weekly earnings (including overtime payments) in April 1986 of full-time employees on adult rates were £184·70 (£207·50 for men and £137·20 for women). Earnings were higher for non-manual employees (£200·90) than for manual employees (£163·20). Some 49 per cent of manual employees and 19 per cent of non-manual employees received overtime payments. Women's earnings are markedly lower than those of men, partly because on average they work shorter hours, with less overtime paid at premium rates, and partly because they tend to be concentrated in the less well-paid jobs.

Remuneration in commercial, technical and professional careers is normally by annual salary paid monthly, often on a scale carrying annual increments. Most of the senior posts in business, the professions and the Civil Service command salaries in the range of £15,000 to £30,000 a year gross before tax.

The posts with salaries above £30,000 a year include those of Cabinet ministers, top-ranking judicial appointments, the highest positions in government departments and the largest municipal authorities, editors of daily newspapers, leading members of professions and the higher managerial posts in industry, commerce and banking. A number of company directors have salaries exceeding £100,000 a year and some other people, such as leading pop musicians and other star entertainers, may receive similar amounts through fees, royalties or fixed contracts.

Hours of Work

The basic working week in Great Britain is in the range 37.5 to 40 hours for manual work and 35 to 38 for non-manual work; a five-day week is usually worked. Actual hours worked differ from basic hours; in April 1986 for full-time employees they were 41.8 for men compared with 37.3 for women. Men and women in non-manual occupations generally work less overtime than manual employees.

Legislation limits the permissible hours of work for young people. Hours of work of adult men and of women in non-industrial jobs are not restricted by statute. In February 1987, under the Sex Discrimination Act 1986, restrictions on the maximum hours of women employed in industrial undertakings were repealed, so that they are able to work the same hours as men, except that they are prohibited from undertaking work at night. However, most industrial establishments are eligible to apply for exemption orders, which allow women to work at night.

Holidays with Pay

There are no general statutory entitlements to holidays, and holiday entitlements are frequently determined by collective agreements. These generally provide for at least four weeks' paid holiday a year, and over 85 per cent of manual employees covered by national collective agreements have entitlements of more than four weeks, with nearly one-quarter having five weeks or more. Non-manual workers tend to have longer holidays than manual workers. Holiday entitlements may also be dependent upon length of service.

Employee Share Schemes

Some firms operate profit-sharing and share-saving schemes, and the Government has taken a number of measures to encourage the development of employee share ownership schemes. The number of schemes open to all employees in a company has risen from less than 30 in 1979 to over 1,300 in 1987, and 1.5 million employees have benefited under them.

Other Benefits

Additional benefits exist in varying degrees. About half of employees in employment are covered by pension schemes provided by their employers. Many employees are also covered by occupational sick pay schemes which are additional or complementary to the state schemes, and by schemes to provide private medical treatment. A smaller number are covered by schemes for redundancy payments above the statutory minimum. Such benefits are more usual among clerical and professional employees receiving a standard salary than among manual workers. The provision of low-priced meals at the place of employment is usual in large undertakings and quite common in smaller ones. Many offices and shops which are unable to provide canteen facilities for their staff have adopted luncheon voucher schemes. Among the other executive fringe benefits sometimes available are company cars, life assurance, free medical insurance, telephone allowances and low-interest loans.

TRADE UNIONS

Trade unions have members in virtually every occupation and represent nearly half the working population. As well as negotiating pay and other terms and

EMPLOYMENT 341

conditions of employment with employers, they provide certain benefits and services—for example, educational facilities, legal advice and benefit payments during industrial disputes—which vary from union to union. Trade unions vary widely in the composition of their membership, and may be organised either by occupation (for example, they may recruit clerks or fitters wherever employed) or by industry, while some are based on a combination of both.

At the end of 1985 the total membership of British trade unions was about $10.8\,$ million, of whom $81\,$ per cent were in the $24\,$ largest unions with over $100,000\,$ members. During the 1980s there has been a decline in trade unionism, primarily reflecting the movement in the economy away from manufacturing (which has a relatively high level of union membership). The number of unions has also fallen as there has been an increase in mergers, and a number of small unions and of long-established craft unions have been absorbed by larger unions. At the end of 1986 there were $375\,$ trade unions on the list maintained by the Certification Officer under the Employment Protection Act $1975.\,$ To be eligible for entry on the list a trade union must show that it consists wholly or mainly of workers and that its principal purposes include the regulation of relations between workers and employers, or between workers and employers' associations. Certain rights and privileges are reserved for independent trade unions.

Among the largest unions are the Transport and General Workers Union (1·4 million members), the Amalgamated Engineering Union (975,000) and the General, Municipal, Boilermakers and Allied Trades Union (827,000); of the non-manual workers' unions, the largest are the National and Local Government Officers' Association (752,000 members) and the National Union of Public Employees (664,000).

The central organisation of most unions consists of a national executive council, usually elected by a secret ballot of the individual members of the union and responsible to the annual conference of delegates from local branches. Between conferences, councils are the highest authority of unions, and carry out policy decisions made by the conference delegates. Most unions also have regional and district organisations. At the level of the individual member there are local branches, covering one or more workplaces. The organising of members in individual places of work, and the negotiation of local pay agreements with management at the workplace, may be done by full-time district officials of the union, or, in many cases, by workplace representatives, often called 'shop stewards', who are chosen by their fellow members in the place of work to represent them. Where two or more unions have members in the same workplace, representatives' or shop stewards' committees may be formed to discuss matters of common concern.

A number of trade unions are affiliated to the Labour Party and some sponsor Members of Parliament. Any trade union wishing to use money for 'political objects' (usually for party political purposes) must set up a separate fund, subject to special rules, one of which must allow any member who objects to contributing to the fund to opt out. Some 5·7 million members contribute to a political fund and at the end of 1986, 44 unions maintained such a fund.

Trades Union Congress In Britain the national centre of the trade union movement is the Trades Union Congress (TUC), which was founded in 1868. The TUC's objects are to promote the interests of its affiliated organisations and to improve the economic and social conditions of working people. Its affiliated membership comprises 88 trade unions which together represent 9.5 million people, or nearly 90 per cent of all trade unionists in Britain, and it exercises power through influence rather than through sanctions. The TUC deals with all general questions which

concern trade unions, both nationally and internationally, and provides a forum in which affiliated unions can collectively determine policy. It is consulted by the Secretary of State for Employment before the appointment of employee representatives on the Manpower Services Commission, the Advisory, Conciliation and Arbitration Service and certain other official bodies with an interest in employment matters. There are eight TUC regional councils for England, and a Wales Trades Union Council.

The annual Congress convenes in September to discuss matters of concern to trade unionists. A General Council represents it between Congresses and is responsible for carrying out Congress decisions, watching economic and social developments, providing educational and advisory services to unions, and presenting to the Government the trade union viewpoint on economic, social and industrial issues. The TUC is also empowered to mediate in inter-union disputes in certain circumstances, and uses its authority to try to resolve such difficulties.

The TUC, as well as many individual unions, conducts extensive educational services for members, mainly concerned with industrial subjects, trade unionism, and the principles and practice of industrial relations.

The TUC plays an active part in international trade union activity, through its affiliation to the International Confederation of Free Trade Unions and the European Trade Union Confederation. It also nominates the British workers' delegation to the annual International Labour Conference.

Scotland and Northern Ireland

Trade unions in Scotland also have their own national central body, the Scottish Trades Union Congress, which in many respects is similar in constitution and function to the TUC. Trade unions in Northern Ireland are represented by the Northern Ireland Committee of the Irish Congress of Trade Unions (ICTU), although the majority of trade unionists in Northern Ireland belong to unions based in Great Britain. Over 75 per cent of Northern Ireland trade unionists are members of organisations affiliated to the ICTU, while the majority belong to unions which are also affiliated to the TUC. The Northern Ireland Committee of the ICTU has no political affiliations and enjoys a high degree of autonomy.

Legal Framework

The beginnings of the present law on industrial relations were established a century ago, when trade union members were freed from liability to charges of criminal conspiracy. At the beginning of the present century unions were given a wide degree of immunity from legal action under the civil law, and the immunities of those organising industrial action were also strengthened. Peaceful picketing during strikes was also made legal.

The Employment Acts 1980 and 1982 were designed to obtain a better balance between rights and responsibilities in industrial relations. The 1980 Act enabled the Government to make funds available to encourage the wider use of secret union ballots and to produce codes of practice to promote good industrial relations. It limited lawful picketing to the picket's own place of work and restricted the scope for secondary action such as blacking and sympathetic strikes. It provided greater protection for the individual working in a 'closed shop' (that is, under an agreement between the employer and one or more unions that union membership is a condition of employment) and removed legal protection from any new closed shop which had not been approved in a secret ballot by 80 per cent of the employees affected. As provided for in the Act, the Government has published codes of practice on the conduct of picketing and the closed shop.

The 1982 Act was designed to carry the process further. It increased the compensation for employees unfairly dismissed for non-membership or

EMPLOYMENT 343

membership of a union and introduced compensation (from government funds) for certain employees dismissed because of non-membership of a union in a closed shop between 1974 and 1980. The Act also removed, from November 1984, legal protection from all closed shops (not only from new ones, as in the 1980 Act) where the closed shop had not been supported in a secret ballot held in the previous five years by 80 per cent of the employees affected or by 85 per cent of those voting in the ballot. Where legal protection is removed, any dismissal for non-membership of a union is unfair. Terms in commercial contracts specifying the use of union labour only were made unenforceable and discrimination on the basis of union membership in the awarding of contracts was made unlawful. Industrial action which seeks to persuade employers to discriminate in this way or to interfere with the supply of goods or services on grounds of union membership is unlawful. The Act also ended the position which gave trade unions almost complete immunity from all civil actions by bringing their position into line with that of their individual officials and members. This means that trade unions now have immunity only for action taken in furtherance or contemplation of a lawful trade dispute. There were also changes to the definition of a trade dispute upon which immunity for civil actions depends. Disputes between employer and employees (that is, most industrial action) continue to qualify as lawful trade disputes, but disputes which have become unlawful are those where there is no disagreement between an employer and his or her employees, or those which have little to do with the normal subject of a trade dispute (such as terms and conditions of work).

> The Trade Union Act 1984 was introduced by the Government to ensure basic standards of democracy in trade unions. It requires that all voting members of the principal executive committee of a union should be elected by a secret and direct ballot of the members at least once every five years, and requires unions to compile and maintain a register of members' names and addresses. It also removes legal immunity from trade unions which call a strike or take other industrial action without first holding a secret ballot of members concerned and securing a majority vote for this action. In addition, the Act requires trade unions with political funds to ballot their members at regular intervals to decide whether the funds should be retained. Unless members had been balloted in the previous ten years, trade unions with political funds were required to hold a ballot in 1985-86 and all of the 38 unions involved voted to retain their funds.

> Northern Ireland has a broadly similar but separate system of industrial relations legislation.

Government **Proposals**

The Government has put forward for consideration a number of proposals which are designed to strengthen the rights of individual trade union members, reinforce their ability to exercise these rights and further improve the internal democracy of unions. It proposes that an individual member should have the right to restrain his or her trade union from authorising or endorsing industrial action unless it has held a ballot. Protection against unfair disciplinary measures is envisaged to protect union members who refuse to take industrial action. The Government is also proposing to remove the remaining legal protection for the closed shop. Measures put forward to increase democracy in trade unions would involve the use of postal ballots under independent supervision for elections for all members, whether voting or non-voting, of principal executive committees and for ballots on political funds. To remedy deficiencies in the arrangements for the enforcement of trade unions' statutory duties, various measures are proposed including the creation of a Commissioner for trade union affairs, with discretion to assist an individual in High Court proceedings against his or her union.

EMPLOYERS'
ORGANISATIONS

Many employers in Britain are members of employers' organisations, some of which are wholly concerned with labour matters although others are also concerned with commercial matters or trade associations. The primary aims of such organisations are to help to establish suitable terms and conditions of employment, including a sound wage structure and proper standards of safety, health and welfare; to promote good relations with employees and the efficient use of manpower; and to provide means of settling any disputes which may arise. Combined employers' organisations and trade associations may also represent members' points of view as manufacturers or traders to the Government on commercial matters.

Employers' organisations are usually organised on an industry basis rather than a product basis, for example, the Engineering Employers' Federation. A few are purely local in character or deal with a section of an industry or, for example, with small businesses; most are national and are concerned with the whole of an industry. In some of the main industries there are local or regional organisations combined into national federations, while in others, within which different firms are engaged in making different principal products, there is a complex structure with national and regional federations for parts of an industry as well as for the industry as a whole. Altogether there are some 335 employers' associations known to the Certification Officer. Those which are national organisations negotiate the national collective agreements for their industry with the trade unions concerned; most of these national organisations belong to the Confederation of British Industry.

Confederation of British Industry

The Confederation of British Industry (CBI) is the largest central employers' organisation in Britain, representing directly or indirectly some 250,000 businesses which together employ about half the working population. It aims primarily to ensure that Government, national and international institutions and the public understand the needs, intentions and problems of business. Membership ranges from the smallest to the largest companies, private sector and nationalised, and covers a broad spectrum which includes manufacturing, agriculture, construction, distribution, mining, finance, retailing and insurance. Most national employers' organisations, trade associations and some chambers of commerce are members. Policy is determined by a council of 400 members, and there is a permanent staff of 350, while there are 13 regional offices and an office in Brussels. The CBI is the British member of the Union of Industries of the European Community. The CBI nominates the employers' representatives on a number of bodies including the National Economic Development Council, the Manpower Services Commission, the Health and Safety Commission and the Advisory, Conciliation and Arbitration Service.

INDUSTRIAL RELATIONS

The structure of industrial relations in Britain has been established mainly on a voluntary basis. The system is based chiefly on the organisation of employees and employers into trade unions and employers' associations, and on freely conducted negotiations at all levels.

Because of the publicity they receive, strikes are commonly thought to occur much more frequently in Britain than in other countries. International comparisons show, however, that Britain's record on industrial disputes is better than those of a number of other major industrialised countries. In 1985 some 6·4 million working days were lost in Britain through industrial stoppages, of which about two-thirds were accounted for by a major dispute in the coal industry, while the number of recorded disputes was the lowest for nearly 50 years. Although the number of disputes rose slightly in 1986, there

EMPLOYMENT 345

was a decline in the number of working days lost to 1.9 million, the lowest since 1.963.

Collective
Bargaining
and Joint
Consultation

In most industries terms and conditions of employment and procedures for the conduct of industrial relations are settled by negotiation and agreement between employers or employers' associations and trade unions. Agreements may be industry-wide, as is generally the case in the public sector, but are often supplemented by local agreements in companies or factories (plant bargaining). and bargaining and consultation are increasingly being conducted at plant level. In some industries, companies and factories, negotiations are conducted by meetings held when necessary, while in others, joint negotiating councils or committees have been established on a permanent basis. The scope of the various bodies (from national joint industrial councils for whole industries to works councils and committees in individual workplaces) varies widely, and can cover such additional matters as production plans, investment, training, education, welfare and safety. Normally these arrangements for collective bargaining suffice to settle all questions which are raised, but there is often provision for matters not so settled to be referred for settlement to independent conciliation or arbitration. The Employment Protection Act 1975 as amended by the Employment Act 1980 makes provision for information needed for collective bargaining purposes to be disclosed by employers to trade unions, subject to certain safeguards.

Advisory, Conciliation and Arbitration Service The Advisory, Conciliation and Arbitration Service (ACAS) is an independent statutory body with the general duty of promoting the improvement of industrial relations, and in particular of encouraging collective bargaining and the development and (where necessary) reform of collective bargaining machinery. ACAS is controlled by a council consisting of a full-time chairman and nine part-time members experienced in industrial relations, of whom three are nominated after consultation with the CBI, three after consultation with the TUC, and three are independent. The Service conciliates in industrial disputes in both the public and private sectors. ACAS assistance was sought in nearly 1,500 disputes in 1986. In addition, there were some 180 further requests for ACAS to provide arbitration, which it may do either by appointing single arbitrators or boards of arbitration or by referring cases to the Central Arbitration Committee (see below). Although ACAS has prime responsibility for helping to resolve disputes, and has also set up major committees of inquiry, the Secretary of State for Employment retains powers to appoint a court of inquiry or committee of investigation into a dispute, but these are rarely used.

The Service gives advice on all aspects of industrial relations and employment policies to employers, managers, trade unions, employee representatives and individuals, and it handled over 270,000 inquiries in 1986. Specialist staff made over 9,000 advisory visits. ACAS also carries particular responsibility for attempting conciliation on complaints of infringement of individual employee rights (such as individual complaints of unfair dismissal, complaints under the Equal Pay Act 1970, including claims for equal pay for work of equal value, and complaints on employment matters under the Sex Discrimination Act 1975 and the Race Relations Act 1976). There were over 51,000 such cases in 1986. Its Work Research Unit promotes, jointly through trade unions and employers, the improvement of work structures and the quality of working life.

Central Arbitration Committee The Central Arbitration Committee is an independent standing arbitration body. It provides boards of arbitration for the settlement of trade disputes referred to it with the consent of the parties concerned and adjudicates on claims made under the disclosure of information provisions of the Employment Protection ${\it Act}\ 1975.$

Office of Manpower Economics The Office of Manpower Economics is an independent non-statutory organisation responsible for servicing independent review bodies which advise on the pay of various public-sector groups. These are the Top Salaries Review Body, the Armed Forces' Pay Review Body, the Doctors' and Dentists' Review Body, and the Review Body for Nurses and other National Health Service professions. The Office also provides services for the Pharmacists' Review Panel, the Police Negotiating Board and the Civil Service Arbitration Tribunal. It is responsible for research into pay and associated matters as requested by the Government.

Wages Councils Wages councils fix statutory minimum pay for over 2 million workers aged 21 and over, primarily in service industries such as retailing, catering and hairdressing. There are 26 councils, each consisting of equal numbers of representatives of employers and employees in the relevant industry and up to five independent members. The Wages Act 1986, which replaced the Wages Councils Act 1979, empowers each council to fix a single minimum hourly rate, an overtime rate and a limit on deductions for accommodation provided.

HEALTH AND SAFETY AT WORK Employers have a duty at civil and criminal law to take reasonable care of their employees, and others affected by their work activities, and to provide a safe system of working, while employees have a duty of care towards each other and also to take care of their own safety. The principal legislation is the Health and Safety at Work etc. Act 1974. Its purpose is to secure the health, safety and welfare of people at work and to provide for the protection of the public whose health and safety might be affected by work activities. The Act places general duties on everyone concerned with work activities, including employers, the self-employed, employees, manufacturers and suppliers.

The 1974 Act is superimposed on earlier health and safety legislation, such as the Mines and Quarries Act 1954, the Factories Act 1961 and the Offices, Shops and Railway Premises Act 1963 and the various regulations made under them. The earlier legislation imposes specific obligations and standards on, for example, occupiers of particular types of premises or employers engaged in particular activities and covers such matters as the fencing of machinery, precautions against the exposure of people to toxic dusts and gases, precautions against fire, dangerous substances and special risks, the safe condition of premises, and cleanliness, lighting, temperature and ventilation.

Some of the earlier legislation was replaced immediately by the 1974 Act, but the remainder continues in force pending its progressive replacement by regulations and codes of practice. Regulations made under the Act govern the establishment of first-aid facilities, the control of work with lead and the control of major accident hazards in industry, each set being supported by either an approved code of practice or other guidance material. Others are in the course of development, for example, on the control of hazardous substances.

A basic principle underlying the 1974 Act is that employers, in consultation with their employees, should have the responsibility of working out health and safety arrangements, within the broad obligations of the law, to suit their own workplaces. Employers with five or more employees must draw up a written policy for safety and health, and must inform their employees of the policy and of the arrangements for its implementation. In workplaces where negotiations take place with a trade union, the union may appoint safety representatives to be the employees' official channel for representation and consultation over safety matters.

EMPLOYMENT 347

The Health and Safety Commission

The Health and Safety Commission, established by the 1974 Act and accountable to Parliament through the Secretary of State for Employment, has responsibility for developing policies, including guidance, codes of practice, or proposals for regulations. In the case of proposals for changes in legislation, the Commission consults the people who will be affected by them and makes recommendations to the Secretary of State concerned. The Commission has an independent chairman, three members appointed after consultation with the CBI, three after consultation with the TUC, and two after consultation with local authority associations. The Commission has seven subject advisory committees (on toxic substances, on dangerous substances, on dangerous pathogens, on genetic manipulation, on the safety of nuclear installations, on the safe transport of radioactive materials and on medical matters), and 11 industry advisory committees, for agriculture, ceramics, construction, education, foundries, health services, oil, paper and board, printing, railways and rubber.

The Health and Safety Executive

The 1974 Act also set up the Health and Safety Executive, which includes government inspectorates covering a range of work activities: the Factory Inspectorate (which also deals with a large number of activities outside factories such as hospitals and educational establishments) and inspectorates for mines and quarries, agriculture, nuclear installations and explosives. It also includes the Medical Division, the Technology Division and the Research and Laboratory Services Division. The inspectors, who have powers of entry and enforcement. seek compliance with health and safety legislation in individual workplaces and give advice. The Medical Division, through the Employment Medical Advisory Service, provides a nationwide service of advice on the medical aspects of employment problems to employers, employees, trade unions, doctors and others.

The Technology Division provides technical advice on industrial health and safety matters. The Research and Laboratory Services Division provides scientific and medical support and testing services, and carries out research both in its own laboratories and through universities and other institutions on a contract basis, often jointly funded by industry. Areas of study include explosion risks, fires, protective equipment, methods for monitoring airborne contaminants, occupational medicine and hygiene, and the safety of engineering systems.

In some premises, mostly offices, shops, warehouses, restaurants and hotels, health and safety legislation is enforced by inspectors appointed by local authorities, working under guidance from the Health and Safety Commission. Some other official bodies work under agency agreement with the Health and Safety Commission, for example, the Railway Inspectorate (concerned with worker safety on railways) and the Department of Energy (concerned with health and safety in the oil industry).

Northern Ireland In Northern Ireland, the Health and Safety Agency, roughly corresponding to the Health and Safety Commission, and an Employment Medical Advisory Service were set up by the Health and Safety at Work (NI) Order 1978. The Northern Ireland Department of Economic Development, through its Health and Safety Inspectorate, is responsible for ensuring compliance with health and safety legislation, which is broadly similar to that for Great Britain.

17 Public Finance

Public finance is concerned with taxation, expenditure and borrowing by central and local government and the financing of public corporations. Central government raises money from individuals and companies by direct and indirect taxation and from National Insurance contributions. It spends money on goods and services, such as health and defence, and in payments to people, such as social security and pensions. Local government receives substantial grants from central government and raises revenue mainly through rates (local property taxes). From these resources it provides services such as education, police and fire services, and refuse collection. The external finance of the nationalised industries and other public corporations also has to be included in the Government's expenditure plans. The diagram (see p 357) shows the relative importance of the various items of receipts (including borrowing) and expenditure for the public sector.

The government department responsible for broad control of public finance and expenditure is the Treasury. The Bank of England (the central bank) advises the Government on financial matters, executes monetary policy and acts as banker to the Government.

PLANNING PUBLIC FINANCE The background to the present Government's planning of public finance is the medium-term financial strategy, introduced in 1980. The Government's aim is to maintain a firm financial framework in order to secure a fall in inflation and ensure the continuation of the conditions for sustainable growth. With commitments also to reduce taxation and curb the role of the State, the Government has therefore sought to reduce public expenditure as a proportion of national output as well. General government expenditure as a proportion of gross domestic product fell from over 46 per cent in the early 1980s to a little over 43 per cent in 1986–87. The 1987 public expenditure White Paper (see below) implies a continued steady decline, to just above 41 per cent by 1989–90.

Table 40 shows the public expenditure planning totals and projections for the public sector borrowing requirement to 1990–91.

The Planning Cycle

Each year the Government conducts a review (the 'public expenditure survey') of its expenditure plans for the forthcoming three years and publishes the resulting totals, together with any changes in National Insurance, in the Autumn Statement around November. Details of these plans and of the aims of government expenditure and the output obtained are given in the annual public expenditure White Paper which appears early in the following year, usually in January.

The Government's updating of the medium-term financial strategy and consequent plans for the public finances over the following year, including any tax changes, are set out in the *Financial Statement and Budget Report*, published with the Budget around the end of the financial year (31 March). Details are announced subsequently in the Finance Bill, which is presented to Parliament shortly after the Budget and becomes law during the summer.

Table 40: Projections of the Public Sector Borrowing Requirement

£ thousand million

	1987–88	1988–89	1989–90	1990–91
General government expenditure	174	180	188	196
Public expenditure planning total	149	154	162	168
General government receipts	169	178	187	197
of which: taxes	128	136	144	152
National Insurance				
and other contributions	28	30	32	34
Fiscal adjustments ^a	_	3	5	7
Market and overseas borrowing				
of public corporations	-1	-1	-1	-1
Public sector borrowing requirement	4	4	5	5
Per cent of gross domestic product	1	1	1	1

Source: Financial Statement and Budget Report 1987-88.

Differences between totals and the sums of their component parts are due to rounding.

PUBLIC EXPENDITURE

The public expenditure planning total for 1987–88 has been set at £148,600 million. Of this, £108,300 million is allocated to central government, £40,200 million to local authorities and £1,700 million to nationalised industries and other public corporations. The reserve (see below) accounts for £3,500 million. Proceeds from privatisation, projected at £5,000 million, count as negative public expenditure and are therefore deducted from the planning total.

Central government spending is largely voted by Parliament through the annual Supply Estimates (see p 352). The rest consists mainly of those social security payments which are made out of the National Insurance Fund. The largest departmental programmes are those on social security payments (31 per cent of the 1987–88 planning total), health and personal social services and defence (each 13 per cent) and education and science (11 per cent). See Table 41.

About half of local authority spending is financed by grants from central government. The rest is met from rates, surpluses on trading, rents and from borrowing. Education accounts for around one-third of local authority spending, with law and order, housing and other environmental services, personal social services and transport accounting for most of the remainder.

The 1987–88 planning total included £1,700 million for spending by public corporations, of which £700 million was attributable to nationalised industries' external finance.

Of planned expenditure in 1987–88, cash payments to the personal sector—for example, pensions and other social security benefits—comprise over one-third; pay (other than that included in departmental running costs) and purchases of assets, goods and services each about one-quarter; and departmental running costs a little under one-tenth. The economic breakdown of each department's spending varies. Capital spending in 1987–88 by central and local government is planned to be £14,800 million and that by nationalised industries and other public corporations £4,600 million.

Reserve

Planned expenditure includes an unallocated reserve to cover all additions to departmental spending during the year, whether arising from policy changes,

^a These imply lower taxes or higher expenditure than assumed in the figures for general government expenditure and receipts.

PUBLIC FINANCE 351

new initiatives or revisions to the estimated costs of demand-led programmes. For 1987–88 the reserve is £3,500 million. The reserve has been set at higher levels for each of the next two years but some will normally be allocated to departments as spending plans are made firmer.

Table 41: Planned Expenditure by Central Government Departments and Local Authorities 1987–88

£ million

	Central government ^a	Local authorities ^a
Defence	18,784	
Foreign and Commonwealth Office	2,055	
European Community	870	_
Agriculture, Fisheries and Food	2,078	180
Trade and Industry	1,190	82
Energy	-85	_
Employment	3,912	120
Transport	2,423	2,719
Environment—housing	1,379	1,801
Environment—other environmental		
services	598	3,324
Home Office	1,700	4,515
Education and Science	2,648	13,956
Arts and Libraries	339	469
Health and Social Security—health		
and personal social services	16,195	2,928
Health and Social Security—social		
security	42,368	3,634
Scotland	3,713	4,193
Wales	1,586	1,598
Northern Ireland	4,008	700
Chancellor's departments	2,216	
Other departments	1,734	a Marie a volume L
Totals	109,711	40,220

Source: The Government's Expenditure Plans 1987-88 to 1989-90 (the public expenditure White Paper).

a Including finance for public corporations.

Differences between totals and the sums of their component parts are due to rounding.

Note: Expenditures on certain services (such as education) are made under the programmes for Scotland, Wales and Northern Ireland in addition to other departmental programmes.

Cash Limits

Some 40 per cent of public expenditure is subject to control by cash limits (external financing limits in the case of nationalised industries). Another 40 per cent consists of demand-led services (for example, social security benefits) on which, once policy and rates of payment have been determined, expenditure in the short run depends on the number of eligible recipients. The remaining 20 per cent is current expenditure of local authorities, which central government does not directly control; however, the major part of the contribution by central government to such expenditure, the rate support grant, is subject to cash limits.

Once fixed, cash limits are not usually revised during the course of the year unless a decision is taken to alter the level of provision for the service concerned. There is, however, a limited facility for carrying forward underspending on the

capital components of cash limits. If any overspending of cash limits occurs, a corresponding deduction is normally made from the limits for the following year.

The Estimates

The annual public expenditure survey conducted by the Treasury provides the basis for the Estimates which each government department submits to the Treasury in December, giving details of its cash requirements for the financial year beginning in the following April. After approval by the Treasury, these Supply Estimates are presented to Parliament in March, usually at the same time as the Budget (see p 353). Parliament approves them in July as part of the Annual Appropriation Act, expenditure between 1 April and this date being covered by Votes on Account approved before the start of the financial year. Supplementary Estimates may also be presented to Parliament during the course of the year. If any Supply Estimate is overspent, the Public Accounts Committee (see below) will investigate fully before Parliament is asked to approve any Excess Vote to balance the account. In each parliamentary session, up to three 'Estimates days' are available for debates on the Supply Estimates, following scrutiny by select committees of the House of Commons.

For 1987–88 the Supply Estimates provided for total expenditure of £104,500 million, of which three-quarters was to be direct spending by central government and the remainder would represent transfers to other parts of the Government or the public sector. Some items of central government expenditure, for example, the salaries and pensions of judges, are paid directly out of the Consolidated Fund (see p 353) as standing services and are not subject to annual approval by Parliament.

Examination and Audit of Public Expenditure

Examination of public expenditure is carried out by select committees of the House of Commons, which study in detail the activities of particular government departments and require the attendance of ministers and officials for cross-examination. The audit of the Government's spending which follows up the control inherent in parliamentary approval of the Estimates is exercised through the functions of the Comptroller and Auditor General and the Public Accounts Committee.

Comptroller and Auditor General

The Comptroller and Auditor General, an officer of the House of Commons appointed by the Crown, has two distinct functions. As Comptroller General, he has the duty to ensure that all revenue and other public money payable to the Consolidated Fund and the National Loans Fund (see p 353) is duly paid and that all payments out of these funds are authorised by statute. As Auditor General, his duties are to certify the accounts of all government departments and those of a wide range of other public sector bodies; to examine revenue accounts and inventories; and to report the results of his examinations to Parliament. He also has wide statutory powers to carry out, and report to Parliament on, examinations of economy, efficiency and effectiveness in the use of resources by those bodies he audits or to which he has right of access.

Public Accounts Committee

The Public Accounts Committee considers the appropriation and other accounts of government departments and the Comptroller and Auditor General's reports on them and on the economy, efficiency and effectiveness of departments' use of their resources. The Committee takes evidence from the official heads of departments and relevant public sector bodies and submits to Parliament reports which carry considerable weight, and its recommendations are taken very seriously by the departments and organisations that it examines. The Government's formal reply to the reports is presented to Parliament by the Treasury in the form of Treasury minutes and the reports and minutes are usually debated annually in the House of Commons.

353 PUBLIC FINANCE

Central Government Financial Funds

The Government's sterling expenditure is largely met out of the Consolidated Fund, an account at the Bank of England into which tax receipts and other revenues are paid. This is also known as the Exchequer. Any excess of expenditure over receipts is met by the National Loans Fund, which is another official sterling account at the Bank of England and is the repository for funds borrowed by the Government. The National Insurance Fund, into which contributions are paid by all employers and employed people, is used mainly to pay for social security benefits; a small proportion of the Fund is used to help finance the National Health Service.

THE BUDGET

The Budget—usually in March or April—sets out the Government's proposals for changes in taxation and is the main occasion for an annual review of economic policy. The proposals are announced to the House of Commons by the Chancellor of the Exchequer in the Budget statement and are published in the Financial Statement and Budget Report. This report also contains a review of recent developments in the economy, together with an economic forecast—one of the two which the Government is required to publish each year (the other being contained in the Autumn Statement)—and sets out the fiscal and monetary framework within which economic policy operates. This is the medium-term financial strategy (see p 349).

The Budget statement is followed by the moving of a set of Ways and Means (or Budget) resolutions in which the proposals are embodied. When passed by the House of Commons, these resolutions give temporary effect, under the Provisional Collection of Taxes Act 1968, to certain of the tax proposals; they are the foundation of the Finance Bill, in which the proposals are set out for detailed consideration by Parliament, becoming law as the Finance Act, usually in the following July. The effect of the Provisional Collection of Taxes Act is thus to enable the Government to collect certain taxes provisionally, at the levels provided by the Budget proposals, pending enactment of the Finance Bill.

> The bulk of the tax proposals are concerned with changes in the rates or coverage of taxes, the introduction of new taxes or the abolition of existing ones and changes in the administrative machinery. These changes are made not only with regard to the revenue required but also with regard to their effect on the way the economy performs.

For two taxes-income tax and corporation tax-annual Ways and Means resolutions followed by Finance Act clauses are required to maintain their existence, since they are annual rather than permanent taxes. Thus, a Budget and a Finance Act are necessary at or about the beginning of each financial year. Tax changes can be made at other times of the year, however, either by specific legislation or by the use of the regulator, which permits limited changes between Budgets in value added tax (by up to 25 per cent) and the main excise duties (by up to 10 per cent).

TAX REVENUE

The three principal sources of tax revenue are: taxes on income, which include income tax and corporation tax; taxes on capital, which include inheritance tax and capital gains tax; and indirect taxes, which include customs and excise duties, value added tax (VAT), rates (which are set and collected by local authorities to help meet their expenditure), stamp duties and licence duties (for example, on motor vehicles).

Table 42 shows the provisional revenue of central government from taxation and other sources in 1986-87 and the forecasts for 1987-88.

Taxes on individual incomes are progressive in that larger incomes bear a proportionately higher rate of tax. Thresholds and rate bands for income tax, inheritance tax and capital gains tax are raised automatically each year in line with the rise in retail prices over the previous calendar year unless the Government proposes otherwise and Parliament approves. The Inland Revenue assesses and collects the taxes on income and capital and the stamp duties. HM Customs and Excise collects the most important taxes on expenditure (the customs and excise duties and VAT).

Taxes on Income Tax

Income tax is imposed for the year of assessment beginning on 6 April. For **Income** 1987–88 the basic rate of 27 per cent applies to the first £17,900 of taxable income. A rate of 40 per cent applies to the £17,901-£20,400 band, 45 per cent to the £20,401-£25,400 band, 50 per cent to the £25,401-£33,300 band and 55 per cent to the £33,301-£41,200 band, ending with a maximum rate of 60 per cent on taxable income over £41,200. These rates apply to both earned and investment incomes.

A number of personal allowances and reliefs reduce the amount of a person's taxable income compared with gross income. The main allowances are £2.425 for the income of a single person or the earned income of a wife and £3.795 for the income of a married man. Among the most important of the reliefs is that for mortgage interest payments on borrowing for house purchase. Relief at the basic rate is usually given 'at source' (that is, passed directly by the tax authorities to the building society or bank making the loan rather than to the individual taxpayer). Another relief is that under the business expansion scheme, whereby certain investors in trading companies without a Stock Exchange quotation (usually small companies) are able to obtain relief on up to £40,000 invested in any one year.

Assuming only the basic personal allowances, a single person with an income of £10,000 a year in 1987-88 pays £2,045 in income tax while a married man with the same income pays £1,675. The amount of tax payable by a single person varies from, for example, £695 on an annual income of £5,000 to £32,203 on one of £70,000.

The income of married couples is usually taxed as if it all belonged to the husband. A couple may, however, choose to have the wife's earnings charged separately for tax on condition that the husband receives the single instead of the married personal allowance. Any joint investment income, however, is taxed as part of the husband's income.

Most wage and salary earners pay their income tax under a Pay-As-You-Earn (PAYE) system whereby tax is deducted (and accounted for to the Inland Revenue) by the employer, thus enabling them to keep as up to date as possible with their tax payments.

In general, income tax is charged on all income which originates in Britain (although some forms of income—such as certain social security benefits—are exempt) and on all income arising abroad of people resident in Britain. Interest on certain British government securities belonging to people not ordinarily resident in Britain is exempt. Britain has entered into agreements with many countries providing for relief from double taxation; where such agreements are not in force unilateral relief is often allowed. British residents working abroad for the whole year benefit from 100 per cent tax relief.

Corporation

Company taxation in Britain is at a significantly lower rate than in most other industrialised countries. Companies pay corporation tax on their profits remaining after deduction of certain allowances. A company which distributes profits to its shareholders is required to make to the Inland Revenue an advance payment of corporation tax. In general, this payment is set against a company's liability to corporation tax on its income and the recipient of the distribution is entitled to a tax credit, which satisfies his or her liability to income tax at the basic rate.

Table 42: Consolidated Fund Revenue 1986-87 and 1987-88

		1987–88		
	1986–87			
	Latest	Budget		
	estimate	forecast	Percentage	
The second second	(£ million)	(£ million)	of total	
Inland Revenue				
Income tax	38,300	39,900	34.0	
Corporation tax ^a	13,400	15,000	12.8	
Petroleum revenue tax ^b	1,260	1,680	1.4	
Capital gains tax	1,050	1,300	1.1	
Development land tax ^c	55	20	1.1	
Inheritance tax ^d	990	1,100	0.9	
Stamp duties	1,840	2,100	1.8	
	1,040	2,100	1.0	
Total Inland Revenue	56,900	61,100	52.0	
Customs and Excise		-11.1 -1.1		
Value added tax	21,500	23,300	19.8	
Petrol, derv. etc.	7,500	7,800	6.6	
Cigarettes and other tobacco	4,700	4,800	4.1	
Spirits, beer, wine, cider and perry	4,200	4,300	3.7	
Betting and gaming	760	800	0.7	
Car tax	980	1,100	0.8	
Other excise duties	20	20		
European Community own	20	20		
resources				
Customs duties, etc.	1,290	1,350	1.1	
Agricultural levies	220	230	0.2	
Total Customs and Excise	41,200	43,800	37.3	
Vehicle excise duties ^e	2,500	2,600	2.2	
Gas levy	520	490	0.4	
Broadcasting receiving licences	1,010	1,030	0.9	
Interest and dividends	870	1,020	0.9	
Other f	8,100	7,600	6.5	
Total Consolidated Fund revenue	111,100	117,500	100.0	
Source: Financial Statement and Budget Report 19	987–88.		10 31 - 5m /	
^a Including advance corporation tax: Net of repayments	4,400	4,700	4.	
b Including advance payments	4,400	4,700	4	

^b Including advance payments. ^c Abolished from March 1985.

The main rate of corporation tax is 35 per cent, with a reduced rate of 27 per cent for small companies (those with profits below £100,000 in a year). Marginal relief between the main rate and the small companies' rate is allowed for companies with profits between £100,000 and £500,000. There is a 4 per cent

 $^{^{\}it d}$ lncluding estate duty and capital transfer tax.

^e Including driving licence receipts.

Including the 10 per cent of own resources refunded by the European Community to meet the costs of collection, privatisation proceeds and oil royalties.

Differences between totals and the sums of their component parts are due to rounding.

annual writing-down allowance for industrial buildings and a 25 per cent writing-down allowance for machinery and plant.

Petroleum Revenue Tax Petroleum revenue tax (deductible in computing profits for corporation tax) is charged on profits from the production, as opposed to the refining or other forms of processing, of oil and gas under licence in Britain and on its Continental Shelf. The rate of tax is 75 per cent. Each licensee of an oilfield is charged on the profits from that field after deduction of certain allowances and reliefs which, among other things, encourage exploration, appraisal and future field development. The tax is computed at half-yearly intervals and the bulk of it is collected in monthly instalments.

Taxes on Capital Inheritance Tax Inheritance tax applies to transfers of personal wealth made up to seven years before the donor's death and to transfers relating to property held in most types of trust. It is chargeable on a cumulative basis over a seven-year period. The rates of tax are progressively higher on successive slices of the cumulative total of chargeable transfers, with the transfer on death treated as the final transfer. The first £90,000 is exempt; the rates on higher amounts rise from 30 per cent on the slice between £90,000 and £140,000 to 60 per cent on the excess over £330,000. There is, however, tapered relief for transfers made between three and seven years before the donor's death, which reduces the tax charge but not the cumulative effect. This ranges from relief of 20 per cent for transfers made between three and four years of death to relief of 80 per cent for those made between six and seven years of death.

Capital Gains Tax Capital gains realised on the disposal of assets are liable to capital gains tax or, in the case of companies, to corporation tax. The rate of tax is 30 per cent but individuals are exempt from tax in respect of total net gains of up to £6,600 in any one year and most trusts on gains of up to £3,300. The effects of inflation since April 1982 are allowed for when measuring gains. The tax on gifts and certain deemed disposals of assets may be deferred until the assets are sold. Certain assets, including the principal private residence, chattels worth less than £3,000 (and any chattels with a predictable life of less than 50 years except those on which the expenditure qualifies for a capital allowance), private motor cars, and National Savings Certificates and Bonds are normally exempt. Gains on government securities and corporate bonds are exempt from the tax, as are gains on shares owned under the Personal Equity Plan (designed to encourage wider share ownership) provided they have been held for at least one calendar year.

Taxes on
Expenditure
Value Added
Tax

Value added tax (VAT) is a broadly based tax, chargeable at 15 per cent. It is collected at each stage in the production and distribution of goods and services by taxable persons (generally those whose business has a turnover of more than £21,300 a year). The final tax is borne by the consumer. When a taxable person purchases taxable goods or services, the supplier charges VAT (the taxable person's input tax). When the taxable person supplies taxable goods or services to customers, then they in turn are charged VAT (the taxable person's output tax). The difference between the output tax and the input tax is paid to, or repaid by, Customs and Excise.

There are two methods by which certain goods and services are relieved from VAT: one is by charging VAT at a zero rate (a taxable person does not charge tax to a customer but reclaims any input tax paid to suppliers); the other is by exemption (a taxable person does not charge a customer any output tax and is not entitled to deduct or reclaim the input tax). Zero-rating applies to exports and to most food; books, newspapers and periodicals; fuel (except for petrol and

Planned Receipts and Expenditure for the Public Sector 1987 – 88

Pence in every pound

Receipts	anta min	Dari'	917		Expenditure
Income tax		23	11		Defence
micome tax		20	2		Foreign and Commonwealth Office
	bolskolar		1		Agriculture, Fisheries and Food
Corporation tax		9	1		Trade and Industry
	FILM MIGH		2		Employment
Capital taxes		2	3		Transport
			2		Environment-housing
Value added tax		13	2		Environment – other environmental service
			4		Home Office
Local authority rates		10	10		Education and Science
Outies on petrol, alcoholic drinks and tobacco		10	11		Health and Social Security – health and personal social service
Other expenditure taxes		6	27		Health and Social Security-social security
Petroleum revenue tax and pil royalties		1			DEPOSITE THE PROPERTY OF THE
			5		Scotland
National Insurance and other contributions		17	2		Wales
burd a or Finder shalling			3		Northern Ireland
nterest and dividends		3	1101		Chancellor's departments
es we chargeable on go			1		Other departments
Gross trading surpluses and rent		2	2		Reserve
Other items and adjustments		2	10		Gross debt interest
Public sector borrowing requirement		2	1		Adjustments (net of privatisation proceeds
Total	(1908)	100	10	0	Total

Cash totals £172,000 million

Sources: Financial Statement and Budget Report 1987–88 and The Government's Expenditure Plans 1987–88 to 1989–90.

Difference between total expenditure and the sum of component parts is due to rounding.

other fuels for road use) and power; construction of new buildings; certain international services; public transport fares; caravans and houseboats; young children's clothing and footwear; drugs and medicines supplied on prescription; specified aids for handicapped people; and certain supplies by or to charities. Exemption applies to land (including rents), insurance, postal services, betting, gaming (other than by gaming machines and lotteries), finance, education, health, burial and cremation, and supplies by trade unions and professional bodies to their members.

Excise Duties

Oils used for road fuel bear duty at the basic rate although there are duty differentials in favour of derv and unleaded petrol. Heavy oil not used for road fuel and light oil used for furnace fuel bear a lower duty and, except for lubricating oil, are zero-rated for VAT. Oil used as chemical feedstocks, or otherwise than as fuel, and most lubricating oils are relieved from duty. There are duties on spirits, beer, wine, made-wine, cider and perry, mainly related to alcoholic strength. The cigarette duty is based partly on a charge per 1,000 cigarettes and partly on a percentage of retail price. Duty on other tobacco products is based on the weight of the finished product. The principal betting duties are the general betting duty, which is charged at a rate of 8 per cent of the stake money, for off-course bets only; pool betting duty (which applies to football pools), charged at a rate of 42·5 per cent of the stake money (33·3 per cent for charity pools); and bingo duty, charged at 10 per cent. Revenue is also raised from licences on the operation of gaming machines and casinos.

The licence duty on a private motor car or light van is £100 a year; for motor cycles it is £10, £20 or £40 a year according to engine capacity. The licence duty on goods vehicles is charged on the basis of gross weight and, if over 12 tonnes, according to the number of axles; the duty is designed to ensure that such vehicles cover at least their road costs through the tax paid (licence duty and fuel duty). Taxis and buses are taxed according to seating capacity.

New cars, motor cycles, scooters, mopeds and some motor caravans, whether British made or imported, are chargeable with car tax at 10 per cent on the wholesale value. VAT is charged on the price including car tax.

Stamp Duty

Car Tax

Transfers or sales of property (other than of stocks and shares) above a value of £30,000 are subject to stamp duty of 1 per cent on the whole of the purchase price. Transfers or sales of stocks and shares are subject to stamp duty of 0.5 per cent regardless of the amount. Transfers by gift are subject to a fixed 50p duty. Transfers to charities are exempt.

Customs Duties

Customs duties are chargeable in accordance with the Common Customs Tariff of the European Community (no such duties are chargeable on goods which qualify as Community goods). Special customs import and export procedures are operated under the Common Agricultural Policy and Community levies are chargeable on a wide range of agricultural products from non-Community countries. Customs duties and agricultural levies are accountable to the European Community as 'own resources'.

PUBLIC SECTOR BORROWING The maintenance of a low public sector borrowing requirement (PSBR) in relation to gross domestic product (GDP) is an important part of the Government's medium-term financial strategy. In 1986–87 the PSBR amounted to 1 per cent of GDP; it is projected to remain at this level up to 1990–91 (see Table 40). As part of the policy of controlling the rate of growth of the money stock, the Government seeks to finance the PSBR by sales of public sector debt outside the banking system. The outturn for the PSBR in 1986–87 was £3,300 million

PUBLIC FINANCE 359

compared with a forecast of £7,000 million at the time of the 1986 Budget. Gross sales of government stock (known as gilt-edged stock as there is no risk of default) to the non-bank private and overseas sectors amounted to £4,300 million in 1986–87 and sales of National Savings instruments £3,400 million. Gilt-edged stock is marketable and is traded on the Stock Exchange. Individuals may also make transactions through post offices in stocks included on the Department for National Savings' Stock Register. Pension funds and life insurance companies have the largest holdings. The Government issues both conventional and indexed stock (on which principal and interest are linked to the movement in the retail prices index).

The main range of National Savings products is non-marketable and is designed to attract personal savings. They are an important additional source of government funding and are aimed at personal savers who are not attracted to gilt-edged stock. The chief products are National Savings Certificates, Income Bonds, Deposit Bonds and National Savings Bank Investment Accounts. In 1986–87 the main contributors to funding were Income Bonds (£1,813 million net), fixed-interest Savings Certificates (£868 million net) and the Investment Account (£796 million), and the contribution made by net accrued interest from National Savings as a whole (that is, interest added less that paid out) amounted to £1,314 million in 1986–87.

The other principal debt instruments of central government are Treasury bills and certificates of tax deposit. Treasury bills are 91-day bills sold at a weekly auction; certificates of tax deposit may be purchased by individuals or corporate bodies to be tendered in settlement of a range of taxes and are non-marketable.

The bulk of public corporations' borrowing is met by central government through the National Loans Fund although their temporary borrowing needs are met largely from the market, usually under Treasury guarantee. That part of local authority borrowing met by central government is supplied by authorisation of Parliament through the Public Works Loan Board from the National Loans Fund. (The Board remains an independent body even though it is merged for administrative purposes with the former National Debt Office, forming the National Investment and Loans Office.) The local authorities also borrow directly from the market, both short-term and long-term, through a range of instruments. Some public corporations and local authorities also borrow on occasion, under special statutory power and with Treasury consent, in foreign currencies.

The National Debt

Net central government borrowing each year represents an addition to the National Debt. At the end of March 1987 the National Debt amounted to some £186,000 million of which about £6,000 million was in currencies other than sterling. Of the £180,000 million sterling debt, £137,000 million consisted of gilt-edged stock; of this, 30 per cent had a maturity of up to five years, 41 per cent a maturity of over five years and up to 15 years and 29 per cent a maturity of over 15 years or undated. The remaining sterling debt was made up mainly of national savings (£27,000 million), certificates of tax deposits, Treasury bills, and Ways and Means advances (very short-term internal government borrowing).

18 Banking and Financial Institutions

Britain is a major financial centre providing a wide range of specialised services. Historically the centre of the industry was located in the famous 'Square Mile' in the City of London. This remains broadly the case today, even though the markets for financial and related services have grown and diversified greatly. The City of London has the greatest concentration of banks in the world (responsible for about a quarter of total international bank lending), the world's biggest insurance market (with about one-fifth of the international market) and a Stock Exchange with a larger listing of securities than any other exchange, and remains the principal international centre for transactions in a large number of commodities. It also exploits its position between the time zones of the United States and the Far East.

Banking, finance and insurance accounted for 5.6 per cent of Britain's total output in 1980, a share which is believed to have risen subsequently. They accounted for 3.4 per cent of employment in 1986. The net identified overseas earnings of British financial institutions in 1986 were £9,375 million.

Development of Financial Services The increase in the rate of international movements of capital in the 1960s and 1970s took the form mainly of increased bank lending and foreign exchange trading. London became the international centre of this activity, particularly in the eurocurrency markets (see p 372), and the number of overseas banks represented in London is larger than in any other financial centre. In the 1980s, with increasing international competition in financial services and with developments in technology, there has also taken place a rapid growth in the international markets for securities. London again has played an important role, especially in the market for eurobonds, in a variety of currencies (see p 372). The London Stock Exchange (see p 370) is reorganising itself, partly in order to adapt to this situation, and has changed its membership rules with the result that numerous financial institutions in London, both British and foreign-based, have formed new alliances with each other.

Supervision

To help Britain's financial services industry to respond to the new competitive climate, while at the same time maintaining adequate safeguards for the investing public, the Government has enacted three pieces of legislation affecting the supervision of the industry: the Financial Services Act 1986, the Building Societies Act 1986 (see p 366) and the Banking Act 1987 (see p 363). Under the Financial Services Act a new supervisory framework is being built up which is expected to be fully in force in early 1988. Investment businesses (those effecting transactions in, managing or giving advice on investments taking the form of securities of all kinds, financial and commodity futures, life assurance, options contracts and certain other instruments—but not wholesale money-

market instruments) will require authorisation and will have to obey rules of conduct based on principles set out in the legislation. The Secretary of State for Trade and Industry will be empowered to authorise and regulate the carrying on of investment business. However, the majority of these powers have been transferred to a designated agency—the Securities and Investments Board (SIB)—on the condition that it continues to meet specified criteria. The SIB, in turn, is empowered to recognise self-regulating organisations (SROs) provided that they offer investors protection at least equivalent to that provided by the SIB. Both the SIB and the SROs will be practitioner-based bodies. It is intended that most investment businesses should become authorised by obtaining membership of an SRO.

In enacting each of the three pieces of legislation referred to above, the Government has made provision for improved co-operation between supervisors in different financial sectors, while seeking to avoid any harm thereby to efficiency, competitiveness and flexibility within the sectors themselves. The Bank of England, the Building Societies Commission, the Treasury and the Department of Trade and Industry have prime responsibility for supervision in different parts of the financial sector. The Government has also reinforced the powers of investigators in cases of fraud and insider dealing and strengthened the measures for treating offenders, is setting up a new government department—the Serious Fraud Office—to investigate and prosecute cases of serious and complex fraud, and is helping to extend international co-operation on the handling of such cases. Memoranda of understanding about the regulation of dealings in securities were reached with the United States in 1986 and with Japan in 1987, and further agreements on mutual assistance are actively being sought.

Changes within the financial services sector as a whole are expected to erode traditional distinctions between financial institutions, with single firms providing a broader range of services, both in domestic and international markets.

THE BANK OF ENGLAND

The Bank of England was established in 1694 by Act of Parliament and Royal Charter as a corporate body; the entire capital stock was acquired by the Government under the Bank of England Act 1946. The Bank's main functions are to execute monetary policy, to act as banker to the Government, to act as a note-issuing authority and to exercise prudential supervision over and provide central banking facilities for the banking system. It also manages the Exchange Equalisation Account and maintains the register of holdings of government securities on behalf of the Treasury. More generally the Bank has a responsibility for overseeing the soundness of the financial system as a whole.

The Government's Medium-Term Strategy provides the framework for its economic policy. Monetary and fiscal policies are designed to keep a steady downward pressure on the growth of money GDP (the average measure of gross domestic product at current prices) over the medium term, so bringing down inflation. The essential instrument of the Government's monetary policy is short-term interest rates. These are influenced by the Bank's operations in the financial markets (see p 370) on behalf of the Government.

As banker to the Government, the Bank of England is responsible for arranging government borrowing and for managing the National Debt.

The Bank of England has the sole right in England and Wales of issuing banknotes. The note issue is fiduciary, that is to say, it is no longer backed by gold but by government and other securities. The Scottish and Northern Ireland banks have limited rights to issue notes; these issues, apart from a small amount specified by legislation for each bank, must be fully covered by holdings of Bank of England notes. Responsibility for the provision of coin circulation lies with the Royal Mint, a government trading fund.

The Bank is able to influence money market conditions through its dealings with the discount houses (see p 366), which developed in the nineteenth century as bill brokers for industrialists. The discount houses hold mainly Treasury, local authority and commercial bills and negotiable certificates of deposit financed by short-term loans from the banks. If on any given day there is a shortage of cash in the banking system as a result, for example, of large tax payments or heavy sales of government securities, the Bank relieves the shortage either by buying bills from the discount houses or by lending directly to them. This permits the banks to replenish their cash balances at the Bank by recalling some of their short-term loans to the discount houses. The Bank conducts its operations in such a way as to keep short-term interest rates within an unpublished band.

Under the Financial Services Act 1986 (see p 361) the Bank is responsible for the supervision of the main wholesale markets in London for money, foreign exchange and gold bullion. (The markets are wholesale in the sense that the participants are professional operators dealing in large amounts of money.)

Under the Banking Act 1987 deposit-taking organisations require authorisation from the Bank of England (unless they are specifically exempted) and are subject to the Bank of England's supervision. The Act—whose broad aims are to improve and update supervisory arrangements—created a Board of Banking Supervision to advise the Governor and senior staff of the Bank and increased the Bank's powers to modify the conduct of banking institutions, to investigate cases of illegal deposit-taking, to block bank mergers and takeovers on prudential grounds and to require information to be supplied to it by banks. The Act also enables information to be shared, in strictly controlled ways, among supervisors in different financial services, and permits auditors to make reports to the Bank of England about a bank if the circumstances justify it.

On behalf of the Treasury, the Bank manages the Exchange Equalisation Account (EEA), which holds Britain's official reserves of gold, foreign exchange, SDRs (which are claims on the International Monetary Fund) and European Currency Units (ECUs). Using the resources of the EEA, the Bank may intervene in the foreign exchange markets to check undue fluctuations in the exchange value of sterling.

DEPOSIT-TAKING INSTITUTIONS Deposit-taking institutions may be broadly divided into the 'monetary sector', which includes the banks and is supervised by the Bank of England, and those institutions outside the monetary sector, of which the most important are the building societies and the National Savings Bank. The monetary sector includes certain banks in the Channel Islands and the Isle of Man.

Another useful distinction is that between 'retail' banking and 'wholesale' banking. Retail banking is mainly concerned with the cash withdrawal services and transmission of deposited funds—the main reason why people keep bank accounts. Competition between the banks and the building societies in the provision of money transmission services has increased during the last two decades and is expected to increase further. Wholesale business involves the taking of large deposits at higher rates of interest, the deployment of funds in money market instruments (see p 371) and the making of large loans and investments. Nearly all the commercial banks in Britain engage in some wholesale activities and some, like the merchant and overseas banks, centre their business on them. Many of such wholesale dealings are conducted on the inter-bank market, that is, among the banks themselves.

At the beginning of 1987 there were 641 institutions in the monetary sector, comprising 19 retail banks (including the Banking Department of the Bank of England), 35 accepting houses (merchant banks), 206 other British banks, 351 foreign banks, 22 consortium banks and 8 discount houses.

The Retail Banks The major retail banks are those with a significant branch network, which offer a full range of financial services to both individuals and companies, including the provision of current and deposit accounts and various kinds of loan arrangements, together with a full range of money transmission facilities.

The dominant banks in England and Wales are Barclays, Lloyds, Midland, National Westminster and the TSB Group, which was formed out of the former Trustee Savings Banks and achieved a successful share flotation in 1986. The major Scottish banks are Bank of Scotland, Clydesdale (a part of the Midland Bank Group) and Royal Bank of Scotland. Other important retail banks are Co-operative Bank, Yorkshire Bank and Girobank, which is a subsidiary of the Post Office, operating through its local branches. Northern Ireland is served by branch networks of four banks, two being subsidiaries of British banks and two subsidiaries of Irish banks.

With the growth of the financial services sector since the 1970s, and with a relaxation of restrictions on competition among financial institutions, the major banks have increasingly diversified the services they provide. They have lent more money for house purchases, and have established or acquired substantial interests in finance houses, leasing and factoring companies, merchant banks, securities dealers, insurance companies and unit trust companies.

The banks provide loan facilities to industrial companies and, since the 1970s, have provided more medium- and long-term loans than they did formerly. They have also become important providers of finance for small firms: they have supported a loan guarantee scheme under which 70 per cent of the value of loans to small companies is guaranteed by the Government, and some banks have set up special subsidiaries to provide equity finance for small companies (see p 370).

The clearing banks also conduct extensive international operations which account for a substantial proportion of their business. In addition to maintaining overseas subsidiaries they are very active in the eurocurrency markets (see p 372).

Deposits and Assets

The total liabilities/assets of the retail banks amounted to £218,000 million at the end of 1986, of which 60 per cent was sterling deposits, 23 per cent other currency deposits and the remainder was items in suspense or transmission and capital and other funds. Of the £131,000 million sterling deposits, about a half was sight deposits (which can be withdrawn on demand) and half time deposits. The banks' main liquid assets consist of balances at the Bank of England, money at call (mainly loans to discount houses), their holdings of Treasury and some other bills, and short-dated British government securities. They also hold a proportion of their assets as portfolio investments (mainly longer-dated British government securities) or trade investments.

Total sterling deposits of the Committee of London and Scottish Clearing Banks were reported to be £156,800 million at the end of 1986, the largest proportions being held by National Westminster (27 per cent), Barclays (22 per cent), Midland (16 per cent), and Lloyds (16 per cent).

Branches and Accounts The main retail banks operate through some 11,800 branches and subbranches. National Westminster has the largest number (3,133), followed by Barclays (2,842), Lloyds (2,152), Midland (2,100) and the TSB (1,576). Nearly two-thirds of all adults in Britain have a current account and over one-third a deposit account.

Payment Systems and Services The London-based inter-bank clearing systems are administered by three separate companies operating under an umbrella organisation, the Association for Payment Clearing Services. The three clearing companies cover bulk paper

clearings (cheques and credit transfers); high-value clearings for same-day settlement (automated payments and 'town clearing'); and bulk electronic clearings (through Bankers Automated Clearing Services, comprising standing orders and direct debits). Membership of each of these clearing companies is open to any bank or financial institution that meets certain published criteria, which include meeting a minimum volume of transactions in that clearing, and having settlement account facilities at the Bank of England. Two large building societies joined the bulk electronic clearings in mid-1987 and one of them was accepted for membership of bulk paper clearings.

In addition to the money transmission services handled by the three clearing companies, nearly all the major banks (and increasingly building societies) have substantial networks of automated teller machines or cash dispensers. In 1987 there were over 10,000 of them in Britain. These give customers access to cash and other services up to 24 hours a day. Trials of a number of electronic home banking services are being conducted by banks and building societies.

All the major retail banks offer their customers cheque guarantee cards which entitle holders to reciprocal encashment facilities up to £50 a day. The same card will also guarantee transactions with retailers up to the same amount. Plans are advanced for a single nationwide 'EFTPOS' system (electronic funds transfer at point of sale) which will enable shoppers to pay for goods by using a plastic card which would transfer funds directly from their bank accounts via terminals installed in retail premises. The inaugural scheme involving 2,000 terminals in Leeds, Southampton and Edinburgh is planned for the end of 1988. Meanwhile a number of banks and building societies are carrying out limited EFTPOS trials around the country.

> Credit cards associated with major retail banks are also a popular means of payment. Access operates within the Mastercard world system and Barclaycard within VISA.

> Uniform eurocheques supported by a uniform eurocheque card are now available from all major banks. These standard-format, high-security cheques may be used to obtain cash or make payments in Britain or overseas. The cheques are made out in the currency of the country in which they are being used, with a guarantee limit of approximately £100 per cheque, but without limit on the number of cheques that may be drawn in respect of a single transaction.

Merchant Banks

Merchant banks have traditionally been primarily concerned with the accepting (or guaranteeing) of commercial bills and with the sponsoring of capital issues on behalf of their customers. Today they have a widely diversified and complex range of activities with important roles in international finance and the short-term capital markets, the provision of expert advice and financial services to British industrial companies, especially where mergers, takeovers and other forms of corporate reorganisation are involved, and in the management of investment holdings, including trusts, pensions and other funds. A number of merchant banks have become part of financial conglomerates offering an even wider range of financial services than hitherto. The principal merchant banks are the 16 members of the Accepting Houses Committee, together with the merchant banking arms of Barclays, Lloyds and National Westminster. The British branches of some overseas banks also engage in merchant banking.

Overseas Banks

Some 520 overseas banks and financial institutions were represented in Britain in 1987 through branches, subsidiaries, representative offices and consortia. A total of 489 were directly represented while 29 were represented only through a stake in a consortium. Of those directly represented, 75 were from the United States, 44 from Japan and 196 from Europe. They provide a comprehensive banking service in many parts of the world and engage in the financing of trade not only between Britain and other countries but also between third countries. Citibank of the United States is expanding its activities in the retail banking market in Britain and has joined the high-value clearing system (see p 365).

British Overseas Banks

A number of banking institutions have their head offices in Britain but operate mainly abroad, often specialising in particular regions such as Latin America or East Asia through extensive branch networks. The major bank in this sector is Standard Chartered.

The Discount Houses

The discount houses are an institution unique to the City of London. They act as intermediaries between the Bank of England and the rest of the banking sector, promote an orderly flow of short-term funds between the Government and the banks, and lend to the Government by guaranteeing to subscribe for the whole of the weekly offer of Treasury bills (which are three-month instruments). In return for acting as intermediaries, the discount houses have privileged daily access to the Bank of England as 'lender of last resort'. Assets of the discount houses consist mainly of Treasury and commercial bills, government and local authority securities and negotiable certificates of deposit denominated in both sterling and United States dollars.

Building Societies

Building societies are mutual institutions which raise short-term deposits from individual savers, who are generally able to withdraw their money on demand or at short notice, and provide long-term loans at variable rates of interest against the security of property—usually private dwellings purchased for owner-occupation.

Building societies have grown very rapidly since 1918, reflecting a continued high growth of owner-occupation. They account for most lending for house purchase in Britain and are the principal repository for the personal sector's liquid assets (although banks' shares have increased in both areas since 1985). About 64 per cent of all adults have building society accounts. The societies have expanded the range of services to investors, a variety of saving schemes have been established, and a growing number of societies provide cheque facilities and automated cash withdrawal systems.

Competition among the building societies and between building societies and other financial institutions has increased in the 1980s and the earlier system of agreed rates of interest for loans by and deposits with the societies has been abandoned.

The three largest societies (the Halifax, Abbey National and Nationwide) account for 45 per cent of the total assets of the movement and the 20 largest for some 90 per cent. Mergers between building societies are a continuing trend, and in mid-1987 the Nationwide and Anglia societies agreed to merge. At the end of 1986 there were 151 registered building societies with assets totalling £140,603 million; about £36,000 million was advanced in new mortgages in the course of the year.

The Government enacted legislation in 1986 to allow the societies to diversify their financial and housing services. As a result up to 10 per cent of a society's commercial assets may be used for purposes other than loans on first mortgage of owner-occupied houses, with up to 5 per cent placed in new types of asset such as unsecured loans, housing, and investments in subsidiaries and associates. Societies may also offer a wider range of banking and money transmission services (including reciprocal encashment and paying arrangements with other financial institutions) as well as estate agency, insurance broking, share dealing facilities, personal pensions and other services. Changes to the arrangements for the prudential supervision of building societies include

the establishment of a new supervisory commission, and provisions allowing a society to convert into a company.

National The National Savings Bank is run by the Department of National Savings based Savings in Glasgow and provides a system for depositing and withdrawing savings at Bank 20,000 post offices around the country or by post. There are about 19 million accounts, In 1987 Ordinary Accounts earned interest at 3 or 6 per cent a year (depending on the balance maintained); the first £70 of annual interest is tax free. Investment Accounts earn a higher variable rate of interest, which is taxable. At the end of March 1987 the sum of the two accounts totalled £8,000 million. All interest is paid without deduction of tax at source. The National Savings Bank does not offer lending facilities. As with other National Savings instruments, its deposits are employed to finance the Government's public sector borrowing requirement. The other instruments include tax-free savings certificates, which either pay fixed rates of interest or a (lower) fixed rate of interest combined with index-linking; and taxable Income Bonds, Indexed-Income Bonds and Deposit Bonds, where interest is paid without deduction of tax at source. At the end of March 1987 the total amount of money invested in National Savings was £34,000 million.

INVESTING The investing institutions are those which collect savings and invest them in the INSTITUTIONS securities market and other long-term assets. The main investing institutions are the insurance companies, the pension funds, the unit trusts and investment trusts.

Insurance Companies

The British insurance industry provides a comprehensive and competitive service domestically and internationally. It has been estimated that it handles some 20 per cent of general insurance business placed on the international market. The London market is the world's leading centre for insurance where, in addition to the British companies and Lloyd's, a large number of overseas companies are represented. It is the world centre for the placement of international reinsurance and, partly as a consequence, many British companies have formed close relationships with overseas companies. Some British companies confine their activities to domestic business but most large companies undertaking general business transact a substantial amount overseas through branches, agencies or affiliated local companies. Over a half of the non-life premium income of British insurance companies and Lloyd's is derived from overseas. Insurance companies carrying on business in Britain are supervised by the Department of Trade and Industry under the Insurance Companies Act 1982. About 830 companies, of which some 170 are from overseas, are authorised to carry on one or more classes of insurance business in Britain. The total net assets of these companies were £151,487 million at the end of 1985.

Around 420 companies belong to the Association of British Insurers and these account for about 92 per cent of the world-wide business of the British insurance companies market.

Long-term insurance is handled by some 280 authorised insurance companies and is also available through certain friendly societies. Some 90 per cent of this business is transacted through the members of the Association of British Insurers. Lloyd's underwriters also write short-term life business.

Lloyd's Lloyd's, the origins of which go back to the seventeenth century, is an incorporated society of private insurers in London. Although its activities were originally confined to the conduct of marine insurance, a very considerable world-wide market for the transaction of other classes of insurance business (such as non-marine, aviation and motor) has been built up. Long-term life and financial guarantee business is not covered.

Lloyd's is not a company but a market for insurance administered by the Council of Lloyd's, where business is carried out for individual underwriting members for their own account and risk and in competition with each other and with insurance companies. Insurance may only be placed through Lloyd's brokers who negotiate with Lloyd's underwriting agents on behalf of the insured. Only elected underwriting members of Lloyd's, for whom insurance is transacted with unlimited liability and who have met the most stringent financial regulations laid down by the Council, are permitted to accept insurance risks at Lloyd's: these and other safeguards give security to a Lloyd's policy.

In January 1987 there were some 31,500 underwriting members of Lloyd's grouped into about 365 syndicates managed at Lloyd's by underwriting agents who are responsible for accepting risks and for settling claims on behalf of the members of their syndicates.

Lloyd's is self-regulating under private Acts of Parliament dating from 1871 to 1982. The Lloyd's Act 1982, which established the Council of Lloyd's (an elected legislative body with wide-ranging disciplinary powers), inaugurated a period of intensive reform of the society, resulting in the introduction of new measures to protect the interests of Lloyd's members. Following the report of a governmentappointed committee of inquiry, further measures were introduced by the Council in 1987 to ensure that Lloyd's members—particularly those not active in the market as agents—should enjoy a level of protection comparable with that proposed for the general investor under the Financial Services Act 1986 (see p 361).

Insurance Brokers

Insurance brokers, acting on behalf of the insured, are an essential part of the Lloyd's market and a valuable part of the company market. Many brokers specialise in reinsurance business, acting as intermediaries in the exchange of contracts between companies, both British and overseas, and often acting as London representatives of the latter. The Insurance Brokers (Registration) Act 1977 provides for the registration and regulation of insurance brokers by the Insurance Brokers Registration Council. In August 1987 nearly 15,000 individuals were registered with the Council, through 1,700 partnerships or traderships and 3,300 limited companies.

Community Directives

European In accordance with the Treaty of Rome, insurance and reinsurance in the European Community are regulated by directives addressed to the governments of member states and intended to harmonise the legislation of the various member countries. Directives cover reinsurance, compulsory motor insurance, freedom of establishment for life and non-life insurers, Community coinsurance and insurance intermediaries. Britain strongly supports the removal of national regulations and exchange controls that restrict the creation of a full common market in services, particularly financial services.

Pension Funds

Virtually all occupational pension schemes are based on trust funds managed so as to protect the interests of the members. Pension contributions are invested either directly in the securities and other investment markets or through intermediaries such as insurance companies. The market value of assets held by pension funds rose from £2,000 million in 1957 to about £190,000 million in 1986 when 15 per cent was in British government securities and 69 per cent in company securities. The pension funds have grown strongly since 1960 to become a dominant force in securities markets. Under government proposals to encourage the expansion of occupational schemes and personal pensions, both types of provision for retirement will be subject to investor protection legislation (see p 361).

and Unit Trusts

Investment Investment and unit trusts enable investors in securities to spread their risks and obtain the benefit of skilled management. Investment trusts are companies which observe certain requirements of the Stock Exchange and the tax authorities and invest in securities for the benefit of their shareholders. The total value of all unit trust investments in 1986 was £32,131 million.

Unit trusts are constituted by trust deed between a management company and a trustee company which holds the assets. Normally, the managers sell units to the public and also repurchase them on demand. The sums held must be invested in securities. The costs of running the trust are met partly by an initial charge which forms part of the price of a unit and partly by a periodic service charge which is usually taken out of the trust's income. Authorisation by the Department of Trade and Industry is needed before units can be offered to the public; this is granted only if the trust deed meets the Department's requirements. Trusts are allowed to hold up to 25 per cent of their assets in shares traded on the Unlisted Securities Market (see p 371) and certain other secondary markets: within this total up to 5 per cent may be held in the form of other unlisted securities. Under the new legislation for the financial services industry (see p 361), authorised unit trusts will be able to invest in a wider range of assets in order to allow a greater variety of investment opportunities to be offered to the public. In April 1987 there were 3.8 million unit trust holdings with a total value of some £39,000 million.

SPECIALISED INSTITUTIONS

The specialised institutions are agencies created to meet the needs of specific groups of borrowers-mostly industrial and commercial-which were not adequately covered by other institutions. They are to be found in both the public and the private sectors. Some of the latter were set up with official support but with financing from banks and other financial institutions. They may offer loan finance or equity capital.

The main private sector institutions are described below. Among public sector agencies are the British Technology Group, the Scottish and Welsh Development Agencies, the Industrial Development Board in Northern Ireland, the Cooperative Development Agency and the Export Credits Guarantee Department.

Finance Houses

Finance houses are major suppliers of hire-purchase finance for the personal sector and of short-term credit and leasing (see below) to the corporate sector. Some 80 per cent of all their business is accounted for by the 48 firms which constitute the Finance Houses Association (FHA). At the end of 1986 credit outstanding to the members of the FHA was over £24,600 million. Many of the finance houses are owned by banks, and most of them are licensed deposittaking institutions.

Leasing Companies

Leasing companies buy and own plant or equipment required and chosen by businesses and lease it at an agreed rental. This form of finance grew quickly in importance in the 1970s, partly because the leasing companies were able to take advantage of investment incentives to the benefit of customers whose tax position would otherwise have made them unavailable. The restructuring of corporate tax rates and capital allowances in the 1984 Budget, however, is expected to reduce the advantages of some forms of leasing in the long run, although it led to a rise in leasing business during a transitional period which ended in March 1986. In 1986 the 72 members of the Equipment Leasing Association acquired assets in Britain valued at some £5,200 million, which represented about 17 per cent of all investment in plant and machinery.

Factoring Companies

Factoring consists of making cash available to a company in exchange for the sums owing to it. Since the early 1960s factoring has developed as a major financial service, covering international activities as well as domestic trade. In 1986 member companies of the Association of British Factors handled business of £5,688 million (representing over 90 per cent of all factoring business in Britain) and 4,826 companies made use of the Association's services.

Finance Corporations

Finance corporations meet the need for medium- and long-term capital when such funds are not easily or directly available from traditional sources such as the Stock Exchange or the banks. When the capital takes the form of equity finance for innovative or other 'high-risk' companies, it is often known as venture capital.

Investors in Industry (known as 3i) supports investment programmes over the whole range of industry. During the year ended 31 March 1987 the corporation invested £368 million. Within the last few years it has become increasingly prominent in financing management 'buy-outs', which involve the purchase of businesses by their management and other staff from their owners. The shares in Investors in Industry are owned by the Bank of England (15 per cent) and the individual London and Scottish clearing banks.

There are well over 100 venture and development capital companies which take equity stakes in small and medium-sized firms. Many of these companies are subsidiaries of other financial institutions, including banks, insurance companies and pension funds. The 77 full members of the British Venture Capital Association invested a total of £384 million in British companies in 1986, an increase of 38 per cent on the previous year.

FINANCIAL MARKETS

The main organised domestic financial markets are the securities markets, of which the Stock Exchange is the most important, and the money markets. Other important markets in the City of London are the foreign exchange market, the financial futures market, the eurobond and eurocurrency markets, the Lloyd's insurance market (see p 367) and the gold bullion and commodity markets.

The Stock Exchange

The Stock Exchange has its main administrative centre in London. There are also centres in Glasgow, Liverpool, Birmingham and Dublin.

The Exchange has been changing radically in recent years. Its rules on membership were altered to allow corporate ownership of member firms; the system under which dealers charged fixed minimum scales of commission to the investing public were abolished in favour of negotiated commissions; dealers were permitted to trade in securities both on their own behalf, as principals, and on behalf of clients, as agents, these two roles having been kept distinct formerly; and a screen-based dealing system came into operation, which has been so successful that the trading floor is to be closed in 1988 (except for dealing in traded options).

In addition, the Exchange has responded to the new regulatory regime created by the Financial Services Act 1986 (see p 361), under which all firms wishing to carry on investment business will need to be authorised through membership of a self-regulating organisation (SRO), recognised by the Securities and Investments Board (SIB) as satisfying criteria defined in the Act. The Council of the Stock Exchange has therefore joined with the International Securities Regulatory Organisation—itself newly created in response to the Act—to form a potential SRO known as the Securities Association. The market, furthermore, has been renamed 'The International Stock Exchange of the United Kingdom and the Republic of Ireland Ltd', and an application has been made under the Act for this market to become a recognised investment exchange. (The Financial

Services Act made provision for the SIB to grant such recognition, although there is no legal requirement for markets to be so recognised.) A further development in the supervision of share dealings in 1987 was a review of the non-statutory City Panel on Takeovers and Mergers, which led to a strengthening of its contacts with other supervisory bodies.

The number and variety of securities (stocks and shares) officially listed on the Stock Exchange are greater than in any other market in the world and its turnover of company securities is roughly equivalent to that of all the other European exchanges combined. Some 6,650 securities are quoted on the Stock Exchange: at the end of June 1987 these had a market value of £1,693,000 million. About 4,900 securities of companies were quoted including a number of leading overseas securities. Company issues represent over four-fifths of the securities at market capitalisation, the remainder being British, Irish Republic and other overseas government and corporation stocks as well as eurobonds.

A market in traded options, in the shares of prominent British companies, enables investors not only to buy options to purchase or sell shares in future at pre-fixed prices but also to trade in the options themselves. In May 1984 trading began in a stock index option and in May 1985 a currency options market came into operation.

In recent years the largest market for new issues has been that for British government securities (known as 'gilt-edged' stocks), although issues of shares resulting from the Government's privatisation programme have been more popular with the investing public. Trading in gilt-edged stocks in the first six months of 1987 accounted for about two-thirds of transactions by value (excluding traded options). New issues are made on the Government's behalf by the Bank of England.

Other Securities Markets

The Unlisted Securities Market, which deals generally in the securities of small Domestic companies who may not qualify for a full Stock Exchange listing, was opened in 1980 under the auspices of the Stock Exchange, since when the number of companies with shares traded has risen from about a dozen to over 400. The Stock Exchange also set up a 'third tier' market for securities in small unlisted companies in February 1987. This will provide a formal structure for trading in a number of securities, particularly those of small companies trying to raise risk capital. At present much of this activity is carried out directly with securities dealers in the 'over-the-counter' market.

The Money Markets

The London money markets channel wholesale funds (mainly short-term) from lenders to borrowers. They consist of a series of integrated groups of financial institutions conducting negotiations primarily by telephone, telex and automated dealing systems, there being no physical market-place. Under the Financial Services Act 1986 (see p 361) the Bank of England will approve market participants and will ensure that they adhere to codes of conduct. The discount houses (see p 366) play an important role as principals and transactions may also be negotiated through money broking firms. The main financial instruments dealt in are bills (issued by the Treasury, local authorities or companies), certificates of deposit (CDs) and short-term deposits. The bill markets and the markets on which the discount houses borrow from the rest of the banking system are often referred to as the 'traditional' markets. Newer markets, known as 'parallel' markets, emerged in the 1960s, and include the inter-bank market and the market in CDs. Since a large proportion of the latter are held by banks the CD market is effectively an extension of the inter-bank market.

Capital markets have been undergoing continuous transformation since the 1960s (see p 361). In the 1980s there has developed a trend towards the 'securitisation of debt'; that is to say, that major borrowers have increasingly

raised funds by issuing securities instead of seeking bank loans. In 1986 large companies in Britain were permitted to develop a sterling commercial paper market; this consists essentially of issues of short-term debt, and enables companies to borrow directly from the money market instead of approaching a bank as an intermediary.

The Euromarkets The eurocurrency market enables banks to deal in deposits and loans denominated in a currency other than that of the country in which the bank is situated. Transactions can thus be carried out in eurodollars, eurodeutschmarks, euroven and so on. While Paris is the main centre for the eurosterling market, London and Tokyo are the main world centres for eurocurrencies.

> The eurobond market performs a similar service in transferring funds from lenders to borrowers but over a longer period by means of bonds issued in currencies other than that of the issuing country. Transactions in both markets tend to be in large denominations. The markets developed in the late 1950s following the restoration of convertibility between the major currencies, partly in order to avoid incurring the costs of exchange control and other regulations. The participants in the markets include multinational corporations, nationalised industries, and central and local governments as well as the international banking community.

> In the 1980s, there has been considerable growth in the euro-commercial paper market. As with the establishment of the sterling commercial paper market (see above) this represents a further movement towards the securitisation of debt.

The Foreign Exchange Market

The market has no physical centre, but consists of telephone links between the participants, which include banks, other financial institutions and several firms of foreign exchange brokers which act as intermediaries between the banks. It provides those engaged in international trade and investment with foreign currencies for their transactions. The banks are in close contact with financial centres abroad and are able to quote buying and selling rates for both spot and forward delivery in a wide range of currencies and maturities. The forward market enables traders who, at a given date in the future, are due to receive or make a specific foreign currency payment, to contract in advance to sell or buy the foreign currency involved for sterling at a fixed exchange rate. A Bank of England survey in 1986 showed that average daily turnover on London's foreign exchange market was about £60,000 million, making it the largest such market in the world.

Financial Futures

The London International Financial Futures Exchange trades on the floor of the Royal Exchange building. Over 200 banks and other financial institutions are members of the market, which allows parties who could be affected by movements in interest rates or exchange rates to reduce their vulnerability. The average number of contracts traded daily is well over 25,000. Trading takes place in financial instruments of differing maturities and denominated in a number of currencies.

The London Gold Market

Anyone may deal in gold but, in practice, dealings are largely concentrated in the hands of the five members of the London gold market, who meet twice daily to establish a London fixing price for gold. This price provides a reference point for world-wide dealings. Although much interest centres upon the fixings, active dealing takes place throughout the day. London and Zurich are the main world centres for gold dealings.

Commodity, Shipping and Freight Markets Britain remains the principal international centre for transactions in a large number of commodities, although most of the sales negotiated in London relate to consignments which never pass through the ports of Britain. The need for close links with sources of finance and with shipping and insurance services often determined the location of these markets in the City of London. There are also futures markets in cocoa, coffee, grains (wheat and barley), rubber, soya bean meal, sugar, pigmeat, non-ferrous metals (aluminium, copper, lead, nickel, silver and zinc), potatoes, gas oil (heating oil) and crude petroleum oil. The markets are collaborating in the development of new arrangements to safeguard participants.

In ship brokerage, London's Baltic Exchange is responsible for a substantial proportion of the world's tramp fixtures. A freight futures market came into operation there in 1985. All Britain's agricultural futures markets are operated from the Baltic Exchange and physical commodity trading is also carried out there.

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19 Overseas Trade

Although small in area and accounting for only about 1 per cent of the world's population, Britain is the fifth largest trading nation in the world—and, as a member of the European Community, part of the world's largest trading area, which accounts for about one-third of all trade.

Overseas trade has been of vital importance to the economy for hundreds of years, and especially since the mid-nineteenth century, when the rapid growth of industry, commerce and shipping was accompanied by Britain's development as an international trading centre. Exports of goods and services in 1986 were equivalent to over one-quarter of gross domestic product. Britain is a major supplier of machinery, vehicles, aerospace products, electrical and electronic equipment and chemicals, and a significant oil exporter. It relies upon imports for about one-third of total consumption of foodstuffs, and for many of the basic materials needed for its industries. Trade in invisibles is also of great significance to the economy: in 1986 overseas earnings from services were equivalent to over one-third of those from total visible exports.

VISIBLE TRADE In 1986 Britain's exports of goods were valued at about £72,800 million and its imports of goods at some £81,100 million on a balance of payments basis (see Table 43). Between 1985 and 1986 both exports and imports increased in volume terms (by 3.7 per cent and 6.3 per cent respectively) but, with a pronounced fall in the price of the unit value indices for exports and fuels, imports declined (by 4.8 per cent and 7.7 per cent respectively). For exports, this fall was sufficient to bring about a decline of 6.7 per cent in total value; for imports, it had the effect of restricting the rise in total value to 1.0 per cent.

Table 43: Exports and Imports 1983-86 (balance of payments basis)

	1983	1984	1985	1986
Value (£ million)				
Exports f.o.b. a	60,776	70,367	78,111	72,843
Imports f.o.b. ^a	61,612	74,751	80,289	81,096
Volume index (1980 = 100))			
Exports	103.8	112.5	118.7	123.1
Imports	109.7	121.8	126.0	133.9
Unit value index (1980 = 1	00)			
Exports	125.7	136.0	143.5	136.6
Imports	127.5	139.7	145.2	134.0
Terms of trade (1980 = 100	98·6	97.4	98.8	101.9

Source: Monthly Review of External Trade Statistics.

b Export unit value index as a percentage of import unit value index.

^a f.o.b. = free on board, that is, all costs accruing up to the time of placing the goods on board the exporting vessel having been paid by the seller.

Commodity Composition

Britain has traditionally been an exporter of manufactured goods (both semi-manufactures and finished manufactures) and an importer of food and basic materials. However, in recent years manufactures have accounted for a falling proportion of exports with fuels increasing their share (although in 1986, when the oil price fell, the proportion of manufactures in total exports rose sharply) while finished manufactures have accounted for a rising proportion of imports. The share of manufactures in total exports fell from 84 per cent in 1970 to 75 per cent by 1986 while that of finished manufactures in total imports rose from 23 per cent to 47 per cent. Machinery and transport equipment account for one-third of exports and a similar proportion of imports. Export sectors that have declined in relative importance include textiles and vehicles. Textiles accounted for 5 per cent of total exports in 1970 but only 2 per cent by 1986; the corresponding figures for vehicles were 11 per cent and 5 per cent. Over the same period, the share of food, beverages and tobacco in total imports fell from 22 per cent to 12 per cent and that of basic materials from 16 per cent to 6 per cent

Since the mid-1970s North Sea oil has made a significant contribution to Britain's overseas trade both in terms of exports and in terms of import

Table 44: Commodity Composition of Trade 1986^a

		Exports (f.o.b.)		Imports (c.i.f.) ^b		
		£ million	per cent	£ million	per cent	
Non-manu	ıfactures	16,208	22.2	21,349	24.8	
Food, beve	erages and tobacco	5,478	7.5	10,067	11.7	
Basic mat		2,046	2.8	4,988	5.8	
Fuels		8,683	11.9	6,294	7.3	
Manufacti	ured goods	54,595	74.8	62,833	73.0	
Semi-man	ufactures	20,671	28.3	22,673	26.3	
of which:	Chemicals	9,692	13.3	7,346	8.5	
	Textiles	1,712	2.3	3,163	3.7	
	Iron and steel	1,867	2.6	1,796	2.1	
	Non-ferrous metals	1,552	2.1	1,836	2.1	
	Metal manufactures	1,465	2.0	1,644	1.9	
	Other	4,383	6.0	6,888	8.0	
Finished i	manufactures	33,925	46.5	40,160	46.7	
of which:	Machinery	18,314	25.1	19,395	22.5	
	Road vehicles	3,954	5.4	7,940	9.2	
	Clothing and footwear	1,396	1.9	3,122	3.6	
	Scientific instruments and photographic					
	apparatus	3,128	4.3	3,078	3.6	
	Other	7,133	9.8	6,625	7.7	
Miscellan	eous	2,206	3.0	1,884	2.2	
Total	1.4	73,009	100.0	86,066	100.0	

Source: Monthly Review of External Trade Statistics.

^a On an overseas trade statistics basis. (This differs from a balance of payments basis because, for imports, it includes the cost of insurance and freight and, for both exports and imports, includes returned goods.)

bc.i.f. = cost, insurance and freight, that is, including shipping, insurance and other expenses incurred in the delivery of goods as far as their place of importation in Britain. Some of these expenses represent earnings by companies resident in Britain and are more appropriate to the invisibles account.

Note: Differences between totals and the sums of their component parts are due to rounding

substitution. Exports of fuels in 1986 were, in volume, more than five times their level of 1975 while imports were less than two-thirds their 1975 level. Over this period the share of fuels in total exports changed from 4 per cent to 12 per cent and in imports from 18 per cent to 7 per cent. From the mid-1980s, with North Sea oil production approaching a peak, the rate of increase in exports of fuels has slowed. In 1986 the sharp fall in oil prices meant that fuels declined as a share of total exports.

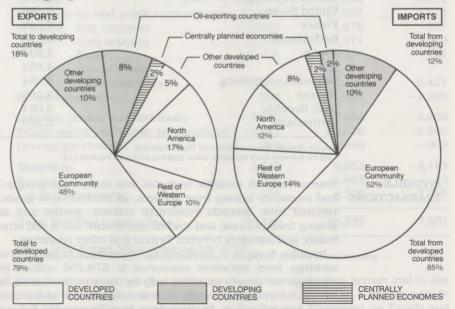
Since the early 1960s Britain's imports of semi-manufactures have exceeded those of basic materials, reflecting the increasing tendency for producing countries to carry out the processing of primary products up to the semi-finished and, on occasions, the finished stage. The fall in the share of food imports (from around 35 per cent of total imports in the 1950s to 10 per cent by 1986) is a result both of the increasing extent to which food demand has been met from domestic agriculture and the decline in the proportion of total expenditure devoted to food.

Geographical Distribution

Britain's overseas trade is mainly—and increasingly—with other developed countries. In 1970 these accounted for 73 per cent of Britain's exports and a similar proportion of Britain's imports; by 1986 the shares were 79 per cent and 85 per cent respectively. Around half of Britain's trade is now with the other 11 countries of the European Community; in 1972 (the year before Britain joined the Community) the proportion had been one-third. Trade with other Commonwealth countries has declined in importance.

European Community countries accounted for seven of the top ten export markets and for six of the ten leading suppliers of goods to Britain in 1986 (see Table 45). From 1981 to 1986 the United States was Britain's largest single market while the Federal Republic of Germany was Britain's largest single supplier from 1982 to 1986; in 1986 the United States accounted for some 14 per cent of Britain's exports while the Federal Republic of Germany supplied over

Geographical Distribution of Trade 1986



Differences between totals and the sums of their component parts are due to rounding Source: Monthly Review of External Trade Statistics.

16 per cent of Britain's imports. There have been a number of changes in the trends of Britain's overseas trade in recent years. The increase in wealth of the oil-exporting countries during the 1970s led to a sharp increase in their imports from all sources; by the early 1980s they were taking some 12 per cent of Britain's exports. There was then a fall in the capacity of these countries to absorb imports so that, by 1986, their share of Britain's exports had fallen to less than 8 per cent. In 1973 the oil-exporting countries supplied 10 per cent of Britain's imports but, with Britain achieving self-sufficiency in oil, the proportion had fallen to 2 per cent by 1986. Japan now accounts for around 6 per cent of Britain's imports, more than twice the proportion of ten years previously.

Table 45: Britain's Main Markets and Suppliers 1986^a

	Value (£ million)	Share (per cent)
Main markets	-	
United States	10,380	14.2
Federal Republic of Germany	8,542	11.7
France	6,210	8.5
Netherlands	5,443	7.5
Belgium/Luxembourg	3,833	5.3
Irish Republic	3,558	4.9
Italy	3,472	4.8
Sweden	2,308	3.2
Spain	1,905	2.6
Canada	1,698	2.3
Main suppliers		
Federal Republic of Germany	14,139	16.4
United States	8,468	9.8
France	7,349	8.5
Netherlands	6,616	7.7
Japan	4,933	5.7
Italy	4,658	5.4
Belgium/Luxembourg	4,084	4.7
Norway	3,265	3.8
Irish Republic	3,054	3.5
Switzerland	2,989	3.5

Source: Monthly Review of External Trade Statistics.

INVISIBLE TRANSACTIONS

Transactions on invisible trade fall into three main groups: services (receipts and payments arising from services, as distinct from goods, supplied to and received from overseas residents); interest, profits and dividends (income arising from outward and inward investment, loans and other capital transactions); and transfers between Britain and other countries.

Invisible trade is of fundamental importance to Britain's economy; overseas earnings from invisibles amounted to £76,200 million in 1986. Britain's earnings are usually exceeded only by those of the United States and France. Britain's surplus is normally second in size to that of the United States though some way behind it. Services have been in surplus for over 20 years while interest, profits and dividends have rarely been in deficit; transfers, however,

^a On an overseas trade statistics basis. Exports are f.o.b.; imports c.i.f.

have almost always been in deficit. For invisible trade as a whole, the deficit of general government is more than offset by the substantial surplus of the private sector (including public corporations), to give an overall surplus. General government transactions are relatively unimportant in either the services or the interest, profits and dividends accounts but they form the greater part of the transfers account. In 1986 the private sector had a surplus of £12,100 million on invisible trade while government had a deficit of £4,500 million. The British Invisible Exports Council, which is financed almost entirely by contributions from the private sector, promotes measures to encourage invisible trade.

Earnings from private sector services rose in value by 4 per cent in 1986 to reach £24,500 million. Debits, at £18,000 million, were 7 per cent higher. The surplus was slightly lower than in 1985, an improvement in the performance of sea transport and financial and other services being more than offset by a movement from surplus into deficit of the civil aviation and travel accounts.

The surplus on private sector interest, profits and dividends was £5,600 million in 1986. Earnings on portfolio investment (investment in overseas securities) rose by 13 per cent above their 1985 level to £5,700 million, reflecting in part the continuing growth in overseas investment following the abolition of exchange controls in 1979 and changes in the method of foreign currency lending by banks located in Britain.

The surplus on private sector transfers in 1986 was £42 million while government transfers were in deficit by £2,235 million mainly as a result of contributions and subscriptions to the European Community and other international organisations and bilateral aid.

Table 46: Britain's Invisible Transactions 1986

£ million

			25 1111111011	
	Credits	Debits	Balance	
Services	24,978	19,864	5,114	
Private sector and public corporations	24,470	17,957	6,513	
of which: Sea transport	3,339	4,276	-937	
Civil aviation	2,922	3,371	-449	
Travel Financial and	5,405	5,927	-522	
other services	12,804	4,383	8,421	
General government	508	1,907	-1,399	
Interest, profits and dividends	47,370	42,684	4,686	
Private sector and public corporations	46,611	41,016	5,595	
General government	760	1,668	-908	
Transfers	3,840	6,033	-2,193	
Private	1,705	1,663	42	
General government	2,135	4,370	-2,235	
Total invisible transactions	76,188	68,581	7,607	

Source: United Kingdom Balance of Payments 1987 Edition.
Note: Differences between totals and the sums of their component parts are due to rounding.

COMMERCIAL POLICY

Britain remains committed to the open multilateral trading system and to the further liberalisation of world trade. To this end it has taken a leading part in the activities of such organisations as the General Agreement on Tariffs and Trade (GATT), the International Monetary Fund, the Organisation for Economic

Co-operation and Development (OECD) and the United Nations Conference on Trade and Development, and has given full support to the new round of multilateral trade negotiations (see below). Since joining the European Community in 1973, Britain has conducted its external commercial policy through the Community, which has legal competence in this area. Britain has consistently sought liberalisation of the Community's internal market and has been pressing for action to be taken on the harmonisation of technical standards, the reduction of frontier formalities and the establishment of a free market in services. The Community's common customs tariff is, at an average of 7 to 8 per cent, at a similarly low level to the tariffs of other major industrialised countries.

General
Agreement on
Tariffs and
Trade

Tariff and non-tariff barriers to trade have been considerably reduced in the seven rounds of multilateral trade negotiations completed since 1947 under the auspices of the GATT, the most recent being the Tokyo Round (1973-79). Britain participates in these negotiations as a member of the European Community, In 1982 the GATT devised a programme to liberalise and expand trade. GATT members also agreed to make determined efforts to ensure that trade policies and measures were consistent with the principles and rules of the GATT, and to resist protectionist policies in formulating and implementing national trade policies. Britain has contributed to the implementation of the GATT programme; it is particularly concerned that the multilateral approach should be extended to trade in services, which is of great importance to Britain's employment and overseas earnings. The eighth round of GATT multilateral trade negotiations (the Uruguay Round) was launched in September 1986. It is scheduled to last for four years and aims to achieve further liberalisation and expansion of world trade; the negotiations will pay particular attention to strengthening the GATT and to trade in agricultural products and trade in services.

European Community Agreements Britain applies the common customs tariff to all countries neither belonging to, nor having any special arrangement with, the European Community. There is duty-free trade between those member states that joined before 1986. Portugal and Spain joined at the beginning of that year. Their trade with the rest of the Community is in a transitional stage: tariffs on industrial products will be phased out by the start of 1993 but those on certain agricultural products will be dismantled over a longer period.

The Community has reciprocal agreements with the European Free Trade Association (EFTA) countries (Austria, Finland, Iceland, Norway, Sweden and Switzerland), which allow for industrial products to be traded free of duty. Following the Luxembourg Declaration of 1984, the Community and EFTA are working towards closer economic co-operation.

The Community also has reciprocal preferential trading agreements with Cyprus, Israel, Malta and Turkey and non-reciprocal agreements with Algeria, Morocco, Tunisia, Egypt, Jordan, Lebanon, Syria and Yugoslavia and, under the third Lomé Convention, a group of 66 African, Caribbean and Pacific developing countries. The Lomé Convention gives these countries free access (subject to certain safeguards) to the Community for industrial goods and most agricultural products.

Tariff preference is also given to developing countries (under the Generalised Scheme of Preferences), the Faroe Islands and the overseas dependencies and territories of member states.

The Community also has economic co-operation agreements with a number of Latin American countries, with China and with the six members of the Association of South East Asian Nations.

OVERSEAS TRADE 381

TRADE

CONTROLS ON Britain maintains few restrictions on its international trade. Most goods may be imported freely and only a narrow range of goods is subject to any sort of export control.

Import Controls

In accordance with its international obligations under the GATT and to the European Community, Britain has progressively removed almost all quantitative import restrictions imposed on economic grounds. The few remaining quantitative restrictions mainly affect textile goods (in view of the rapid contraction of the domestic textile industry) and stem primarily from the Multi-Fibre Arrangement (MFA) under which there exists a series of agreements covering international trade in textiles, designed to balance the interests of both exporting and importing countries. The present MFA is due to expire in 1991. The Department of Trade and Industry, in accordance with European Community directives, operates a ban on the import from South Africa of certain iron and steel products and gold coins. Quantitative restrictions have been removed from imports of goods of Community origin (except for restraints for a transition period on imports of certain categories of textile product from Portugal and Spain). However, there are exceptions: the Department of Trade and Industry continues to apply internationally recognised restrictions on non-economic grounds on imports from all countries of products such as firearms, ammunition and nuclear materials. Other government departments apply similar non-economic restrictions on goods such as meat and poultry, animals, birds, bees, fish and plants and some of their derivatives, controlled drugs, explosives, certain citizens' band radios and indecent or obscene articles.

Export Controls The great majority of British exports are not subject to any government control or direction. However, there are controls governing exports of military equipment and industrial goods of strategic significance as well as nuclear products and certain metals, and metal scrap. There are also controls, for health certification purposes, on cattle, swine and certain meat exported to another member state of the European Community; endangered species of animals and plants and some of their derivatives, in accordance with international agreements; photographic material over 60 years old and valued at £400 or more per item and other articles over 50 years old (including works of art) valued at £16,000 or more (£4,000 or more in the case of British historical portraits); controlled drugs; British spirits (beverages) in casks of less than 40 litres; and Common Agricultural Policy products.

GOVERNMENT The Government assists exporters by creating conditions favourable to the SERVICES export trade and by providing information and advice about opportunities for trade in other countries, services designed to help exporters and improve exporting practices, and credit insurance facilities.

British Over-

The British Overseas Trade Board (BOTB) directs Britain's official export seas Trade promotion services, which include the provision of export intelligence, assist-Board ance to British exporters in appointing agents and researching potential markets overseas, help at trade fairs and other promotional events overseas, and support for firms participating in trade missions. It mainly comprises representatives of commerce and industry with personal involvement in exporting, but also includes representatives of the Department of Trade and Industry, the Export Credits Guarantee Department (ECGD), and the Foreign and Commonwealth Office; it operates under the general authority of the Secretary of State for Trade and Industry, who is the president.

Exporters wanting assistance and advice can consult the regional offices of the BOTB throughout Britain and, through these offices, the commercial posts

of the British Diplomatic Service overseas. The Scottish Export Office (Industry Department for Scotland), the Welsh Office and the Industrial Development Board for Northern Ireland (Department of Economic Development) also act as BOTB regional offices.

Export Credits The Export Credits Guarantee Department provides credit insurance for about one-quarter of the country's export trade and insures exporters of both goods and services against non-payment by overseas buyers. The main risks covered include insolvency or protracted default of the buyer, governmental action which stops the British exporter receiving payment, new import restrictions, and war or civil disturbance in the buyer's country. Cover may commence from the date of shipment or from the date of contract (at higher premiums).

This insurance may be supplemented by guarantees of repayment given direct to banks financing exports sold on credit of two years or more, whether in sterling or in foreign currencies. Alternatively, for contracts over £1 million, the ECGD will guarantee loans direct to overseas buyers enabling them to pay on cash terms, or 'lines of credit' similarly covering an agreed buying programme of an overseas country. The banks provide finance against these guarantees. The ECGD is also prepared to support the issue of performance bonds in the commercial market in respect of cash or near-cash contracts worth over £250,000. Investment insurance is provided for new British investment overseas against expropriation, war damage and restrictions on remittances.

Under the Aid and Trade Provision, aid combined with export credits may be provided to developing countries to support projects which promise opportunities to British exporters.

BALANCE OF The balance of payments statistics record transactions between residents of PAYMENTS Britain and non-residents. The transactions are classified into two groups: current account (visibles and invisibles) and transactions in assets and liabilities. The balance on current account shows whether Britain has had a surplus of income over expenditure.

Traditionally Britain has had a deficit on visible trade and a surplus on trade in invisibles and this was again the case in 1986. However, in 1980, 1981 and 1982 visible trade was also in surplus. The surplus on invisibles rose from £5,100 million in 1985 to £7,600 million in 1986. Although there was a slight decline in the surplus on services (as the civil aviation and travel accounts moved into deficit), there was a sharp increase in the surplus on interest, profits and dividends (with a rise in overseas earnings from portfolio investment and a pronounced fall in the earnings in Britain of overseas oil companies), and a decline in the deficit on transfers (which was more than accounted for by the fall in the deficit on government transactions with European Community institutions).

A description of visible trade and invisible transactions is given on pp 375-9.

Capital Flows

Britain's exchange controls were abolished during 1979 and residents are free to acquire foreign currency for any purpose including direct and portfolio investment overseas. Controls on the lending of sterling abroad have also been removed and non-residents may freely acquire sterling for any purpose. Gold may be freely bought and sold. The abolition of exchange controls means that Britain meets its full obligations on capital movements under the OECD Code on Capital Movements and under European Community directives. The Government welcomes both outward and inward investment. Outward investment helps to develop markets for British exports, while providing earnings in the form of interest receipts, profits and dividends. Foreign investment in Britain creates employment directly; introduces new technology, products, manage-

Table 47: Britain's Balance of Payments 1982-86

auso arribirtam o Balanco	01 1 dy011		£ million		
-	1982	1983	1984	1985	1986
Current account					
Visible trade balance	2,331	-835	-4,384	-2,178	-8,463
Invisible transactions					
balance	1,704	4,173	5,858	5,097	7,607
Current balance	4,035	3,338	1,474	2,919	-856
Financial account					
Transactions in assets and liabilities					
British external assets	-30,831	-30,850	-31,039	-51,301	-92,229
British external liabilities	28,569	26,108	24,123	43,880	81,482
Balancing item	-1,773	1,404	5,442	4,502	11,603

Source: United Kingdom Balance of Payments 1987 Edition.

ment styles and attitudes; and provides an opportunity to increase exports or substitute imports. Inward investment is particularly encouraged by the Department of Trade and Industry's Invest in Britain Bureau.

In 1986 direct investment overseas by British residents was \$11,400 million. British residents' portfolio investment overseas totalled £22,900 million, most of which was investment by banks and other financial institutions located in Britain. The inflow of direct and portfolio investment into Britain amounted to £13,600 million. An analysis of transactions in Britain's external assets and liabilities is given in Table 48.

Table 48: Summary of Transactions in External Assets and Liabilities 1984–86^a £ million

1984		1985	1986
n -181		4,421	5,420
1,419		7,079	8,202
-6,086		-8,821	-11,386
-9,550		-17,830	-22,870
22,925		32,360	67,693
-15,567		-22,162	-54,548
908		-1,758	-2,891
-40		20	167
-743		-730	-535
-6,916		-7,421	-10,747
	1,419 -6,086 -9,550 22,925 -15,567 908 -40 -743	1,419 -6,086 -9,550 22,925 -15,567 908 -40 -743	1,419 7,079 -6,086 -8,821 -9,550 -17,830 22,925 32,360 -15,567 -22,162 908 -1,758 -40 20 -743 -730

Source: United Kingdom Balance of Payments 1987 Edition.

^b Drawings on (+)/additions to (-).

^a Assets: increase (-)/decrease (+); liabilities: increase (+)/decrease (-).

External Assets and Liabilities

At the end of 1986 Britain's identified external assets exceeded identified external liabilities by £114,400 million; only Japan had higher net external assets. Britain's private sector net assets were estimated at £107,700 million and public sector net assets at £6,700 million. 1

Direct investment overseas by British residents (investment in branches, subsidiaries and associated companies) totalled £90,800 million at the end of 1986 and portfolio investment £145,700 million. At the end of 1984 (the latest year for which data are available) over four-fifths of direct investment was in developed countries. More than one-third of the total was in the United States and over one-fifth in the European Community. In terms of industries, manufacturing accounted for 28 per cent of direct investment holdings. By type of company, oil companies were responsible for 32 per cent, insurance companies for 7 per cent and banks for 1 per cent.

Direct investment in Britain by overseas residents amounted to £48,600 million at the end of 1986 and portfolio investment to £42,900 million. At the end of 1984 investment from developed countries accounted for virtually all of overseas direct investment in Britain. Fifty-one per cent originated in the United States and 30 per cent in the European Community. Forty-one per cent was in manufacturing. Oil companies were responsible for 34 per cent, insurance companies for 2 per cent and banks for 8 per cent.

 $^{^{1}}$ The significance of any inventory of Britain's aggregate external assets and liabilities is limited because a variety of claims and obligations are included that are very dissimilar in kind, in degree of liquidity and in method of valuation.

20 Promotion of Science and Technology

Britain has for centuries encouraged research and innovation, and its record of achievement in relation to size of population is in many respects unsurpassed. This record has been maintained throughout the twentieth century. For example, fundamental contributions to modern molecular genetics were made by the working out of the structure of the molecule of deoxyribonucleic acid (DNA) by Professor Francis Crick, Professor Maurice Wilkins, and an American colleague, James Watson, at Cambridge University in 1952. More recent achievements include the research carried out by Mr Patrick Steptoe and Dr Robert Edwards which made possible the birth of the world's first test-tube baby in Britain in 1978, and work on brain and body scanners (based on computerised X-ray readings, nuclear magnetic resonance or ultrasonics) and on monoclonal antibodies (used to diagnose animal diseases and which have the potential to combat human virus diseases). Other notable contributions in recent years have been made by Professor Stephen Hawking on black holes (hypothetical regions of space) and Professor Frederick Sanger on molecular biology. Nobel prizes for science have been won by 68 British citizens, a number exceeded only by the United States, and Table 49 lists British citizens who have won Nobel prizes for science (excluding economic science) since 1970.

Total expenditure in Britain on research and development in 1985 was about £7,900 million, 2·2 per cent of the gross domestic product. About 40 per cent was provided by industrial enterprises, with a significant contribution also being made by private endowments, trusts and charities. Nationalised and private sector industries finance their own research programmes, and many run their own laboratories.

The Government finances about half of the total expenditure on research and development in Britain, of which roughly a quarter is carried out in government research establishments. Government finance for research and development also goes to industry and the universities.

Expenditure on research and development in industrial enterprises in 1985 was £5,146 million, of which £1,193 million came from public sector funds, £575 million from overseas and the balance of nearly £3,400 million from the domestic private sector. The main areas of expenditure were electronics (£1,738 million), chemicals and allied products (£942 million), aerospace (£845 million), motor vehicles (£372 million) and mechanical engineering (£269 million). Considerable expenditure is directed towards applied research and the development of new or improved materials, products and processes. In many areas Britain participates in European and other international projects.

Government and Scientific Research The main objectives of the Government's expenditure on research and development are to advance scientific knowledge and develop technology in Britain as well as to support its own activities. Generally the Government seeks to enhance

Table 49: Recent British Winners of Nobel Prizes for Science

	Year of award	Category	Subject
Sir Bernard Katz	1970	Physiology or Medicine (jointly)	The role of neural transmitter substances
Professor Dennis Gabor	1971	Physics	Invention of holography
Professor Rodney Porter	1972	Physiology or Medicine (jointly)	Discoveries concerning the chemical structure of antibodies
Professor Brian Josephson	1973	Physics	Work on superconductivity (abnormally high conductivity at low temperatures)
Professor Nikolaas Tinbergen	1973	Physiology or Medicine (jointly)	The organisation of individual and social behaviour patterns
Professor Sir Geoffrey Wilkinson	1973	Chemistry (jointly)	Work on organometallic compounds
Sir Martin Ryle and Professor Anthony Hewish	1974	Physics	Development of new types of radio telescopes
Sir Nevill Mott	1977	Physics (jointly)	Theoretical investigations of the electronic structure of magnetic systems
Dr Peter Mitchell	1978		Contributions to the understanding of biological energy transfer
Sir Godfrey Hounsfield	1979	Physiology or Medicine (jointly)	Computer-assisted assembly of X-ray information in three dimensions
Dr Frederick Sanger	1980	Chemistry (jointly)	Determination of base sequences in nucleic acids
Dr Aaron Klug	1982	Chemistry	Work on the structure of viruses and genetic material in cells
Sir John Vane	1982	Physiology or Medicine (jointly)	Clarification of the pathways of prostaglandin metabolism in the body
Dr César Milstein	1984	Physiology or Medicine (jointly)	Production of monoclonal antibodies

the contribution of both public and private research and development expenditure to improving the efficiency and competitiveness of the British economy.

Priorities in science and technology policy are decided by collective ministerial consideration under the leadership of the Prime Minister. The Prime Minister is advised on such matters by her Chief Scientific Adviser, Cabinet Office, and also, since July 1987, by the Advisory Council on Science and Technology (ACOST), which incorporates the former Advisory Council for Applied Research and Development (ACARD). The remit of ACOST covers defence as well as civil

research and both academic science and industrial research and development. ACOST is composed of independent members from industry, academia and government, and ex-officio members are the chairmen of the Advisory Board for the Research Councils (ABRC), the Technology Requirements Board (TRB) and the University Grants Committee (UGC). It advises on national priorities in science and technology, on the application of the results of scientific research, on the co-ordination of government policy for science and technology, and on Britain's participation in international scientific projects.

Responsibility for basic civil science rests with the Secretary of State for Education and Science, who is advised by the ABRC; that for technology rests mainly with the Secretary of State for Trade and Industry, who is advised by the TRB. Other departments with a substantial involvement in science and technology have a Departmental Advisory Body; these bodies work closely with ACOST. A committee of Departmental Chief Scientists, under the chairmanship of the Chief Scientific Adviser, is responsible for co-ordination among departments. In July 1986 a Science and Technology Assessment Office, responsible to the Chief Scientific Adviser, was established to evaluate the impact of government-funded research on the efficiency and competitiveness of the economy.

Research and Development Expenditure Total government expenditure on research and development in 1987–88 is planned to be some £4,726 million. The largest departmental research and development budget is that of the Ministry of Defence. The main civil departments involved are the Department of Education and Science, which supports the research councils and the universities; the Department of Trade and Industry; the Department of Energy; and the Ministry of Agriculture, Fisheries and Food and the Department of Agriculture and Fisheries for Scotland.

The Ministry of Defence

The Ministry of Defence's research programme is undertaken both in the Ministry's research establishments and as funded research in industry, universities and other institutions of higher education. In 1987–88 the Ministry plans to spend some £2,346 million, of which some £401 million will be for research and £1,945 million for development. An increasing emphasis is placed on research funded jointly with industry, and initiatives are also being taken to encourage 'spin-off' from defence technology to the civil market. For example, Defence Technology Enterprises Ltd was set up in 1985 by private industry with government co-operation to identify and promote civil applications of defence research. ACARD (now ACOST—see p 386) also began a study of this subject in March 1987. Examples of technological innovations at Ministry of Defence research establishments include the pioneering work of the Royal Signals and Radar Establishment on liquid crystal displays, now widely used in the civil sector, and its current development of a new simpler type of 'supercomputer' based on Inmos' transputer chip.

The Department of Trade and Industry

Although most industrial research and development is financed by industry, the Department of Trade and Industry (DTI) provides support, some £442 million in 1986–87, to stimulate activities which would bring economic benefits but would not otherwise be undertaken by industry. The main areas of expenditure are aeronautics and space (some £193 million in 1986–87), while a wide range of industrial projects, and technology transfer, awareness, training and advisory activities is also undertaken. For example, the Department's Support for Innovation scheme has helped to finance more than 5,000 industrial research projects since 1982. Other DTI programmes that have already assisted

technological innovations include launch aid for the development of aircraft, such as the A320 Airbus, and the £350 million Alvey Programme for research into information technology. In December 1986 the Government announced the LINK programme to co-ordinate various schemes to speed up the application of pure research to industrial processes. The DTI also plans to set up a National Advanced Robotics Research Centre during 1987. The Department has four research establishments: the National Physical Laboratory, the National Engineering Laboratory, the Laboratory of the Government Chemist and the Warren Spring Laboratory.

The DTI is advised on its support for industrial research and development by the Technology Requirements Board and 15 Sectoral Advisory Committees, which consist of representatives of both industry and research organisations.

The DTI maintains close contact with the British Technology Group (BTG), an independent public corporation which promotes the transfer of technology from the laboratory to the market-place. The BTG takes responsibility for licensing inventions, particularly those emanating from universities and other public sector research organisations; in return it takes a proportion of the licensing income. It also provides development finance for industrial projects embodying new technology, for up to 50 per cent of their cost. The loan is repayable through a levy on sales of resulting products or processes. The BTG is now self-financing and in 1985–86 earned nearly £18 million, or more than 80 per cent of its income, from its licensing activities.

In 1987 the Centre for Exploitation of Science and Technology was being established, using funds from industry and government, to identify areas of scientific research that have significant commercial potential.

The Department of Education and Science

The Department of Education and Science discharges its responsibilities for basic and applied civil science mainly through the five research councils, to which it allocates funds from its science budget (£657 million in 1987-88). The councils and their allocations are: the Science and Engineering Research Council (£350 million), the Medical Research Council (£133 million), the Natural Environment Research Council (£71 million), the Agricultural and Food Research Council (£53 million) and the Economic and Social Research Council (£24 million). Science budget grants are also made to the British Museum (Natural History), the Royal Society and the Fellowship of Engineering. The allocations provide support for research in the form of grants and contracts to universities, polytechnics, research units and other establishments of the research councils, postgraduate support and subscriptions to international scientific organisations. The Department is also responsible for some aspects of international scientific relations and helps to co-ordinate government policy regarding scientific and technical information. Together with the Scottish Education Department it funds various schemes for training both students and those working in industry in the latest technology. For example, under the Professional, Industrial and Commercial Updating Programme (PICKUP), a network of nine New Technology Centres is to be established in 1987-88; in these, scientists from higher education institutions will train employees of private companies in recent developments in their fields. The Department is also encouraging, through a variety of initiatives, the teaching in schools of scientific and technical subjects, such as computing and craft, design and technology.

The Department is also the main source of funding for the universities, whose individual allocations are determined by the University Grants Committee. Although each university decides upon the allocation of its resources between teaching and research, the proportion committed to research is generally believed to be between 30 and 40 per cent.

The Advisory Board for the Research

The Advisory Board for the Research Councils advises the Secretary of State on civil science, particularly with regard to the research council system, on the support of postgraduate students, on the proper balance between national and Councils international scientific activities, and on the allocation of the science budget among research councils and other bodies. It also promotes close liaison between the councils and industrial users of their research. Its members are drawn from the research councils, government departments, industry and the academic world.

THE RESEARCH Each of the four research councils engaged in scientific research is an COUNCILS autonomous body established under Royal Charter with membership drawn from the universities, professions, industry and the Government. They conduct research through their own establishments and by supporting selected research, study and training in universities and other higher education establishments. They also receive income for research commissioned by departments under the customer-contractor principle and from the private sector. Income from commissioned research is particularly important for the Agricultural and Food Research Council and the Natural Environment Research Council.

In 1985 the Government announced new arrangements intended to make it easier for educational establishments to exploit research carried out with the support of grants from the research councils. Under the arrangements the rights and responsibility of commercial exploitation rest with the institution receiving the grant, subject to the existence of procedures agreed with the sponsoring research council. Universities and research institutes may still make use of the expertise of the British Technology Group (see p 388) to patent and license their inventions, but are no longer obliged to do so.

Science and Engineering Research Council

The Science and Engineering Research Council (SERC) is responsible for the support of research work and postgraduate training in pure and applied science (including engineering) outside the areas of agriculture, medicine and the environment. SERC spends about £100 million each year on grants to support research. Within higher education establishments it encourages collaboration with industry, partly by sponsoring co-ordinated research programmes in areas of special concern to industry, such as information technology and biotechnology. Six such areas have been designated and put under the control of directorates, one of which has been transferred to the private sector. In August 1987 SERC initiated plans for the first in a series of interdisciplinary research centres. Each centre will be based at a single university or polytechnic but may also involve researchers from neighbouring higher education institutions in planned programmes of research in priority areas such as semiconductor materials, high-temperature superconductivity and lasers in manufacturing.

SERC maintains four research establishments: the Rutherford Appleton Laboratory (RAL) at Chilton (Oxfordshire), which accounts for nearly 10 per cent of SERC's budget, the Daresbury Laboratory at Warrington (Cheshire), the Royal Greenwich Observatory at Herstmonceux (East Sussex), which is to be moved to Cambridge in about 1990, and the Royal Observatory, Edinburgh. The establishments are centres of specialised research, and are also used for the development and operation of central experimental facilities beyond the resources of an individual academic institution. They provide support for scientists whose research needs access to facilities run by international research organisations, such as the powerful particle accelerators at the European Centre for Nuclear Research (CERN) near Geneva and the high-flux neutron source at the Institut Laue-Langevin (ILL) at Grenoble. SERC also provides all or part of Britain's contribution to these and other international facilities and organisations such as the European Space Agency (to which funds are channelled through the British National Space Centre; see p 395).

Engineering Among engineering subjects receiving major support are information technology (including software engineering, intelligent knowledge-based systems and device fabrication), radio communications, the application of computers to manufacturing, biotechnology, marine technology, polymer engineering, materials, particulate technology, medical engineering, combustion engines and coal technology. The Teaching Company Scheme, jointly sponsored by SERC, the Economic and Social Research Council, the Department of Trade and Industry, and the Northern Ireland Department of Economic Development, is currently supporting some 270 collaborative ventures between academic engineering departments and industrial companies to improve their manufacturing and management methods and performance. A network providing an interactive computing facility to more than 2,000 subscribers in universities is serviced at RAL.

Astronomy

Britain has a leading position in most major branches of astronomy including radio astronomy, infra-red astronomy, X-ray astronomy and theoretical research. In optical astronomy SERC is the principal partner in the international observatory on the island of La Palma in the Canary Islands. This contains four telescopes, including the 4·2-m William Herschel. Opened in 1987, it is the third largest optical telescope in the world and, with its advanced design and instrumentation, is capable of detecting fainter and more distant objects than was previously possible. On Mauna Kea, Hawaii, SERC has a 3.8-m infra-red telescope, the largest telescope in the world designed specifically to make infra-red observations, and the 15-m James Clerk Maxwell radio telescope (built in collaboration with the Netherlands) for observing wavelengths of less than a millimetre. Much of the observation will eventually be carried out under remote control from Britain and the Netherlands using computer communications networks such as the Starlink network based at RAL. The world's largest X-ray telescope (aimed at one object) was built by RAL in collaboration with Leicester University and launched into space on the Japanese-built Ginga satellite (see p 396) in February 1987, when it was used to investigate a supernova (the remains of an exploded star), which was the nearest such phenomenon to the earth for more than 350 years.

Nuclear ln nuclear physics, RAL co-ordinates and supports Britain's experimental particle physics research programme and links university researchers with overseas centres such as CERN in Geneva and DESY, the electron synchrotron facility in Hamburg. The Daresbury Laboratory offers a 20-million-volt tandem accelerator for research into nuclear structure, which in 1986 was used, with its TESSA 3 high-resolution spectrometer, to confirm for the first time a 20-year-old theory that, if rapidly rotated, certain nuclei adopt a 'superdeformed' shape.

Natural

Support is provided for research in biological and natural sciences, and Sciences mathematics. About 30 per cent of research grant finance in these areas goes to nine co-ordinated programmes of interdisciplinary strategic research, carried out in collaboration with industry, in such areas as low-dimensional structures and protein engineering. SERC also helps to finance the £60 million pulsed neutron source, ISIS, at RAL, which is now being reconstituted as an international institute with members from countries including the Federal Republic of Germany, France and Italy; ISIS allows scientists to 'look inside' solids and liquids. The Daresbury Laboratory operates a synchrotron radiation

facility which provides high-intensity electromagnetic radiation used in a wide range of experiments in protein crystallography, surface physics, chemical structure and materials science. Other central facilities include a high-powered laser facility at RAL, which is used to study plasmas. Scientific research funded by SERC in 1985–86 included developments of 'superstring' theories of the universe in pure mathematics; in optics, the demonstration of lasers operating very close to X-ray wavelengths; and in thermodynamics, a solution to the problem of icing on the centre 'nose cone' of jet engines.

Medical Research Council The Medical Research Council (MRC) is the main government agency for the support of biomedical research, both at its own centres and by means of grants to research workers at higher education institutions and hospitals. Its major research establishments are the National Institute for Medical Research at Mill Hill, London, the Clinical Research Centre at Northwick Park Hospital, London, and the Laboratory of Molecular Biology at Cambridge. The Council also has more than 50 other research units, located in universities and medical schools throughout Britain.

The MRC's scientists and doctors have pioneered developments in molecular biology, therapeutic clinical trials, applied psychology and methods of imaging the body, such as magnetic resonance and ultrasound. The Council's larger research programmes include those into neurological (including Alzheimer's) and psychiatric disease, heart and respiratory ailments, infectious diseases (including AIDS), tropical medicine, and antenatal screening for cystic fibrosis and muscular dystrophy.

Natural Environment Research Council The Natural Environment Research Council (NERC) aims to advance scientific understanding of the relationship between man and his surroundings through research in the physical and biological sciences at its own institutes and at grant-aided institutions, and in universities and polytechnics. NERC's three directorates cover (respectively) terrestrial and freshwater, earth and marine sciences. They are responsible for the Council's 16 institutes and three grant-aided associations. The former include the British Antarctic Survey, the British Geological Survey and the Institute of Oceanographic Sciences (IOS) and the latter the Marine Biological Association of the United Kingdom (MBA). Examples of their work include a new ecologically safe method for monitoring sea pollution, based on perfluorocarbons, announced by the MBA in 1986, and GLORIA, a unique side-scan sonar developed at the IOS and now being used for the United States Geological Survey to map the ocean floor around that country's coast.

Research commissioned by public authorities and industry in Britain and overseas accounts for about one-third of NERC's income. Applied projects in progress overseas include those on biological pest control, regeneration of tropical hardwoods and drip irrigation techniques for tropical crops. NERC also offers specialist data services providing information on subjects, including biology and ecology, from satellite and aircraft surveys and its research vessels, as well as through its various centres and units in Britain.

Agricultural and Food Research Council The Agricultural and Food Research Council (AFRC), together with the Department of Agriculture and Fisheries for Scotland, supports a network of eight research institutes in Britain collectively known as the Agricultural and Food Research Service. Over the past two years these institutes have been reorganised into functional groupings and their number reduced; for example, the well-known Rothamsted Experimental Station is now part of the Institute of Arable Crops Research. AFRC institutes have been responsible for a variety of technological innovations in the 1980s, including the Multiple Ovulation and

Embryo Transfer technique for increasing the rate of genetic improvement of livestock, the genetic manipulation of crop plants and the development of a harvester that strips crops in situ, rather than cutting and then stripping them.

The AFRC is also increasing its support for research in further education institutions. About half of the Council's income comes from the science budget and the rest from contract research, mostly for the Ministry of Agriculture, Fisheries and Food.

UNIVERSITY RESEARCH

Of the total estimated university expenditure on scientific research in the academic year 1985-86 (about £780 million), the largest government contribution (some £390 million) was through the University Grants Committee (UGC). Universities are currently being encouraged to direct their resources into those areas where they have existing research strength or where they see a prospect of establishing strong groups in new and promising spheres of science and technology.

Scientific research in the universities and other institutions of higher education is also supported through the research councils. This support takes two forms. First, between a quarter and a third of postgraduate students in science and technology receive maintenance awards from the research councils. through postgraduate studentships. Secondly, grants and contracts are given to the universities and other institutions by the research councils for specified projects, particularly in new or developing areas of research. The other main channels of support for scientific research in the universities are various government departments, the Royal Society, industry and the independent foundations.

Increasingly close relationships are being fostered between the universities, industry and the Government in numerous joint projects. For example, in June 1987 a new information technology institute, sponsored jointly by industry and the Cranfield Institute of Technology, was opened to link academic and commercial spheres. British universities' earnings from industry and other outside agencies were £253 million in 1985–86, an increase in real terms of 69 per cent since 1981–82, and are still rising rapidly. The money comes from research contracts and royalties on the exploitation of university innovations. Many universities now operate industrial liaison service units, which are linked together by university directors of industrial liaison.

Technological breakthroughs in the university sector in the 1980s include optoelectronic devices for future super-fast optical computers at Heriot-Watt University, near Edinburgh, and techniques for the active cancellation of sound and other vibrations pioneered at the universities of Cambridge and Essex. Important research on optical fibres is being carried out at Southampton, Exeter and Essex universities, on liquid crystal displays at Hull and Manchester, and on pharmaceutical products and biotechnology at Strathclyde.

Parks

Science Science parks provide an environment for both existing and new businesses using high technology in which they have easy access to the research expertise of higher education institutions. At the end of 1986 there were 28 such parks in operation at or near universities and similar organisations, with a further seven under construction or planned. One of the first to be established (in 1972) and still the largest is the Cambridge Science Park, where 65 companies employ about 2,100 people on a 53-hectare (130-acre) site.

Britain's science parks now provide accommodation for over 400 companies, ranging from subsidiaries of large corporations, such as the British Oxygen Company, Olivetti, British Petroleum and 3M, to a wide variety of new and recently formed businesses. A recent survey, conducted for the United Kingdom Science Park Association, showed that companies on parks tended to exhibit

EXPORTS

The next five vears' production of British Aerospace's 146QT 'Quiet Trader' freight aircraft has been assigned toan Australianbased group, in an agreement worth about £950 million.



This giant gearbox, one of the largest in North America, has been supplied by David Brown Gear Industries to a drift mine in Nova Scotia, Canada.

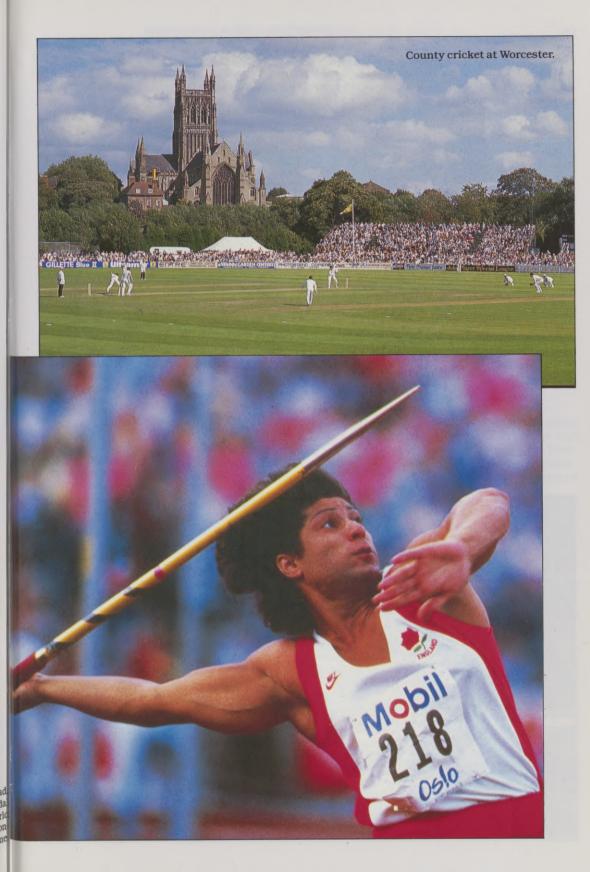
SPORT



Richard Fox, European Champion for slalom canoeing, and three times winner of the World Championships.

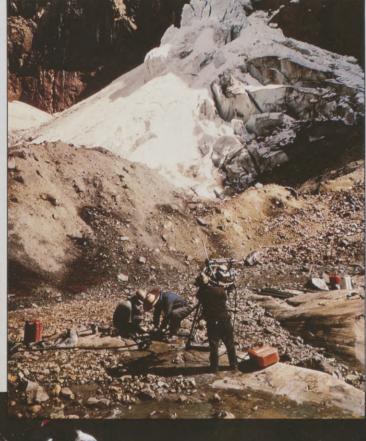
Laura Davies, first Englishwoman to win the US Women's Open golf championship, in 1987.

> Fatima Whitbread who won a gold meda at the 1987 Work Athletics Champion ships in Rome



BRITONS OVERSEAS

British and Peruvian geologists making test drillings in a mineralised zone near Laguna Jacabamba, Peru, in one of a number of surveys in Latin America carried out by the British Geological Survey.



The Overseas
Development
Administration has
funded this
study of fish
populations in
Sierra Leone
to improve
conservation
of a valuable
food source.



high growth and low failure rates. The main areas in which science park companies are involved are computing, electronics, instrumentation, robotics, electrical engineering, chemicals and biotechnology, with the emphasis on research, design, development, consultancy, testing and training activities rather than large-scale manufacturing.

OTHER RESEARCH Charitable **Foundations**

Charitable foundations sponsoring research in Britain include: the Cancer Research Campaign, the Chester Beatty Institute for Cancer Research, the Ciba ORGANISATIONS Foundation, the Imperial Cancer Research Fund, the Institute for Cancer Research, the Leverhulme Foundation, the Nuffield Foundation, the Wellcome Trust and the Wolfson Foundation. In 1986 the largest spenders on medical research were the Wellcome Trust at £33 million and the Imperial Cancer Research Fund at £25 million.

Industrial Research Organisations

The Association of Independent Research and Technology Organisations links together 46 such institutions employing about 9,000 people with a turnover of about £250 million in 1986. These are limited companies undertaking research contracts and providing consultancy and training services in particular branches of industry. In addition to payment for this work, many are supported by membership fees from firms in their sectors and government grants.

The British Technology Group (see p 388) also finances new technology projects within the private sector, as do a number of venture capital companies. For example, in November 1986 Investors in Industry Ltd announced a £60 million programme, in association with Imperial College, London, to set up centres of innovation at six British universities.

Professional Institutions

There are numerous technical institutions and professional associations, many of which promote their own disciplines or are interested in the education and professional well-being of their members. The Council of Science and Technology Institutes has 15 member institutes representing, among others, engineers, biologists, chemists, mathematicians, metallurgists, physicists and geologists.

The Engineering Council, established in 1981, actively promotes the study of all types of engineering in schools and other organisations, in co-operation with its 170 industrial affiliates, including large private companies and government departments. Together with 46 professional engineering institutions, the Council accredits courses in higher education institutions. It also maintains a register of about 300,000 engineers with varying levels of qualifications.

The national academy of engineering in Britain is the Fellowship of Engineering, set up in 1976, which promotes the discipline and advises the Government on related policy issues. Its membership consists of distinguished engineers.

The Learned Societies

More than 300 learned societies in Britain play an important part in the promotion of science and technology through meetings, publications and sponsorship.

Royal Society

The most prestigious of these is the Royal Society, or, more fully, the Royal Society of London for Improving Natural Knowledge, founded in 1660, which is equivalent to national academies of science in other countries. It is the oldest such academy in the world to have enjoyed continuous existence. The Society has over 1,000 fellows, many of whom serve on the governmental advisory councils and committees concerned with research. The Society is financed through a parliamentary grant (£6.92 million for 1987-88) and through funds from private sources (£3.3 million in 1986-87).

The Royal Society recognises scientific and technological achievements through the award of fellowships, medals and endowed lectureships. It administers over 160 research appointments, mostly at British universities and research institutes, at all levels from post-doctoral to professorial. A new scheme, begun in 1983, provides up to 100 posts in universities for particularly able young scientists, for whom positions are not currently available. The Society funds specific research projects and encourages the dissemination of scientific knowledge by a programme of discussion meetings and through its publications. In 1986 it established, jointly with the Fellowship of Engineering (see p 393), a unit to undertake statistical analyses of issues in science policy. The Society also provides advice on such issues to government and others.

The international relations of the Royal Society are extensive. As the national academy of science, it represents Britain in a number of international non-governmental organisations and is involved in a variety of international scientific programmes. It has bilateral arrangements with academies and research councils throughout the world, under which a large number of exchange visits by scientists and collaborative research projects are supported.

Other Societies

Three other major institutions publicise scientific developments through lectures and publications for specialists and for schoolchildren. Of these, the British Association for the Advancement of Science, founded in 1831, is mainly concerned with science, while the Royal Society of Arts, dating from 1754, also deals with the arts and commerce. The Royal Institution, founded in 1799, also performs these functions and in addition runs its own research laboratories.

Zoological Gardens

The Zoological Society of London, an independent scientific body, runs the world-famous London Zoo, which occupies 14 hectares (36 acres) of Regent's Park, London. The Society also runs Whipsnade Park Zoo near Dunstable (Bedfordshire), and is responsible for the Institute of Zoology, which carries out research in conservation and comparative medicine. It also organises scientific meetings and symposia, publishes scientific journals and maintains one of the largest zoological libraries in the world. Other well-known zoos include those at Edinburgh, Bristol, Chester, Dudley, Chessington, Marwell (near Winchester) and Jersey.

Botanical Gardens

The Royal Botanic Gardens, founded in 1759, cover 121 hectares (300 acres) at Kew (west London) and a 187-hectare (462-acre) estate at Wakehurst Place, Ardingly (West Sussex). They contain the largest collections of living and dried plants in the world. Research is conducted into all aspects of plant life, including physiology, biochemistry, genetics and the conservation of rare species.

The Royal Botanic Garden at Edinburgh, founded in 1670, is a centre for research into taxonomy, for the conservation and study of living plants and for horticultural education.

Scientific Museums

The British Museum (Natural History) is one of the world's principal centres for the general study of natural history, and has a large collection of fossils and minerals. The Science Museum illustrates the development of pure and applied science in all countries, but chiefly in Britain. The geology of Britain is probably known in more exact detail than that of any other country in the world, and there is an outstanding collection of exhibits in the Geological Museum. These three museums are in South Kensington, London. Other important collections include the Museum of Science and Industry, in Birmingham, the Museum of the History of Science, at Oxford, and the Royal Scottish Museum, Edinburgh.

INTER-NATIONAL SCIENTIFIC RELATIONS Britain is fully involved in the European Community's programmes for research and joins with other member states in the co-ordination of particular national programmes of interest to the Community. For example, British firms are participating, with government backing, in about half of the projects approved under the European Strategic Programme of Research into Information Technology (ESPRIT), the RACE telecommunications study and the BRITE programme to develop technology within the more traditional industries. In addition, British companies are involved in many of the projects under Eureka, the framework for industry-led collaboration in high technology, which also involves non-Community countries in Europe. Britain is also a member of the science and technology committees of other international organisations such as the Organisation for Economic Co-operation and Development (OECD) and the North Atlantic Treaty Organisation (NATO), and various specialised agencies of the United Nations. In addition, it co-operates with other countries in specific areas of research, notably nuclear science (see p 390) and space (see p 390).

Britain is party to a number of intergovernmental agreements with other countries on co-operation in science and technology. Among non-governmental organisations the five research councils, the Royal Society and the British Academy were founder members of the European Science Foundation in 1974.

There are science and technology sections in the British Embassies in Washington, Paris, Bonn, Tokyo and Moscow, while staff in other British Embassies and High Commissions also promote contacts in science and technology between Britain and the countries to which they are accredited.

The British Council fosters co-operation and exchange visits between British scientists and those of overseas countries to promote among overseas specialists a better understanding and knowledge of Britain and its scientific achievements, and, in the developing countries, to identify and manage development projects in the technological, scientific and educational sectors.

A number of British companies are involved in commercial co-operative research projects with overseas manufacturers, including Rolls-Royce with American, Japanese, German and Italian companies for the development of the V2500 aero-engine, and British Aerospace with various West European firms in the Airbus and European fighter aircraft projects.

Space Activities One area in which Britain is particularly involved in international scientific collaboration is civil space research co-ordinated by the British National Space Centre. The Government spends about £100 million each year on all space activities, more than £80 million of which goes towards the work of the European Space Agency (ESA). The remainder supports a programme of research and development in government establishments, universities and companies. In ESA's space applications programmes, British industry has led the consortia which have developed all of the communications satellites for ESA and the main user organisations. The largest ever communications satellite, Olympus, is under development and is expected to be launched in 1989.

In ESA's other applications programmes, Britain is developing the main microwave instrument for an earth observation satellite, ERS-1, to be launched in 1990. In the Columbus preparatory programme, which is the European contribution to the international space station proposed by the United States, Britain is leading the study on a polar-orbiting platform for experimentation and earth observation.

British groups have been selected to participate in all but one of ESA's science missions, including the 1986 launch of the British-built Giotto spacecraft, which investigated Halley's Comet, and the Infrared Space Observatory.

Participation in ESA missions is complemented by bilateral arrangements for space research with other countries, notably the United States through its National Aeronautics and Space Administration (NASA). British groups have participated in several NASA space science missions, and are currently developing a payload for NASA's Upper Atmosphere Research Satellite. Other collaborations include the development of the wide field camera for the Federal Republic of Germany's X-ray satellite ROSAT and the X-ray sensor for the Japanese-built Ginga satellite (see p 390). In March 1987 the Government signed an agreement with the Soviet Union on collaboration in space sciences; British scientists are taking part in studies relating to the Soviet mission to Mars and one of its satellites, Phobos.

21 Promotion of the Arts

Artistic and cultural activity in Britain ranges from the highest standards of professional performance to the enthusiastic support and participation of amateurs. London is one of the leading world centres for drama, music, opera and dance, and festivals held in towns and cities throughout the country attract much interest. Glasgow, which has developed into an important artistic centre, has been chosen as European City of Culture for 1990. Many British playwrights, composers, film-makers, sculptors, painters, writers, actors, singers, choreographers and dancers enjoy international reputations. Television and radio play an important role in bringing a wide range of artistic events to a large audience. At an amateur level, activities which make use of local talent and resources take many forms: choral, orchestral, operatic, dramatic and other societies for the arts abound, and increasing numbers of people take an interest in such crafts as spinning, lace-making and wood-carving. Arts activities introduced and developed by the ethnic minorities are also flourishing.

Policies

The general aim of the Government's policies for the arts is to encourage public access to, and enjoyment and appreciation of, artistic activity and the cultural heritage. This is achieved by assisting the provision and development of the performing and visual arts; encouraging the arts to increase their income through better marketing and by attracting contributions from the private sector; maintaining and enhancing the national museums and galleries; helping to preserve objects of importance to the national heritage; and sustaining and developing national collections of literary material, archive and information stores. The Government is maintaining existing levels of support for arts activities; encouraging private funding of the arts by various means including sponsorship; and making the arts more available to people in the regions. National museums and galleries are encouraged by the Government to increase their receipts either through trading activities or by making admission charges. An important concept in its funding policy is the 'arm's length principle' by which government funds are distributed to arts organisations indirectly, through bodies such as the Arts Councils and the British Film Institute; this helps to safeguard against political interference in arts activities.

Administration

Promotion and patronage of the arts are the concern of both official and unofficial bodies. The Government and local authorities play an active part, and a substantial and increasing amount of help also comes from private sources, including trusts and commercial concerns.

The Minister for the Arts, a Minister of State at the Privy Council Office, is responsible for general arts policy and heads the Office of Arts and Libraries which administers government expenditure on national museums and art galleries in England, the Arts Council, the British Library and other national arts and heritage bodies. Responsibility for the upkeep of ancient monuments and historic buildings is exercised by the Department of the Environment; the Historic Buildings and Monuments Commission for England (known as English

Heritage) manages 400 ancient monuments and buildings on behalf of the Secretary of State for the Environment. The regulation of the film industry and of broadcasting is conducted by the Department of Trade and Industry and the Home Office, respectively. The Secretaries of State for Wales and Scotland are responsible for the national museums, galleries and libraries in their countries, and for other cultural matters. In Northern Ireland the Department of Education has responsibility for these affairs.

Local authorities support a wide range of artistic and cultural activities. They maintain more than 1,000 local museums and art galleries and some 4,000 public libraries; provide grant aid for professional and voluntary organisations including orchestras and theatre, opera and ballet companies; and undertake direct promotions through local arts councils. They also contribute to the cost of new or converted buildings for the arts.

Arts education in schools, colleges, polytechnics, evening institutes and community centres is the responsibility of central government education departments, in partnership with local education authorities and voluntary bodies.

Finance Planned central government expenditure through the Office of Arts and Libraries amounts to some £340 million in 1987-88. About 30 per cent of current expenditure is spent on ten national galleries and museums in England, about a fifth on the British Library and two-fifths channelled through the Arts Council to support the performing and visual arts throughout Britain. Grants are also made to bodies including the British Film Institute, the Crafts Council, certain other museums, and to the National Heritage Memorial Fund. The Fund provides assistance to organisations wishing to acquire, for the public benefit, land, buildings, works of art and other objects associated with the national heritage. Additional central government expenditure on arts and libraries in Scotland, Wales and Northern Ireland amounts to over £61 million.

Planned spending on the arts and libraries by local authorities in 1987–88 is about £470 million. Some 80 per cent of current expenditure by the authorities in England is on the public library service, and the remainder on local museums and art galleries.

Industrial and commercial concerns offer a vital and growing source of sponsorship and patronage to a wide range of arts, including exhibitions, concerts and opera seasons, and are often advised by the Association for Business Sponsorship of the Arts and the Arts Councils. The Business Sponsorship Incentive Scheme was launched by the Office of Arts and Libraries in Great Britain in 1984, and in 1987–88 it has available £1·75 million to match new business sponsorships (a similar scheme is to be set up in Northern Ireland in 1987–88). The value of business sponsorship is currently some £25 million a year. The Government has announced its intention to extend 'incentive funding' in order to encourage arts organisations to raise finance from other sources. Further support is encouraged by tax concessions which allow companies and individuals to obtain tax relief on donations to arts charities. An experimental Arts Marketing Scheme introduced in 1987 with funds of £250,000 was aimed at helping organisations find ways of increasing their audiences and improving their financial returns.

Arts Councils The independent Arts Council of Great Britain, established by Royal Charter in 1946, is the main channel for government aid to the performing and visual arts. Its main objects are to develop and improve the knowledge, understanding and practice of the performing and visual arts, increase their accessibility to the public, and advise and co-operate with government departments, local authorities and other organisations. The Council gives financial help and advice to organisations ranging from the major opera, dance and drama companies, orchestras and festivals, to small touring theatres and experimental groups. It encourages such interests as contemporary dance, mime, jazz, literature, photography and art films, and helps professional creative writers, choreographers, composers, artists and photographers by means of a variety of schemes. It also promotes art exhibitions and tours of opera, dance and drama companies and of contemporary music groups, and provides funds for some specialist training courses in the arts.

Under a development programme for the next decade, launched in 1984, the Council is increasing its funding of the arts in the regions. In the first five years support for new activities is being concentrated in five main areas of the arts—art, dance, drama, music and education—focusing on 13 main centres of population throughout England. Greater emphasis is being placed on obtaining funds through partnership arrangements with local authorities and other agencies and from commercial sources. Increased funding and responsibilities are also being given to the regional arts associations (see below).

Organisations in Scotland and Wales receive their subsidies through the Scottish and Welsh Arts Councils, which are committees of the Arts Council of Great Britain with a large measure of autonomy. Northern Ireland has an independent Arts Council with aims and functions similar to those of the Arts Council of Great Britain.

The Arts Council of Great Britain assumed responsibility for London's South Bank arts centre in 1986.

Regional Arts Associations

Regional co-operation in development of the arts is encouraged through 15 regional arts associations in England and Wales, which bring together all those in a region, ranging from local authorities and private companies to local artists, with an interest in improving the artistic life of their area. Their aim is to ensure that the arts are more widely available and that artists receive support at regional as well as national level. They offer financial assistance to artists and arts organisations, and advise on, and in some cases promote, activities. They are financed mainly by the Arts Council, the British Film Institute, the Crafts Council and local authorities, and these interests are represented on their governing bodies. Business sponsorship is also an increasingly important source of regional funds.

Community Arts

The community arts movement has grown rapidly over the last decade, the primary concern of community artists being their impact on a community and their relationship with it. Using many techniques and performing in a variety of places their aim is to make people more aware of their circumstances and to help them develop their creative powers in order to enrich both their own lives and that of the community.

Arts of Ethnic Minorities

There is a wide range of arts activities by ethnic minorities which embrace both the traditional and new forms of artistic expression. In its strategy for developing the arts over the next decade published in 1984 the Arts Council identified black and Asian dance and drama as areas that would receive extra support. The Commonwealth Institute arranges a varied programme of artistic events and festivals, and the Minority Arts Advisory Service is a national information and resource centre for the arts of the ethnic minority communities.

Arts Centres

More than 300 arts centres in Britain provide opportunities for enjoyment of and participation in a range of activities in both the performing and visual arts, with educational projects becoming increasingly important. All are profession-

ally managed and most are supported by volunteer groups. The centres are assisted mainly by regional arts associations and local authorities with some help from the Arts Council and other organisations. Many theatres and art galleries also provide a focal point for the community by offering facilities for other arts.

Local Arts Councils

Local arts councils in towns and communities throughout Britain, some of them founded and supported by local authorities, seek to promote and co-ordinate arts activities in their localities. Industrial and commercial interests also give financial help.

British Council

The British Council promotes knowledge of British culture and literature overseas and maintains libraries in many of the 80 or so countries in which it is represented. The Council initiates or supports overseas tours by British theatre companies, orchestras, choirs, and opera and dance companies, as well as by individual actors, musicians and artists. It promotes fine arts and other exhibitions overseas, organises British participation in international exhibitions and film festivals, maintains film libraries in many of the countries in which it works, and encourages professional interchange in all cultural fields between Britain and other countries.

Broadcasting Organisations

Both BBC radio and television and the independent television companies broadcast a wide variety of drama (including adaptations of novels and stage plays), opera, ballet, and music, and general arts magazine programmes and documentaries. These have won many international awards at festivals such as the Prix Italia and Montreux International Television Festivals. Independent television companies also make grants for arts promotion in their regions.

The BBC has orchestras employing many of Britain's full-time professional musicians, and each week it broadcasts nearly 100 hours of classical and other music (both live and recorded) on its Radio 3 channel. Radios 1 and 2 broadcast popular and light music. The BBC regularly commissions new music, particularly by British composers, and sponsors concerts, competitions and festivals. Each summer it presents and broadcasts the BBC Promenade Concerts at the Royal Albert Hall.

Festivals

Considerable interest and enthusiasm is shown for the 400 or so professional arts festivals which take place in Britain each year. The Edinburgh International Festival, featuring a wide range of different arts, is the largest of its kind in the world and celebrated its fortieth anniversary in 1986. Other annual festivals held in the Scottish capital include International Folk and Jazz Festivals, while the Mayfest takes place in Glasgow. Well-known festivals concentrating on music include the Three Choirs Festival, which has taken place annually for 260 years in Gloucester, Worcester or Hereford; the Cheltenham Festival, largely devoted to contemporary British music; and the Aldeburgh and Bath festivals. Among others catering for a number of art forms are the Royal National Eisteddfod of Wales, the Llangollen International Musical Eisteddfod and the festivals in Belfast, Buxton, Malvern, Chichester, Harrogate, Salisbury, Windsor and York.

DRAMA **Professional** Theatre

Britain is one of the world's foremost countries for theatre, and has a long and rich dramatic tradition. As well as companies based in London and other major cities and towns, numerous touring companies visit a wide range of theatres, festivals and other venues throughout Britain including arts and sports centres and working men's clubs. Contemporary British playwrights who have received international recognition include Harold Pinter, Tom Stoppard, Alan Ayckbourn, Caryl Churchill and David Edgar. The musicals of Andrew Lloyd Webber have enjoyed considerable success both in Britain and overseas. Among the best-known directors are Sir Peter Hall, Trevor Nunn, Peter Brook, John Schlesinger and Terry Hands, while the many British performers who enjoy international reputations include Dame Peggy Ashcroft, Lord (formerly Sir Laurence) Olivier, Sir John Gielgud, Sir Alec Guinness, Vanessa Redgrave, lan McKellen Derek Jacobi. Jeremy lrons and Glenda Jackson. British designers such as John Bury, Ralph Koltai and Carl Toms are internationally recognised.

Britain has about 300 theatres intended for professional use which can seat between 200 and 2,300 people. Some are privately owned, but most are owned either municipally or by non-profit-distributing organisations. About 50 of these house resident theatre companies which receive subsidies from the Arts Council, London is the main focus with a hundred or so West End and suburban theatres, 15 of which are permanently occupied by subsidised companies. These include the National Theatre, which stages a wide range of modern and classical plays in its three auditoria in the South Bank arts centre; the Royal Shakespeare Company, which, while performing in Stratford upon Avon, also produces plays mainly by Shakespeare and his contemporaries, as well as modern work, in its two auditoria in the City's Barbican Centre; and the English Stage Company at the Royal Court Theatre, which produces the work of the most talented new playwrights. Among new theatre projects is one launched in mid-1987 to reconstruct Shakespeare's Globe Playhouse on its original Thames-side site.

Outside London most cities and many large towns have at least one theatre; some, like the Palace Theatre, Manchester, and the Theatre Royal, Nottingham, date from the nineteenth century and have been handsomely restored. Others. like the Crucible Theatre, Sheffield, and the Theatre Royal, Plymouth, have been built to the latest designs. Some universities such as those in Aberystwyth, Exeter and Newcastle upon Tyne have theatres which house professional companies playing to the general public. Most regional repertory companies mount about eight to ten productions a year; some also have studio theatres in addition to the main auditorium, where they present new or experimental drama and plays of specialist interest. Repertory theatres also frequently serve the function of a social centre and meeting place by offering a wide range of events such as concerts, poetry recitals and exhibitions, and by providing restaurants, bars and theatre shops. Successful productions from regional theatre companies often transfer to London's West End, while the largest regional theatres receive visits from the National Theatre or the Royal Shakespeare Company.

Theatre for A number of companies provide theatre for young audiences. Unicorn Theatre Young People for Young People and Polka Children's Theatre, both in London, produce plays specially written for children, and the Whirligig Theatre tours throughout the country. The Young Vic Company in London and Contact Theatre Company in Manchester produce plays for young people. There are numerous Theatre-in-Education companies which perform in schools for all age ranges and abilities. Some of these companies operate independently (such as Theatre Centre, which plays in London and tours further afield), while others are attached to regional repertory theatres such as the Belgrade in Coventry and the Playhouse in Leeds. Most regional repertory theatres also mount occasional productions aimed at vounger audiences, and concessionary ticket prices for those at school, college or university are generally available. There are also a number of puppet companies.

> There has been a marked growth in youth theatres, which now number more than 500 in England alone; both the National Youth Theatre in London and the

Scottish Youth Theatre in Edinburgh offer early acting opportunities to young people.

Dramatic Training

Training for actors and stage managers is provided mainly in drama schools, among which the best known are the Royal Academy of Dramatic Art, the Central School of Speech and Drama, the London Academy of Music and Drama. and the Drama Centre (all in London), and the Bristol Old Vic School, the Royal Scottish Academy of Music and Drama (Glasgow) and the Manchester Polytechnic School of Drama. There are a number of theatre design courses, often based in art schools, which train designers for the stage. Several universities, polytechnics and other colleges offer courses in drama.

Amateur Theatre

There are several thousand amateur dramatic societies throughout Britain. Their work is encouraged by a number of bodies, such as the British Theatre Association, the Central Council for Amateur Theatre, the National Drama Conference, the Scottish Community Drama Association and the Association of Ulster Drama Festivals. Amateur companies sometimes receive financial support from local government, regional arts associations and other bodies.

MUSIC, OPERA AND DANCE

The widespread interest in classical music in Britain is reflected in the large audiences at choral and orchestral concerts, at the opera, which is enjoying increasing popularity, and at performances of dance and chamber music. Rock and pop music are extremely popular, especially among younger people, while folk music, jazz, light music and brass bands also have substantial followings.

Seasons of orchestral and choral concerts are promoted every year in many of the Orchestral and large towns and cities. The principal concert-halls in central London are the Choral Royal Festival Hall, next to which are the Queen Elizabeth Hall and the Purcell Room accommodating smaller-scale performances; the Barbican Hall (part of the Barbican Centre for Arts and Conferences); the Royal Albert Hall; the Wigmore Hall, a recital centre; and St John's, Smith Square.

The leading symphony orchestras are the London Philharmonic, the London Symphony (resident at the Barbican Centre), the Philharmonia, the Royal Philharmonic, the BBC Symphony, the Royal Liverpool Philharmonic, the Hallé (Manchester), the City of Birmingham Symphony, the Bournemouth Symphony, and the Ulster and the Scottish National Orchestras. The BBC's six orchestras provide broadcast concerts which are often open to the public. There are also specialised string and chamber orchestras such as the English Chamber Orchestra, the Academy of St Martin-in-the-Fields, the Academy of Ancient Music, the Bournemouth Sinfonietta, the Northern Sinfonia (Newcastle upon Tyne), the Scottish Ensemble and the Scottish Chamber Orchestra. The London Sinfonietta specialises in performing contemporary music which, in its various forms, appeals to growing audiences, especially of younger people. Groups playing early instruments attract interest throughout the country.

British conductors such as Sir Colin Davis, Sir Neville Marriner and Simon Rattle reach a wide audience through their recordings as well as by their performances, and the works of living composers such as Sir Michael Tippett and Sir Peter Maxwell Davies enjoy international acclaim. The Master of the Queen's Music, Malcolm Williamson, holds an office within the Royal Household with responsibility for organising and writing music for state occasions.

Choirs

The principal choral societies include the Bach Choir, the Royal Choral Society, the Cardiff Polyphonic Choir, the Edinburgh Choral Union and the Belfast

Philharmonic Society. Almost all the leading orchestras have close links with particular choirs. The English tradition of church singing is represented by choirs such as those of King's College Chapel, Cambridge, and Christ Church Cathedral, Oxford. There are many male-voice choirs in Wales and in certain parts of England.

Pop and Rock Music Among the characteristics of modern pop and rock music are the diversity of styles, the frequency with which new styles and stars emerge, and the short lifespan of many groups. Electric guitars and drums usually provide the instrumental basis, but there has been an increasing use of brass instruments, while many groups have adopted synthesisers. In the 1960s and 1970s groups such as The Beatles, The Rolling Stones, The Who, Led Zeppelin and Pink Floyd achieved international success. British groups continue to have enormous appeal to audiences throughout the world and often set new trends in music; some of the more recent groups to have achieved renown are Dire Straits, the Eurhythmics and Five Star. Well-known performers include David Bowie, Elton John and Paul McCartney. In recent years black British musicians have made a large contribution to the development of popular music.

Jazz

Jazz has an enthusiastic following in Britain and is played in numerous clubs and public houses. British musicians such as Barbara Thompson, Stan Tracey, John Surman and Kenny Wheeler have established strong reputations throughout Europe. Festivals of jazz music are held annually at Camden (London) and Bracknell (Berkshire) and at a number of other places.

Opera and Dance

Regular seasons of opera and ballet are given at the Royal Opera House, Covent Garden, London. The Royal Opera and Royal Ballet, which rank among the world's finest companies, are supported by a permanent orchestra. Seasons of opera in English are given by the English National Opera at the London Coliseum and their wide range of productions receive much critical acclaim. Sadler's Wells Theatre is the home of Sadler's Wells Royal Ballet and the New Sadler's Wells Opera Company, and stages many of the London performances of visiting opera and dance companies. Scottish Opera (which celebrated its Silver Jubilee in 1987) has regular winter seasons at the Theatre Royal in Glasgow, and tours mainly in Scotland and northern England. Welsh National Opera has seasons in Cardiff and other cities and, with Kent Opera and Opera 80, provides most of the touring productions in England. Opera North, based in Leeds. undertakes tours in the north of England and Opera Factory stages experimental work in opera and music drama. Opera in Northern Ireland is promoted by Opera, Northern Ireland.

An opera season for which international casts are specially assembled is held every summer at Glyndebourne in Sussex; this is followed by an autumn tour by Glyndebourne Touring Opera using different casts.

Dance and Mime Dance companies also include: London Festival Ballet, which divides its performances almost equally between London and the regions; Ballet Rambert (Britain's oldest ballet company, which re-formed in 1966 as a leading modern dance company); Scottish Ballet, based in Glasgow; London Contemporary Dance Theatre (which provides regular seasons of contemporary dance in London besides touring extensively); and Northern Ballet Theatre, based in Manchester, which also tours widely throughout England. A number of modern dance groups are supported by regional arts associations and about 30 small dance and mime groups by the Arts Council. The three Arts Councils also support individuals and offer commissions to small groups.

Training in Music, Opera and Dance Professional training in music is given mainly at colleges of music. The leading London colleges are the Royal Academy of Music, the Royal College of Music, the Guildhall School of Music and Drama and Trinity College of Music. Outside London the main centres include the Royal Scottish Academy of Music and Drama in Glasgow, the Royal Northern College of Music in Manchester, the Welsh College of Music and Drama, Cardiff, and the Birmingham School of Music. The National Opera Studio provides advanced training courses. The leading dance schools are the Royal Ballet School, the Ballet Rambert School and the London School of Contemporary Dance which, with many private schools, have helped in raising British dance to its present high standard. Dance is now a subject for degree studies at the Laban Centre, the University of Surrey and Dartington College. Courses leading to work with community groups are available at three institutions.

Youth and Music, an organisation affiliated to the international Jeunesses Musicales, encourages attendance by young people at opera, dance and concert performances. Special performances of orchestral music for children include the Robert Mayer Concerts, held in London on Saturday mornings. Ludus Dance in Education Company and Outreach (in the north of England) work mainly with young people. Scottish Ballet Steps Out works in schools throughout Scotland.

Many children learn to play musical instruments at school, and some take the examinations of the Associated Board of the Royal Schools of Music. The National Youth Orchestras of Great Britain, of Scotland and of Wales and other youth orchestras are noted for their high standards. Nearly a third of the players in the European Community Youth Orchestra come from Britain. There is also a National Youth Jazz Orchestra.

FILMS

The British film industry is widely acknowledged to have undergone a revival in the early 1980s. British films, actors and the creative and technical services which support them have been achieving notable successes commercially and in international film festivals and other events. Besides feature films, including co-productions with other countries, the industry produces films for television as well as promotional, advertising, industrial, scientific, educational and training films.

There are about 1,250 cinema screens in Britain and estimated attendances in 1986 amounted to over 72 million, an increase of over 24 per cent since 1984. Cinema attendance figures declined rapidly between the mid-1950s and the early 1980s, a major reason being competition from television. However, cinema-going started to rise in 1985, partly as a result of British Film Year, which was successful in promoting the cinema and British films, and in spite of the growing number of households with video recorders and the greater availability of films on video. There has also been a growth in recent years in the number of grant-aided regional film theatres and film societies offering alternative programmes to those of the commercial cinema chains.

Government Support for the Film Industry

Following a wide-ranging review of the film industry, measures were taken by the Government in 1985 to remove certain statutory controls on cinemas which had become outdated and which were no longer contributing to the industry's development. British Screen Finance, a private company, whose members are drawn from the film and television industries, was set up to provide a source of finance for new film-makers in commercially viable productions who have difficulty in attracting funding elsewhere. The company, investing its own money together with contributions from the Government amounting to £10 million over five years, part-finances the production of low- and medium-budget films involving largely British talent and encourages the early stages of film project development and the production of short films.

An annual government grant of some £10 million is also made to the British Film Institute.

British Film Institute

The development of film and television as an art form is promoted by the British Film Institute, founded in 1933, and in Scotland by the Scottish Film Council. The Institute offers direct financial and technical help through its Film Production Board to new and experienced film-makers who cannot find support elsewhere, and helps to fund film and video workshops in liaison with the Channel Four Television Company. It administers the National Film Theatre in London and the National Film Archive, and has a library from which films and video-cassettes may be hired. The Institute's Information Division has extensive international collections of books, periodicals, scripts, stills and posters. It offers an information service on all aspects of film and television, and produces a range of publications, including the British National Film and Video Catalogue, which records films and video-cassettes available in Britain, and a quarterly journal. Sight and Sound. The Education Department produces study materials and offers an advisory service to the growing number of teachers of film and television at all levels of formal education and in adult education.

The National Film Archive contains over 75,000 films, including newsreels and other miscellaneous items, and over 10,000 television programmes. The National Film Theatre has two cinemas showing films of outstanding historical, artistic or technical interest, and is unique in offering regular programmes unrestricted by commercial considerations or by the age or nationality of the films. Each autumn it mounts the London Film Festival, at which about 150 of the finest new films from all over the world are screened.

The British Film Institute has promoted and helps to fund the development of some 40 regional film theatres, and is involved in establishing film and television centres with a range of activities and facilities in a number of major cities. It also co-operates with the regional arts associations and grant-aids their film activities. In Wales, the Welsh Arts Council acts as the Institute's agent. In Scotland, the Scottish Film Council supports regional film theatres, administers the Scottish Film Archive, and promotes and provides material for media education. Together with the Scottish Arts Council, it set up the Scottish Film Production Fund, which makes grants towards film production in Scotland. Grants in Northern Ireland are made by the Arts Council of Northern Ireland. There is an annual festival of film and television in the Celtic countries which is held in rotation in Scotland, Wales, Ireland and France.

Children's Films

The Children's Film and Television Foundation produces and distributes entertainment films specially designed for children. In view of the rapid decline of the children's matinee movement (only some 50 cinemas now provide programmes for children on Saturday mornings) the Foundation's films are increasingly shown through the medium of video and television.

Production

Training in Film The National Film and Television School, financed jointly by the Government and the film and television industry, offers courses for writers, directors, producers and camera technicians. Training in film production is also given at the London International Film School, the Royal College of Art, and at some polytechnics and other institutions.

Cinema and Film Classification

Cinemas showing films to the public must be licensed by local authorities, Licensing which have a legal duty to prohibit the admission of children under 16 to unsuitable films, and may prevent the showing of any film. In considering the suitability of films the authorities normally rely on the judgment of an independent non-statutory body, the British Board of Film Classification, to which films

offered to the public must be submitted. The Board was set up on the initiative of the cinema industry to ensure that a proper standard was maintained in films offered to the public. It does not use any written code of censorship, but may require cuts to be made before granting a certificate; very rarely, it refuses a certificate. Films passed by the Board are put into one of five categories: U meaning universal—suitable for all; PG, meaning parental guidance, in which some scenes may be unsuitable for young children; 15 and 18, for people of not less than 15 and 18 years of age respectively; and Restricted 18, for restricted showing only at segregated premises to which no one under 18 is admitted—for example, licensed cinema clubs.

Videos

The British Board of Film Classification is also legally responsible for the classification of videos. The system of classification is similar to that for films.

VISUAL ARTS State support for painting and sculpture mainly takes the form of maintenance and purchase grants for the national museums and galleries, purchase grants for municipal museums and galleries, funding for living artists channelled through the Arts and Crafts Councils, and grants towards the cost of art education. The Government also encourages high standards of industrial design and craftsmanship through grants to the Design Council.

All national museums and galleries are financed mainly from government funds. They are free to levy entrance charges to their permanent collections, special exhibitions and outstations at their discretion. Government policy is to give priority to the conservation of the buildings and collections of the national institutions rather than to increasing purchase grants for acquisitions. All the national collections in England, Scotland and Wales are administered by independent trustees. Museums and art galleries maintained by local authorities, universities and private benefactions may receive help in building up their collections through annual government grants administered by the Museums and Galleries Commission (for England and Wales) and the National Museums of Scotland. Financial and practical assistance to both national and local museums and galleries is also given by the Arts Council and by trusts and voluntary bodies including the Calouste Gulbenkian Foundation, the National Art-Collections Fund and the Contemporary Art Society. Pre-eminent works of art accepted by the Government in place of inheritance tax are allocated to public galleries. Financial help may also be available from the government-financed National Heritage Memorial Fund; in recent years, the Fund has made important contributions towards pictures purchased by the Birmingham, Leeds and Manchester City Art Galleries, and by the national galleries and museums.

Support given by the Arts Council, in co-operation with regional arts associations, includes grants towards the public presentation of art, especially contemporary and experimental works, publication of books and magazines, and the commissioning of works of art in public places. It administers the Serpentine Gallery in London while the South Bank Board, a committee of the Council, maintains a collection of contemporary British art and organises exhibitions at the Hayward Gallery in London and throughout the country. The Council also supports a number of art and photography galleries in London and the regions, such as the Arnolfini in Bristol and the Museum of Modern Art in Oxford and provides support for artists and photographers through purchasing and commissioning fellowships and residences. Similar support is given by the Scottish Arts Council to galleries in Scotland such as the Fruitmarket Gallery in Edinburgh. The Welsh and Northern Ireland Arts Councils have galleries in Cardiff and Belfast respectively.

A number of modern British sculptors and painters have high international

reputations, and have received many international prizes and commissions for major works in foreign cities. Among the best known are the late Henry Moore, Elisabeth Frink, Francis Bacon and David Hockney.

Museums and Art Galleries

A major expansion in the number of museums is taking place and many are introducing new display techniques that attract increasing numbers of visitors. Over 68 million people a year attend the 2,000 or so museums and galleries open to the public, which include the major national collections and a wide variety of municipally and independently or privately owned institutions.

The Government is advised on policy matters by the Museums and Galleries Commission, which also promotes co-operation between national and provincial institutions. Nine area museum councils provide technical services and advice on conservation, display, documentation and publicity.

Museums Association The independent Museums Association, to which museums and art galleries and their staffs belong and which also has many overseas members, is a focus for the collection of information and discussion of matters relating to museum administration, and a training and examining body for professional qualifications. It also manages a comprehensive, publicly available database on British museums and has an active publishing programme.

National Collections The national museums and art galleries, which are mostly located in London, contain some of the world's most comprehensive collections of objects of artistic, archaeological, scientific, historical and general interest. They are the British Museum (including the Museum of Mankind), the British Museum (Natural History), the Victoria and Albert Museum, the Science Museum, the National Gallery, the Tate Gallery, the National Portrait Gallery, the Imperial War Museum, the National Army Museum, the Royal Air Force Museum, the National Maritime Museum, the Wallace Collection, the Geological Museum and a group of museums and galleries on Merseyside. Some of the museums in London have branches outside London, examples being the National Railway Museum (York) and the National Museum of Photography, Film and Television (Bradford) which are part of the Science Museum.

New developments at the Tate Gallery include the opening in 1987 of the Clore Gallery to house the paintings bequeathed to the nation by J. M. W. Turner, plans for the construction of a further arts complex and the opening of an outstation in Liverpool, to be called Tate in the North, in 1988. An extension to the National Gallery, to be financed by the Sainsbury family, has also been announced. A national theatre museum opened in 1987 in Covent Garden, London.

In Scotland the national collections are the National Museums of Scotland (formed by the bringing together in October 1985 of the Royal Scottish Museum and the National Museum of Antiquities of Scotland, and embracing the Scottish United Services Museum in Edinburgh Castle) and the National Galleries of Scotland (comprising the National Gallery of Scotland, the Scottish National Portrait Gallery and the Scottish National Gallery of Modern Art). The National Museum of Wales, in Cardiff, has a branch at St Fagan's Castle where the Welsh Folk Museum is housed, an Industrial and Maritime Museum in Cardiff's dockland, the Museum of the Woollen Industry at Drefach Felindre, and the North Wales Quarrying Museum at Llanberis. Northern Ireland has two national museums: the Ulster Museum in Belfast and the Ulster Folk and Transport Museum in County Down.

Other Collections

Other important collections in London include the Royal Armouries in the Tower of London, the Museum of London, Sir John Soane's Museum, the Courtauld

collection and the London Transport Museum. The Queen's Gallery in Buckingham Palace has exhibitions of pictures from the extensive royal collections.

Most cities and towns have museums devoted to art, archaeology and natural history, usually administered by the local authorities but sometimes by local learned societies or by individuals or trustees. Both Oxford and Cambridge are rich in museums, many of them associated with the universities, such as the Ashmolean Museum in Oxford, founded in 1683, the oldest in the world, and the Fitzwilliam Museum in Cambridge. Many private art collections in historic family mansions, including those owned by the National Trusts, are open to the public, while an increasing number of open air museums depict the regional life of an area or preserve early industrial remains (for example, the Weald and Downland Museum in Sussex, the North of England Open Air Museum in Durham, and the Ironbridge Gorge Museum in Shropshire). Skills of the past are revived in a number of 'living' museums like the Gladstone Pottery Museum near Stoke on Trent and the Quarry Bank Mill at Styal in Cheshire. Among the newest museums are the National Horseracing Museum at Newmarket, the Jorvik Viking Centre, a reconstruction of the Viking settlement in York, and a new maritime museum in Portsmouth, housing the restored wreck of the Mary Rose, the flagship of Henry VIII, which sank in 1545 and was raised in 1982. The new Burrell gallery in Glasgow houses a world-famous collection of tapestries, paintings and objets d'art. A new Museum of the Moving Image, due to open on the South Bank of the Thames in 1988, will feature exhibitions of moving images ranging from ancient shadow plays, through television and video, to images produced using optic fibres and lasers.

Apart from their permanent collections, most museums and galleries stage temporary exhibitions on particular themes. There are also a number of national art exhibiting societies, the most famous of which is the Royal Academy of Arts at Burlington House. The Academy holds an annual Summer Exhibition, in which the works of hundreds of professional and amateur artists are included, and important exhibitions during the rest of the year. The Royal Scottish Academy holds annual exhibitions in Edinburgh. There are also children's exhibitions, including the National Exhibition of Children's Art.

Crafts

Government aid for the crafts, amounting to just over £2 million in 1987–88, is administered in England and Wales by the Crafts Council. The Council supports artist craftsmen and women by promoting interest in their work, making it accessible to the public and encouraging the creation and appreciation of articles of fine craftsmanship. Grants are available to assist with training, setting up workshops and acquiring equipment; the Council maintains a selective index of craftsmen and women and a non-selective national register; it arranges exhibitions and seminars and circulates information. It publishes a range of literature, including the *Crafts* magazine, issued every two months. The Council also manages a British crafts shop at the Victoria and Albert Museum. Funding is given to the Welsh Arts Council and the regional arts associations in England for the support of crafts, and also to Contemporary Applied Art, a membership organisation which holds exhibitions and sells work through its London gallery.

Scotland receives a separate government grant which is administered by the Crafts Consultative Committee of the Scottish Development Agency.

Training in Art and Design

Most practical education in art and design is provided in colleges of art (among the best known of which are the Slade School and the Royal College of Art, both in London), further education colleges and private art schools. Four art colleges in London (Camberwell, Central, Chelsea and St Martin's) were merged in January 1986 with other colleges to form the London Institute. Degrees at

postgraduate level are awarded by the Royal College of Art. Art is also taught at an advanced level at the four Scottish Central (Art) Institutions.

Courses at universities and polytechnics concentrate largely on academic disciplines such as the history of art. The leading institutions include the Courtauld and Warburg Institutes of the University of London and the Department of Classical Art and Archaeology at University College, London. Art has a place in all school curricula, and the Society for Education through Art encourages, among other activities, the purchase by schools of original works of art by organising an annual Pictures for Schools exhibition.

The Art Market

London is a major centre for the international art market, and sales of works of art take place in the main auction houses (two of the longest established being Sotheby's and Christie's), and through private dealers. Certain items are covered by export control. These are: works of art and collectors' items over 50 years old and worth £16,000 or more (£4,000 or more in the case of British historical portraits); photographic material over 60 years old and worth £400 or more apiece; and documents, manuscripts and archives over 50 years old, irrespective of value. A licence is required before such items can be exported. The application for a licence is considered by the Department of Trade and Industry, and, if the Department's expert advisers recommend the withholding of a licence, the matter is referred to the Reviewing Committee on the Export of Works of Art. If the Committee considers a work to be of national importance it can advise the Government to withhold the export licence for a specified time to give a public museum or art gallery an opportunity to buy at a fair price.

LITERATURE AND LIBRARIES

The study of literature is included in the curricula of all schools and of most colleges and universities. There are free public libraries throughout the country, private libraries and several private literary societies. Book reviews are featured in the press and on television and radio and there are numerous periodicals concerned with literature. Recognition of outstanding literary merit is provided by a number of awards, including the Booker, W. H. Smith & Son, and Whitbread prizes. Awards to encourage young writers include those of the Somerset Maugham Trust Fund and the E. C. Gregory Trust Fund. Many British writers are internationally recognised and in 1983 the Nobel prize for literature was awarded to the novelist William Golding. Other well-known living authors are Graham Greene, Anthony Burgess, Margaret Drabble and Iris Murdoch, while distinguished British poets include Ted Hughes, Seamus Heaney, Gavin Ewart and Elizabeth Jennings. Ted Hughes is Poet Laureate, a member of the Royal Household who writes verse to mark royal occasions in return for a small stipend.

A public lending right scheme, introduced in 1982, gives registered authors the right to receive payment from a central fund (totalling £2.75 million in 1987–88) for the use of their books borrowed from public libraries.

Authors' Copyright

The author of any original literary, dramatic, musical or artistic work is automatically protected by the Copyright Act 1956 and its related international conventions¹ from the unauthorised reproduction of the work both before and after publication. The author of the work is the first owner of the copyright, and the normal term of copyright in published original works is the life of the author and a period of 50 years after his or her death.

¹ A copyright work first published in Britain has automatic copyright in all countries which are members of the Berne Copyright Convention and the Universal Copyright Convention. The law on copyright is under review.

Literary and Philological Societies

Societies to promote literature include the English Association and the Royal Society of Literature. The British Academy for the Promotion of Historical. Philosophical and Philological Studies (the British Academy) is the leading society for humanistic studies.

Other specialist societies include the Early English Text Society, the Bibliographical Society, the Harleian Society, the Saltire Society, and several societies devoted to particular authors, the largest of which is the Dickens Fellowship. A number of societies, such as the Poetry Society, sponsor poetry readings and recitals. There are also a number of clubs and societies, such as the Poetry Book Society, which distribute selected new books to their members.

Libraries The British Library is the national library of the United Kingdom and ranks with the National Library of Congress in Washington and the Bibliothèque Nationale in Paris as one of the world's greatest libraries. Publishers have a legal obligation to supply the Library with a copy of each new book, pamphlet or newspaper published in Britain. The Humanities and Social Sciences division provides comprehensive information and reference services based on its world-famous collections of some 12 million items of monographs, manuscripts, maps, stamps, newspapers and recorded sound. The Library's exhibition galleries are housed in the British Museum building, where many of the Library's greatest treasures are on permanent display and temporary exhibitions are regularly mounted.

The British Library Science, Technology and Industry division comprises the Document Supply Centre in West Yorkshire and the Science Reference and Information Service in London. The former operates a rapid postal inter-library lending service of journals and photocopies and satisfies some 3 million requests each year. It also has access to many millions of books in other libraries and is the national centre for inter-library lending within Britain and between Britain and countries overseas. The Science Reference and Information Service is Western Europe's most comprehensive collection of material on modern science and technology and holds patent specifications. It provides a referral service for company, product and market information. The Library's Bibliographic Services division processes the material deposited with the Library for inclusion in its catalogues, and publishes the British National Bibliography (which lists all new books and new editions published in Britain) and other bibliographic records. It also provides automated information services for bibliographic data for libraries and their users. The Research and Development Department is a major source of funding for research and development in library and information services.

A new building at St Pancras, to be occupied from 1991, will eventually house in one unit most of the Library's London-based operations.

The National Libraries of Scotland and of Wales, the Bodleian Library of Oxford University and the Cambridge University Library can claim copies of all new British publications under copyright legislation.

Some of the national museums and government departments have important libraries. The Public Record Office contains the records of the superior courts of law and of most government departments, as well as famous historical documents. The Scottish Record Office in Edinburgh serves the same purpose.

Besides a number of great private collections, such as that of the London Library, there are the rich resources of the learned societies and institutions. Examples are the libraries of the Royal Institute of International Affairs, the Royal Commonwealth Society, the Royal Geographical Society, the British Theatre Association, the Royal Academy of Music, the National Library for the Blind and the National Book League.

University Libraries The university libraries of Oxford and Cambridge are unmatched by those of the more recent foundations, although the combined library resources of the colleges and institutions of the University of London total some 9 million volumes, the John Rylands University Library in Manchester contains some 3·4 million volumes, Edinburgh some 2 million, Leeds some 1·8 million, and Birmingham, Glasgow, Liverpool and Aberdeen each have over 1 million volumes. Many universities have important research collections in special subjects; examples include the Barnes Medical Library at Birmingham and the British Library of Political and Economic Science at the London School of Economics.

Special Libraries Many associations and commercial and industrial organisations operate library and information services. Although most of these are primarily intended for use within the organisation, many special libraries can be used, by arrangement, by people interested in the area covered, and the specialist publications held are often available for inter-library lending.

Public Libraries Local library authorities have a duty to provide a free lending and reference library service in their areas, and Britain's network of libraries has a total stock of some 137 million books. About one-third of the total population are members of public libraries. Some areas are served by mobile libraries, and domiciliary services cater for people unable to visit a library. Many libraries have collections of records, audio- and video-cassettes, and musical scores for loan to the public, while a number also lend from collections of works of art, which may be originals or reproductions. Most libraries hold documents on local history, and nearly all provide children's departments, while reference and information sections and art, music, commercial and technical departments meet the growing and more specific demands in these fields. The information role is one of increasing importance for many libraries, and they are making greater use of information technology including microcomputers and reference databases.

The Government is advised on library and information matters by four Library and Information Services Councils or Committees, representing England, Wales, Scotland and Northern Ireland, respectively.

Books

In 1986 British publishers issued almost 58,000 separate titles. Of these about 44,000 were new titles and the remainder reprints and new editions. The British publishing industry devotes much effort to the development of overseas markets, and exports of British books in 1986 amounted to over £474 million. The industry is also distinguished for its interest in new technological developments, including electronic publishing and the development of software for educational and other purposes.

Among the leading organisations representing publishing and distribution interests are the Publishers Association, which has 400 members, and the Booksellers' Association. The Publishers Association, through its associated body the Book Development Council, has been active in promoting the export of British books world-wide.

The British Council publicises British books overseas through its 120 libraries in over 60 countries, participation in international book fairs and a programme of travelling exhibitions. The Council also publishes a monthly periodical, *British Book News*.

The Book Trust, whose membership includes authors, publishers, booksellers, librarians and readers, encourages an interest in books and arranges exhibitions throughout Britain.

22 The Press

More daily newspapers, national and regional, are sold per person in Britain than in most other developed countries. On an average day two out of three people over the age of 15 read a national morning newspaper; about three out of four read a Sunday newspaper. Three out of four adults regularly read a paid-for regional or local newspaper. National papers have a total circulation of $14\cdot 8$ million on weekdays and $17\cdot 5$ million on Sundays though the total readership is considerably greater. There are about 200 daily (Monday to Saturday) and Sunday newspapers, 1,300 weekly newspapers (including business, sporting and religious newspapers) and some 7,500 periodical publications.

The press caters for a variety of political views, interests and levels of education. There is no state control or censorship of the press, but it is subject to the general laws on publication (see p 421). Newspapers are almost always financially independent of any political party; where they express pronounced views and have obvious political leanings, these derive from traditional, proprietorial and other non-party influences. In order to preserve their character and traditions, a few newspapers and periodicals are governed by various trustee-type arrangements. Others have management arrangements to ensure their editors' authority and independence.

In discussions on a 'new world information and communication order' Britain has opposed measures designed to increase governmental regulation of the media or to limit the free flow of information. At the same time, it has reaffirmed its willingness to support efforts to improve communications systems in the developing world.

Unlike most of its European counterparts the British press receives no subsidies and relatively few tax and postal concessions. Newspaper and magazine sales (but not advertising receipts) are zero-rated for value added tax. Newspapers registered with the Post Office receive a concession on postal rates, and there are concessions on 'per-word' rates for international press telegrams and photo-telegrams. Like all postal customers, publishers can obtain reductions in charges for regular bulk postings.

Much greater reliance is now placed on computer-based technology (see p 417) by the national press (the regional press has been using it extensively for some time) and working practices are undergoing profound changes throughout the newspaper industry in response to the challenges posed by the new technology and the need to reduce costs. Using computerised technology sharply reduces the initial capital outlay required to produce new papers: in 1986 two new national newspapers were launched, in February 1987 a London evening paper was relaunched and in April 1987 a new national Sunday appeared.

Newsprint, about two-thirds of which is imported, forms roughly 20 per cent of average national newspaper costs; labour represents about 55 per cent but this proportion is likely to fall with the growing use of new technology. Revenue from sales accounts for varying proportions of income; many newspapers and periodicals derive considerable earnings from their advertising.

Newspaper Ownership Ownership of the national, London and regional daily newspapers is concentrated in the hands of a number of large press publishing groups (the groups

controlling the national press are listed in Table 50). There are, in addition, some 200 independent regional and local newspaper publishers.

Although most enterprises are organised as limited liability companies, individual and partner proprietorship survives. The large national newspaper and periodical publishers are major corporations with interests ranging over the whole field of publishing and communications; some have shares in independent television and radio companies while others are involved in industrial and commercial activities.

The law provides safeguards against the risks inherent in undue concentration of the means of communication. For instance, if it appears that newspaper shareholdings in independent television or independent local radio companies have led or are leading to results contrary to the public interest, the Independent

Table 50: National Newspapers

Title and foundation date	Controlled by	Circulation ^a average Jan.—June 1987
National dailies	or an appear to the other	
'Populars'	II:4 - 1 NI	1 607 000
Daily Express (1900)	United Newspapers Associated Newspapers Group	1,697,229 1,759,455
Daily Mail (1896) Daily Mirror (1903)	Mirror Group Newspapers (1986)	3,122,773
Morning Star (1966)	Morning Star Co-operative Society	25,000
The Star (1978)	United Newspapers	1,288,583
The Sun (1964)	News International	3,993,031
Today (1986)	News International	307,256
	1,110,100,100,100,100,100,100	
'Qualities'	The Detha The American	1 140 017
Daily Telegraph (1855)	The Daily Telegraph	1,146,917 279,762
Financial Times (1888)	Pearson The Guardian and Manchester	219,102
The Guardian (1821)	Evening News	493,582
The Independent (1986)	Newspaper Publishing	292,703
The Times (1785)	News International	442,375
The Times (1705)	Trews international	112,0.0
National Sundays		
'Populars'		
News of the World (1843)	News International	4,941,966
Sunday Express (1918)	United Newspapers	2,214,612
Sunday Mirror (1963)	Mirror Group Newspapers (1986)	3,013,285
Sunday People (1881)	Mirror Group Newspapers (1986)	2,932,472
The Mail on Sunday (1982)	Associated Newspapers Group	1,688,015
News on Sunday (1987)	News on Sunday Ltd	n.a.
'Qualities'		
Sunday Telegraph (1961)	The Daily Telegraph	720,902
Sunday Times (1822)	News International	1,220,021
The Observer (1791)	George Outram & Co/The Observer	773,514

^a Circulation figures are those of the Audit Bureau of Circulations (founded in 1931 and consisting of publishers, advertisers and advertising agencies) and are certified average daily or weekly net sales for the period. The circulation figure of the *Morning Star* is otherwise audited.

n.a. = not available; the newspaper was first published in April 1987.

THE PRESS 415

Broadcasting Authority can, with the consent of the Home Secretary, notify the companies that their programmes may cease to be transmitted. There are additional controls over newspaper interests in cable television services, In addition, it is unlawful to transfer a newspaper or newspaper assets to a proprietor whose newspapers have an average daily circulation amounting, with that of the newspaper to be taken over, to 500,000 or more copies without the written consent of the Secretary of State for Trade and Industry. Except in certain limited cases, consent may be given only after the Secretary of State has referred the matter to the Monopolies and Mergers Commission and received its report.

The National Press

Twelve morning daily papers and nine papers published on Sunday (see Table 50) circulate throughout most parts of Britain, and are known as national newspapers. Traditionally, they have been produced in or near Fleet Street in London with, in some cases, northern editions being printed in Manchester. Recently, a majority of the national papers have moved, or made plans to move. their editorial and printing facilities to other parts of London (including the Docklands) or away from the capital altogether. Today, a new national newspaper launched in 1986, is printed at Poyle (Middlesex), Manchester and Birmingham. The new national daily 'quality' paper, The Independent, which also began publishing in 1986, uses printing presses in Bradford, Peterborough and Portsmouth

> Several newspapers have had very long and distinguished histories: for example, The Observer, first published in 1791, is the oldest national Sunday newspaper in the world, and The Times, one of the most influential of all newspapers and Britain's oldest daily national newspaper, celebrated its two-hundredth anniversary in 1985.

The leading Scottish papers, The Scotsman and the Glasgow Herald, have a considerable circulation outside Scotland.

National newspapers are often thought of as either 'quality' or 'popular' papers on the basis of differences in style, content and format (broadsheet or tabloid. though this is not a rigid distinction). Five dailies and three Sundays are usually described as quality newspapers. The three Sunday qualities and three of the Sunday populars produce colour supplements as part of the paper.

The total circulation of national newspapers amounted to 32 million in 1986 (compared with 36 million in 1973). This figure conceals the fact that the circulation of some newspapers has remained generally steady, while that of others has increased.

Regional Newspapers England

The regional newspapers of England (outside London, over 70 morning or evening dailies and Sundays and some 550 newspapers appearing once or twice a week) provide mainly regional and local news. The daily newspapers also give coverage of national and international affairs. Generally, regional evening newspapers are non-political, while the morning newspapers adopt a more positive political stance and tend to be independent or conservative in outlook.

Of the morning papers the Yorkshire Post (Leeds) and the Eastern Daily Press (Norwich) have circulations of 93,000 and 92,000 respectively, and two provincial Sunday papers—the Sunday Sun (Newcastle upon Tyne) and the Sunday Mercury (Birmingham)—sell 122,000 and 169,000 copies, respectively. Circulation figures of evening papers start at about 11,000 and most are in the 20,000 to 100,000 range; those with much larger sales include the Manchester Evening News (301,000) and the Birmingham Evening Mail (288,000), Wolverhampton's Express and Star (244,000) and the Liverpool Echo (212,000). Weekly papers are of mainly local appeal and are also a valuable medium for local advertising. Most have circulations in the 5,000 to 30,000 range.

There are currently two London evening newspapers, the *London Standard* (with a circulation of some 522,000) and the relaunched *Evening News*. A number of evening newspapers are published in the outer metropolitan area. The hundred or so local weeklies include papers for every district in Greater London, often in the form of local editions of an individual paper.

Wales

Wales has one daily morning newspaper, the *Western Mail*, published in Cardiff; its circulation of 81,000 is mainly in south Wales. In north Wales the *Daily Post*, published in Liverpool, gives wide coverage to events in the area. Evening papers published in Wales are the *South Wales Echo*, Cardiff; the *South Wales Argus*, Newport; the *South Wales Evening Post*, Swansea; and the *Evening Leader*, Wrexham. Their circulation range is between 28,000 and 103,000. North Wales is also served by the *Liverpool Echo*, while the *Shropshire Star* covers parts of north and mid-Wales, and there is coverage to a smaller extent by the *Manchester Evening News*.

The weekly press (some 66 publications) includes English-language papers, some of which carry articles in Welsh, bilingual papers and Welsh-language papers. Welsh community newspapers receive an annual grant as part of the Government's wider financial support for the Welsh language.

Scotland

Scotland has six morning, six evening and three Sunday newspapers. The morning papers, with circulations of between 98,000 and 764,000, are *The Scotsman*, published in Edinburgh; the *Glasgow Herald*; the *Daily Record* (sister paper of the *Daily Mirror*); the Dundee *Courier and Advertiser*; the Aberdeen *Press and Journal*; and the *Scottish Daily Express* (printed in Manchester). The evening papers have circulations in the range of 12,000 to 185,000 and are the *Evening News* of Edinburgh, Glasgow's *Evening Times*, Dundee's *Evening Telegraph*, Aberdeen's *Evening Express*, the *Paisley Daily Express* and the *Greenock Telegraph*. The Sunday papers are the *Sunday Mail*, the *Sunday Post* and the *Scottish Sunday Express* (printed in Manchester).

Weekly and local newspapers number 111, and there are 31 free weekly newspapers.

Northern Ireland Northern Ireland has two morning newspapers, one evening and one Sunday paper, all published in Belfast with circulations ranging from 42,000 to 149,000. They are the *News Letter* (unionist) and the *Irish News* (nationalist), the evening *Belfast Telegraph* and the *Sunday News*. There are 42 weeklies. Newspapers from the Irish Republic, as well as the British national press, are widely read in Northern Ireland.

Ethnic Minority Publications Some 80 newspapers and magazines are produced by members of the ethnic minorities, 40 of which are printed in Asian languages and the rest mainly in English. Most are published weekly or monthly. They include the Asian newspapers *New Life* and *Asian Times*, *The Weekly Gleaner*—a local edition of the *Jamaican Gleaner*—and *West Indian Digest. The Voice* and *Caribbean Times* are aimed at the black population in general as is the magazine *Root*; *Chic* is a fashion and beauty magazine. An Arabic daily, *Al-Arab*, is also produced in Britain.

Free Distribution Newspapers Some 900 free distribution newspapers (mostly weekly and financed by advertising) are now published in Britain, many of which are produced by established newspaper publishers. They have enjoyed rapid growth in recent years and now have an estimated total weekly circulation of over 40 million.

Europe's first daily free distribution paper, the *Daily News*, was launched in Birmingham in 1984.

THE PRESS 417

The Periodical Press

The 8,000 periodical publications are classified as 'consumer general', 'specialised', 'trade', 'technical' and 'professional'. There are also several hundred 'house magazines' produced by industrial undertakings, business houses or public services for the benefit of their employees and/or clients and some 300 free consumer magazines. Directories and similar publications number more than 2,000. The 'alternative' press comprises several hundred further titles, most of them devoted to radical politics, community matters, religion, the occult, science or ecology.

Consumer general and specialised periodicals include magazines for a wide range of interests: women's magazines; publications for children; religious periodicals; fiction magazines; magazines dealing with sport, motoring, gardening, pop music, hobbies and humour; computer magazines; and the publications of learned societies, trade unions, regiments, universities and other organisations.

The weekly periodicals with the highest sales are: Radio Times and TV Times Magazine, which carry details of the week's television and radio programmes on BBC and independent television, respectively, each of which has a circulation of about 3 million, and Woman's Weekly, Woman's Own, Woman, Weekly News (which sells mainly in Scotland) and My Weekly, with circulations in the 600,000 to 1.3 million range. Woman's Realm and the more recently launched Chat have circulations of 625,000 and 584,000 respectively. Of monthly magazines Reader's Digest has the highest circulation (1.6 million). The leading journals of opinion are The Economist, a politically independent publication covering a wider range of topics than its title implies; the New Statesman, which reviews politics, literature and the arts from an independent socialist point of view; the Spectator, which covers much the same subjects from an independent conservative standpoint; Tribune, which represents certain left-wing views within the Labour Party; New Society, covering the sociological aspects of current affairs; and New Scientist, which reports on science and technology in terms which the non-specialist can understand. Articles and features relating largely to BBC television and radio programmes appear in The Listener. Punch, traditionally the leading humorous periodical, and Private Eye, a satirical fortnightly, also cover public affairs. Financial Weekly and Investors Chronicle are two of a number of periodicals for people with business and investment interests.

Weekly 'listings' magazines including *Time Out* and *City Limits* provide details of cultural and other events in London and other large cities.

Literary and political journals and those specialising in international and Commonwealth affairs, published monthly or quarterly, generally appeal to the more serious reader.

Trade, technical, business, scientific and professional journals, publication of which ranges from twice weekly to quarterly, are an important aspect of British publishing and business communication, many having a considerable circulation overseas. There are about 500 publications of significant size covering business and industrial affairs.

Periodicals published in England circulate throughout Britain. In Wales there are also several monthly and quarterly journals published in both Welsh and English; in Scotland there are three monthly illustrated periodicals, a weekly paper devoted to farming interests, a number of literary journals and numerous popular magazines; and Northern Ireland has weekly, monthly and quarterly publications covering business, professional and leisure interests.

New Printing Technology The heavy production costs of newspapers and periodicals continue to encourage publishers to look for ways of reducing these costs, often by using computer systems to control editing and production processes. The 'front end'

or 'single stroking' system, for example, allows journalists or advertisement staff to input 'copy' directly into a video terminal, and then by pressing a button to transform it automatically into computer-set columns of type. Although it is possible for these columns to be assembled electronically on a page-sized screen, turned into a full page, and made automatically into a plate ready for transfer to the printing press, at present very few such systems are in operation. Most involve the production of bromides from the computer setting which are pasted up into columns before being placed in a plate-making machine. The most advanced systems present opportunities for reorganisation which have implications throughout a newspaper office and may give rise to disputes over manning levels and other industrial relations problems. Generally, and most recently in the case of national newspapers, the introduction of computerised systems has led to substantial reductions in workforces, particularly, but not solely, among print workers.

Most of the national newspapers now use some computer technology, while its use in the provincial press, which has generally led the way in adopting new techniques, is widespread. The national newspapers *Today* and *The Independent* are produced by fully computerised systems: journalists type articles directly into and edit them on computer terminals, while colour pictures and graphics are entered into the same system electronically. News International, publisher of three daily and two Sunday papers, uses at its new east London headquarters more than 500 computer terminals, one of the largest systems ever installed at one time anywhere in the world. Many other national papers are also building new computer-based printing plants outside Fleet Street. Where printing plants are some distance from editorial offices, pages for printing are sent by facsimile machine from typesetter to print plant.

Other technological developments include the introduction of full-colour printing, and a switch from traditional letterpress printing to the web-offset litho process.

News Agencies

The four principal news agencies in Britain are: Reuters, an international news organisation registered in London, The Press Association, The Exchange Telegraph Company and Extel Financial.

Reuters is a publicly owned company, employing some 6,850 full-time staff in 80 countries. Of its 1,040 journalists, 730 work outside the United Kingdom. The company's world-wide communications network makes use of satellites, cables and microwave radio, and is connected to computerised message-handling systems and data banks located around the world. Services include general news for the media delivered by teleprinter or fed directly into clients' computers, and specialised economic news and information services for business delivered through video terminals, by teleprinter or by direct computer feed. Reuters serves subscribers in 158 countries including financial institutions, commodities houses, traders in currencies, equities and bonds, newspapers, radio and television stations, and news agencies.

In 1985 Reuters launched its own world service of news pictures, having in the previous year acquired the news pictures business outside the United States of United Press International, the American news agency.

The Press Association Ltd, the British national news agency, is co-operatively owned by the principal daily newspapers of the United Kingdom outside London, and of the Irish Republic. It provides to national and regional newspapers and broadcasting services a complete service of home news, including general and parliamentary news, legal reports, and all types of financial, commercial and sports news, and includes in its services to regional papers the world news of Reuters and Associated Press. News is teleprinted from London, certain items being available in teletypesetting form. Its 'Newsfile' service provides general

THE PRESS 419

home news on screen to non-media as well as media clients by means of telephone and viewdata terminals. Also available on screen is the 'Esmerk' service, an international digest of business information. The photographic department provides newspapers and broadcasters with a daily service of pictures from Britain and overseas; these are wired to the regional press. The NewsFeatures service supplies reports of local or special interest and provides exclusive rights to syndicated articles and visual features.

The Exchange Telegraph Company is the chief supplier of sports information throughout Britain, providing results and comment to every national newspaper, television and radio, as well as overseas news agencies and the CEEFAX and ORACLE teletext services. The Racing News Service is supplied to all betting shops in Britain and the Irish Republic and provides a full news and information service about race meetings, including running commentaries from many meetings. This information is transmitted by Extelnet through six centres in Britain by high-speed digital circuits provided by British Telecom and managed by Extel Communications. Changes in legislation controlling licensed betting offices have encouraged the development of more advanced technology to supply closed-circuit video to betting shops and other subscribers.

Extel Financial supplies information and services to British and international financial institutions. Based in London, it has a network of offices in Europe and the United States and representatives in Japan and South-east Asia. Data are collected from all the world's money exchanges, from companies and from the international press. The agency is a major source of reference material on companies and finance; it provides a comprehensive range of data products on international financial matters; and provides specialised services by computer to banks, insurance companies and other institutions.

The British press and broadcasting organisations are also served by Associated Press Ltd and United Press International, which are British subsidiaries of United States news agencies.

A number of other British, Commonwealth and foreign agencies and news services have offices in London, and there are minor agencies in other cities, mostly specialising in various aspects of newspaper and periodical requirements. Syndication of features is not as common in Britain as in some countries, but a few agencies specialise in this type of work.

Training for Journalism

The National Council for the Training of Journalists (NCTJ), which represents the principal regional press organisations, sets and conducts examinations, and organises short training courses for journalists.

The two main methods of entry into newspaper journalism are selection for a one-year NCTJ pre-entry course at a college of further education or direct recruitment by a regional or local newspaper. Both categories of entrant take part in an apprenticeship scheme consisting of 'on-the-job' training, and block-release courses are provided for those who have not attended a pre-entry course. There are similar courses for press photographers. Postgraduate diploma courses in journalism are provided at University College, Cardiff, and the City University (London). Courses are provided by the Newspaper Society Training Service for regional newspapers in such subjects as newspaper sales, advertising, industrial relations and management.

Specialist training courses for senior journalists from developing countries are run by the Thomson Foundation in London. The Foundation also conducts training courses in developing countries and provides consultants to assist newspapers and magazines in such areas as advertising, management, circulation and the introduction and operation of new technology. It runs an international training centre in collaboration with Xinhua News Agency in Peking.

The Periodicals Training Council is the official training organisation in periodical publishing. It offers a wide range of short courses covering editorial work, advertisement sales and circulation sales. It has special responsibility for editorial training and administers an industry-wide editorial training scheme for those already in employment. The postgraduate courses in journalism at Cardiff and the City University offer periodical journalism options, and the London College of Printing provides postgraduate courses and General Certificate of Education Advanced-level courses in periodical journalism. Reed Business Publishing Ltd, one of the largest publishing companies, runs an in-company training course for suitable candidates from the general public on a fee-paying basis.

Under the Harry Brittain Memorial Fellowship Scheme, administered by the Commonwealth Press Union, several young Commonwealth journalists each year spend three months working and studying in Britain, while the Reuter Foundation, established in 1982, awards six fellowships each year to journalists from developing countries to study at Oxford, Stanford and Bordeaux universities. In 1987 the Reuter Foundation established a fellowship for photo-journalists from developing countries at the School of Journalism, University of Missouri.

Annual Student Media Awards are presented jointly by *The Guardian* newspaper and the National Union of Students to students in higher education who have excelled in college press, television and radio journalism.

Press Institutions

The most important employers' organisations are the Newspaper Publishers Association, whose members publish national newspapers in London and Manchester; the Newspaper Society, which represents the regional, local and London suburban press; the Scottish Daily Newspaper Society, which represents the interests of daily and Sunday newspapers in Scotland; the Scottish Newspaper Proprietors' Association, which represents the owners of weekly newspapers in Scotland; Associated Northern Ireland Newspapers, whose members are the proprietors of weekly newspapers in Northern Ireland; and the Periodical Publishers Association, whose membership embraces the majority of independent publishers of business, professional and consumer journals.

Organisations representing journalists are the National Union of Journalists, with some 32,500 members, and the Institute of Journalists, with about 2,500 members. Two main printing unions are concerned with the press: the Society of Graphical and Allied Trades (SOGAT) '82, with nearly 200,000 members, and the National Graphical Association 1982, with 132,000 members, about one-sixth of whom work on newspapers.

The Guild of British Newspaper Editors is the officially recognised professional body for newspaper editors. It has approximately 450 members and aims to maintain the professional status and independence of editors, defend the freedom of the press, and improve the education and training of journalists. The British Association of Industrial Editors is the professional organisation to which most editors of house journals belong. The Association of British Editors, representing the whole range of media including radio, television, newspapers and magazines, was established in 1984.

The main aim of the Foreign Press Association, founded in 1888, is to help the correspondents of overseas newspapers in their work by arranging press conferences, tours, briefings and a range of other facilities.

The Press Council The Press Council is a voluntary and non-statutory body founded by the newspaper industry in 1953 on the recommendation of the first Royal Commission on the press to safeguard the freedom of the press and to ensure that it conducts itself responsibly. It comprises equal numbers of press and

non-press members, including members of the public, with an independent chairman. Its full aims are to preserve the established freedom of the press; maintain the character of the press in accordance with the highest professional and commercial standards; keep under review any developments likely to restrict the supply of information of public interest and importance; deal with complaints about the conduct of the press or the conduct of individuals and organisations towards the press; report on developments in the press which may tend towards greater concentration or monopoly; make representations on appropriate occasions to the Government, the United Nations and press organisations abroad; publish its adjudications and periodic reports recording its work; and review from time to time developments in the press and the factors affecting them.

Dealing with complaints from the public about the content and conduct of the press is the Council's best-known function. It has no power to impose penalties on publications which it has found guilty of malpractice, but relies on the sanction of adverse publicity. It can censure newspapers, magazines, editors and journalists, and issues adjudications which the editor of the newspaper or magazine criticised by the Council has a moral obligation to publish in full. The Council sometimes initiates inquiries into aspects of press conduct without first receiving public complaints. Its annual reports include press statistics and articles on the structure of leading press groups.

Advertising Practice

Advertising practice in the press (and in the cinema and on posters) is regulated and controlled by the Advertising Standards Authority, an independent body which aims to promote and enforce the highest standards of advertising in the interests of the public and the industry, in particular through the British Code of Advertising Practice. The objects of the code are to ensure that advertisements are legal, decent, honest and truthful; that they are prepared with a sense of responsibility to the consumer; that they conform to the principles of fair competition as generally accepted in business; and that no advertisement brings advertising into disrepute or reduces confidence in advertising as a service to industry and the public.

The Authority's main activities are monitoring advertisements for their compliance with the code; initiating modifications to the code; and dealing with complaints received direct from members of the public. Its main sanction is the recommendation to media that advertisements considered to be in breach of the code should not be published. It also publishes regular reports on the results of its investigations, naming the companies involved.

The Press and the Law

The press has generally the same freedom as the individual to comment on matters of public interest. There are no specific press laws, but certain statutes include sections which apply to the press. There is a legal requirement to reproduce 'the printer's imprint' (the printer's name and place of publication) on all publications, including newspapers. In addition, certain formalities exist relating to the depositing of copies of newspapers and other publications at the British Library and the making of annual returns to Companies House in the rare circumstances in which a newspaper is not printed and published as a joint stock company. Other provisions relate to such matters as the extent of newspaper ownership in television and radio companies; the transfer of newspaper assets; restrictions on the reporting of certain types of court proceedings and on publishing material likely to stir up racial hatred; the right of press representatives to be admitted to meetings of local authorities; restrictions on the publication of advertisement and investment circulars (which are governed by Acts dealing with the publication of false or misleading descriptions of goods and services and with fraud) and of advertisements for

remedies for certain diseases, which are covered by public health legislation; agreements between British Telecom and newspaper proprietors on telegraphic communications, which must comply with telegraphs legislation; restrictions on certain types of prize competition; and copyrights, which come under copyright laws.

Of particular relevance to the press are laws such as those on contempt of court, official secrets, libel and defamation. A newspaper may not publish comments on the conduct of judicial proceedings which are likely to prejudice the courts' reputation for fairness before or during the actual proceedings, nor may it publish before or during a trial anything which might tend to influence the result. The unauthorised acquisition and publication of information of a confidential or security nature from state and official sources is an offence under the Official Secrets Act 1911. Newspapers are also liable to proceedings for seditious libel and incitement to disaffection. The majority of legal proceedings against the press are libel actions brought by private individuals. In such cases, the editor, proprietor, publishers, printer and distributor of the newspaper, as well as the author, may all be held responsible.

Government officials and representatives of the media who form the Defence, Press and Broadcasting Committee have agreed that in some circumstances the publication of certain categories of information might endanger national security. Details of these categories are contained in Defence Notices (D Notices) circulated to the media who are asked to seek advice from the Secretary of the Committee, a senior civil servant, before publishing information in these areas. Compliance with any advice offered by the Secretary is expected but there is no legal force behind it and the final decision on whether to publish lies with the editor, producer or publisher concerned.

23 Television and Radio

Broadcasting is based on the tradition that it is a public service accountable to the people through Parliament. Two public bodies—the British Broadcasting Corporation (BBC) and the Independent Broadcasting Authority (IBA)—provide television and radio services throughout the country. In Wales the Welsh Fourth Channel Authority is responsible for programmes on one channel. The authorities work to broad requirements and objectives defined by Parliament, but are otherwise independent in the day-to-day conduct of business.

This independence carries with it certain obligations over programmes and programme content. Programmes must display, as far as possible, a proper balance and wide range of subject matter, impartiality in matters of controversy and accuracy in news coverage, and must not offend against good taste. Codes of guidance on violence in television programmes, particularly during hours when large numbers of children are likely to be viewing, are operated by both authorities. A code of advertising standards and practice is also operated by the IBA. (The BBC does not broadcast advertisements.) A complaints commission deals with allegations of unfair treatment or infringement of privacy in programmes. Publicly available video recordings are classified according to their suitability for different audiences.

The Home Secretary regulates broadcasting generally, is answerable to Parliament on broad policy questions, and may issue directions on a number of technical and other matters.

Television viewing is by far the most popular leisure pastime in Britain: about 95 per cent of the population watch television, average viewing time per person being about 27 hours a week. Over 50 per cent of households have two or more receivers. The growth in use of video-cassette recorders and equipment (including home computers) for playing television games has for many people increased the choice of entertainment available in the home. (Over 50 per cent of households rent or own a video-cassette recorder.) Practically every home also has a radio set, and car radios and portable sets have made radio a major daytime diversion.

Households with television must buy an annual licence costing £18 for black and white or £58 for colour. Over 18.9 million licences were current in March 1987, about 16.5 million for colour.

The British Broadcasting Corporation The constitution and finances of the BBC are governed by Royal Charter and by a Licence and Agreement. The Corporation of 12 governors including the Chairman (each appointed by the Queen on the advice of the Government and including separate governors for Scotland, Wales and Northern Ireland) is finally responsible for all aspects of broadcasting. Committees advise them on a wide range of matters including the social effects of television, religious broadcasting, music, agriculture, schools broadcasting, further education, programmes for ethnic minorities, science and engineering, and charitable appeals. The governors appoint the Director-General, the Corporation's chief executive officer, who heads the BBC's board of management, which is in charge of the daily operation of the services.

The National Broadcasting Councils for Scotland, Wales and Northern Ireland

control the policy and content of television and radio programmes intended primarily for reception in their areas. Local radio councils, representative of the local community, advise on the development and operation of the BBC's local radio stations.

The domestic services of the BBC are financed principally from the sale of television licences. This is supplemented by profits from trading activities, including television programme exports, sale of recordings and publications connected with BBC programmes, hire and sale of educational films, film library sales, and exhibitions based on programmes. Nearly three-quarters of expenditure on domestic services relates to television. The BBC meets the cost of its local radio stations while some local education authorities help to make educational programmes.

The BBC's External Services are financed by a grant-in-aid from the Foreign and Commonwealth Office.

Recommendations on the financing of the BBC's domestic services were made by a government-appointed committee under the chairmanship of Sir (then Professor) Alan Peacock whose report was published in 1986. The report made proposals for radical changes in the structure of broadcasting. Its central recommendation was that British broadcasting should move towards a sophisticated market system based on freedom of consumer choice with viewers and listeners having the option of purchasing broadcasting services from as many alternative sources of supply as possible. Public finance would, however, continue to be needed for programmes of a public service nature. The report rejected the idea that the BBC should at present be funded by advertising, and this has been accepted by the Government.

The Independent Broadcasting Authority

The IBA's constitution and finances are governed by statute. Its 12 members (three of whom have responsibility for Scotland, Wales and Northern Ireland) are appointed by the Home Secretary. The IBA does not produce radio or television programmes; these are provided by independent programme companies on a regional basis and by the Channel Four Television Company (a wholly owned subsidiary of the IBA). The IBA's main functions are to appoint the companies, supervise programme arrangements, control advertising, and build, own and operate transmitting stations. Its chief executive officer, the Director-General, is supported by a headquarters and regional office staff covering all technical and administrative services.

The IBA is advised by a General Advisory Council, by Scottish, Northern Ireland and Welsh committees, and by committees on educational broadcasting, religious broadcasting, charitable appeals and advertising. A specialist panel advises on advertisements of a medical nature. Local committees advise on local radio services.

The IBA's finance comes from annual rental payments made by the television and radio programme companies for the use of its transmitters. The television programme companies are also liable to pay to the IBA, for transfer to government funds, a levy related to their profits.

The Programme Companies

Fifteen television programme companies hold contracts to provide programmes in the 14 independent television regions (two companies share the contract for London, one providing programmes during the week and the other at the weekend). A contract to provide a national early morning television service, transmitted on the ITV network, is held by an additional company. The companies operate on a commercial basis, deriving most of their revenue from the sale of advertising time. The financial resources, advertising revenue and programme production of the companies vary considerably, depending largely on the size of population in the areas in which they operate. Although

newspapers can acquire an interest in programme companies, there are safeguards to protect the public interest.

In consultation with the IBA, each company plans the content of the programmes to be broadcast in its area. These are produced by the company itself and by other programme companies or bought from elsewhere. There are controls on the number of television programmes which may be bought from abroad. The five largest companies, serving London, north-west England, East Midlands, West Midlands and Yorkshire, provide more programmes for broadcast elsewhere on the national network than do the smaller ones. A common news service is provided by Independent Television News Ltd, a non-profit-making company in which all the programme companies are shareholders. Negotiations for the supply, exchange and purchase of programmes and their co-ordinated transmission through the independent television network take place largely on the Network Programme Committee, which consists of representatives of all the programme companies and of the IBA.

Similar principles apply to independent local radio. The programme companies are under contract to the IBA, operate under its control and are financed by advertising revenue. News coverage is supplied as a common service by Independent Radio News.

Television

Four television channels are in operation. BBC 1 and BBC 2 are owned by the BBC; ITV (Independent Television) is controlled by, and Channel 4 is owned by, the IBA; all four channels broadcast on 625 lines ultra-high frequency (uhf). About 99 per cent of the population live within range of transmission.

Apart from a break during the second world war the BBC has been providing regular television broadcasts since 1936. Over 100 hours of programmes are transmitted by each of the two BBC channels every week; all BBC 2 programmes and the vast majority of those on BBC 1 are broadcast on the national network. Approximately 70 per cent of the BBC's home-produced network programmes for 1986–87 were produced in London and 30 per cent elsewhere in Britain. It is the aim of the Government that at least 25 per cent of programmes on all channels should be made by independent producers.

Through co-ordinated planning on its two services the BBC caters simultaneously for people of different interests. While both services cover the whole range of television output, BBC 1 presents more programmes of general interest, such as light entertainment, sport, current affairs, children's programmes and outside broadcasts, while BBC 2 places greater emphasis on minority interests, but also provides documentaries, travel programmes, serious drama, music, programmes on pastimes and international films. The daytime schedule contains an early morning television service on BBC 1 from Monday to Friday, providing news, information and light entertainment.

The first regular ITV programmes began in London in 1955. On average each of the 14 ITV areas transmitted over 100 hours of television programmes a week in 1986–87, nearly two-fifths of them comprising informative programmes—including news, documentaries, and programmes on current affairs, education and religion. Almost three-quarters of the programmes are produced by the programme companies. A national early morning television service on ITV provides about three hours of news, information, current affairs and light entertainment daily.

Channel 4, which began broadcasting in 1982, provides a national television service throughout Britain, except in Wales which has a corresponding service (Sianel 4 Cymru—S4C—see below). The IBA must ensure that programmes on Channel 4 are complementary to those of ITV, catering for tastes and interests not normally provided for by the original independent service. It must provide a suitable proportion (about 15 per cent) of educational programmes, encourage

innovation and experiment, and include a substantial proportion of programmes from independent producers. Channel 4 broadcasts for approximately 75 hours a week, about half of which is devoted to informative programmes. The service, both nationally and in Wales, is financed by subscriptions from the programme companies in return for advertising time in fourth channel programmes broadcast in their own regions. In Wales, programmes on the fourth channel are run and controlled by the Welsh Fourth Channel Authority appointed by the Home Secretary. The Authority is required to ensure that a substantial proportion (in practice some 23 hours a week) are in Welsh and that those broadcast between 18.30 and 22.00 hours are mainly in Welsh. At other times the Welsh fourth channel shows national Channel 4 programmes.

Britain is one of the world's foremost exporters of television productions. exporting in 1986 programmes worth roughly £60 million. In 1986 British productions won a number of international awards, including first prizes in three of the five programme categories and a special award in the International Emmy Awards in the United States.

A service to cable operators on the continent of Europe is provided by Superchannel, a satellite-relayed television channel owned and operated by most of the independent television companies, which transmits a schedule of programmes selected from ITV and the BBC and acquired series and films.

Cable

Until recently, a small proportion of households with television sets have Services received their television services by cable. The vast majority of cable systems have been used solely to relay broadcast television and radio services in order to improve reception quality, to avoid 'screening' by buildings or the local topography, or because external aerials are not allowed on some residential buildings.

Legislation has been passed to allow a much more general expansion of cable television. It is intended that cable investment should be privately financed (the Government is, however, providing £5 million to the cable television industry to encourage the development of advanced interactive services such as home banking and shopping over broadband cable systems); that regulation should be as light as possible to allow the development of a wide range of services and facilities, and flexible enough to adapt to changing technology; and that there should be certain safeguards for existing broadcasting services. A new national Cable Authority has been established to issue licences, supervise programme services and promote cable development. In 1983, licences were awarded to 11 cable systems to serve as pilot projects, and some existing cable operators, formerly relaying broadcast services, have been licensed to offer additional services on their existing systems. By January 1987 the Cable Authority had awarded a further 11 cable franchises.

In July 1987 over 1.25 million homes were capable of receiving non-broadcast cable services. The number of homes receiving such services was 208,000. Cable operators are represented by the Cable Television Association.

Radio

BBC Radio has four national channels. Radio 1 broadcasts rock and pop music, while Radio 2 provides music and light entertainment as well as being the principal channel for the coverage of sport. Radio 3 broadcasts mainly classical music as well as drama, poetry and short stories, talks and documentaries, and Test Match cricket (on medium wave only). Radio 4 is the main speech network, providing the principal news and current affairs service, as well as drama, comedy, documentaries and panel games; it also carries parliamentary coverage and live relays of major public events. At present, there is no independent national radio service, but legislation passed in 1984 gave the IBA power to build a transmitter network for such a service.

There are 32 BBC local radio stations serving England and the Channel Islands, and regional and community radio services in Scotland, Wales and Northern Ireland, as well as 47 ILR (independent local radio) contractors throughout Britain. Further BBC and ILR stations are planned. About 90 per cent of the population is served by BBC or ILR stations. Broadcasts provide a comprehensive service of local news and information, music and other entertainment, education, consumer advice and coverage of local events, and offer listeners a chance to air their views, often by using the phone-in technique. Some 200 hospitals and 20 universities have closed-circuit radio stations.

In a Green Paper published in February 1987, the Government outlined its proposals for the long-term future of radio broadcasting. The BBC would continue to broadcast nationally programmes of a public service nature, that is, high-quality and wide-ranging programmes that inform, educate and entertain, but additional national radio services run on commercial lines would be introduced to provide greater choice and also competition. A new tier of independent community or special interest local stations would be established.

Educational Broadcasting

Both the BBC and the IBA broadcast educational programmes for children and students in schools of all kinds, as well as for pre-school children, and for adults in colleges and other institutions and in their homes. Broadcasts to schools cover most subjects of the curriculum, while education programmes for adults cover many fields of learning, vocational training and recreation. Supporting material in the form of books, pamphlets, filmstrips, computer software, and audio and video cassettes, is available to supplement the programmes. The BBC broadcasts television and radio programmes made specially for students of the Open University, most of whose 130 or so undergraduate courses contain video and audio components, some of them available on cassette for use with correspondence texts. The BBC Open University Centre also produces educational and training audio-visual materials in collaboration with external agencies such as the Department of Trade and Industry, the Department of Education and Science and the Engineering Industry Training Board. The Open College, a new initiative in vocational training, is due to start in September 1987 with the transmission of courses on Channel 4 ranging from basic literacy and numeracy to high-level technological studies.

BBC
External
Services

The BBC External Services broadcast by radio world-wide, using English and 36 other languages, for nearly 735 hours a week. The main objectives are to give unbiased news, reflect British opinion and project British life, culture and developments in science and industry. News bulletins, current affairs programmes, political commentaries and topical magazine programmes form the main part of the output, with a full sports service, music, drama and general entertainment. Regular listeners were estimated to number more than 120 million in 1986.

The languages in which the External Services broadcast and the length of time each is on the air are prescribed by the Government. Apart from this the BBC has full responsibility and is completely independent in determining the content of news and other programmes. A plan to improve audibility is in progress.

The BBC World Service broadcasts by radio for 24 hours a day in English and is supplemented at peak listening times by programmes of special interest to Africa, South Asia and the Falkland Islands. Plans to broadcast a televised service are being considered by the BBC.

BBC news bulletins and other programmes are re-broadcast by the radio services of many countries. Re-broadcasting involves direct relays from BBC transmissions and the use of recorded programmes supplied through the BBC Transcription Service. There are some 3,000 re-broadcasts weekly of World

Service programmes in about 150 countries. The Transcription Service offers programmes to over 100 countries.

The BBC's English by Radio and Television Service is the most extensive language teaching undertaking in the world. English lessons are broadcast daily by radio with explanations in 30 other languages, and recorded lessons are supplied to some 300 stations free of charge. English by Television programmes are also shown in more than 100 countries. There is a wide range of printed and audio material accompanying these programmes.

Another part of the External Services, the Monitoring Service, listens to and reports on foreign broadcasts, supplying a daily flow of significant news and comment from overseas to the BBC and the Government. This information is also sold to the press, to companies, to academic staff and public bodies.

Radio for overseas is also produced by the radio services of the Central Office of Information (COI). A wide range of recorded material is sent to radio stations in about 100 countries. COI television services provide material such as documentary and magazine programmes for distribution to overseas stations.

Advertising

The BBC does not give publicity to any firm or organised interest except when it is necessary to provide effective and informative programmes. It must not broadcast any commercial advertisement or any sponsored programme.

Advertisements are broadcast on independent television but advertisers can have no influence on programme content or editorial control. Advertisements must be clearly distinguishable and separate from programmes, and the time given to them must not be so great as to detract from the value of the programmes as a medium of information, education or entertainment. Advertising is normally limited to seven minutes in any one hour of broadcasting time, and averaged over the day's programmes must not exceed six minutes per hour. The independent local radio stations are normally limited to a maximum of nine minutes of advertising each hour. The IBA has a code governing standards and practice in advertising on television and radio and giving guidance on the types and methods of advertisement which are prohibited; this includes advertising with a political or religious object or on behalf of cigarettes or betting. Advertisements may not be inserted in certain types of programme, such as broadcasts to schools. A comparable code has been adopted by the Cable Authority, which is responsible for advertising control and policy on cable television. The IBA has endorsed the Principles for Advertising by Direct Satellite Broadcasting which have been drawn up by the European Broadcasting Union.

The Government has no general privileged access to radio or television but government publicity material to support non-political campaigns may be broadcast on independent radio and television. This is prepared through the COI and broadcast and paid for on a normal commercial basis. Short public service items, concerning health, safety and welfare, are also produced by the COI for free transmission by the BBC and independent television and radio.

Parliamentary and Political Broadcasting Parliamentary reporting includes a daily factual and impartial account of proceedings in Parliament. Proceedings, including those of committees, are broadcast on radio, some live and others in recorded form in radio and television news and current affairs programmes. The House of Commons is not televised. The issue has arisen on a number of occasions, with members voting against it, most recently in 1985. An experiment in televising the House of Lords began in 1985; members decided in 1986 that it should continue on a permanent basis.

Ministerial and party political broadcasts are transmitted periodically on radio and television, under rules agreed between the major political parties, the BBC and the IBA, and there are special arrangements for the period following the announcement of a general election.

Both the BBC and the IBA are required to keep themselves informed on the state Research of public opinion about the programmes (and, in the case of the IBA, the advertising) they broadcast. This is done through the continuous measurement of the size and composition of audiences and their opinions of programmes. For television, this work is undertaken through the Broadcasters' Audience Research Board, which is owned jointly by the BBC and the lBA. Information is collected from a panel of about 3,000 homes throughout the country designed to be representative of all private households in Britain with a television set. Meters attached to each television set and linked to a central computer are used to record times of viewing, numbers of viewers and programmes watched. Regular surveys and questionnaires are conducted by both the BBC and the IBA to gauge audience opinion on television and radio services, and public opinion is further assessed by both bodies through the work of their many advisory committees, councils and panels (whose members are drawn from a wide cross-section of the public); the regular holding of public meetings to debate the services provided; and careful consideration of correspondence and telephone calls from listeners and viewers.

Technical One of the most important recent developments has been the introduction of Developments smaller, lighter cameras and video recorders for use on location. Electronic news-gathering equipment, whereby pictures can be transmitted directly to a studio or recorded on video tape on location, reduces significantly the time before an item can be broadcast. Other developments include the use of new types of video tape recorders, the increasing use of computers to generate graphical shapes such as captions and credits, and the improvement of the quality of video tape pictures.

Among recent developments by the BBC are the ACE digital television standards converter, probably the most advanced in the world, which is used to convert pictures between the European and American standards, and the NICAM system used to carry high-quality sound programme signals across the country. Both of these systems have been licensed to commercial manufacturers. The BBC has also developed a data-labelling system for sound programmes which will make programme and station selection much easier. Research includes investigations into stereo sound for television, digital transmission of signals over fibre-optic cables, improved picture displays, and many aspects of satellite broadcasting. IBA engineers were the first in the world to introduce a fully digital field rate standards converter to improve the interchange of programmes between areas using the 525-line system and those using the 625-line system. The IBA is at present engaged in the further development of digital techniques for studio applications and inter-city links, and a study of the future use of satellites for broadcasting which has included the development of a new MAC/packet family of transmission systems for use on future direct broadcast satellites and for distribution on cable networks. The European Broadcasting Union has recommended the MAC/packet family system as the standard for Europe, and the Government has endorsed the use of D-MAC as the system for British direct broadcasting by satellite.

Another IBA development has been an enhanced MAC system for satellite transmission capable of providing wide-screen pictures at a subjective definition of about 1,000 lines, fully compatible with MAC transmissions and capable of being transmitted in a single 27-MHz satellite channel.

It is hoped that by the end of 1989 direct broadcasting by satellite, by which television pictures are transmitted directly from space into people's homes, will be available throughout Britain. The IBA has appointed a programme contractor (British Satellite Broadcasting) for three of the five satellite channels allocated to the United Kingdom by international agreement. It is expected that four separate programme services devoted to news and sport, feature films, children's programmes and general entertainment will be set up. They will be commercial services funded by advertising and subscription.

The BBC and IBA have co-operated in the development of a teletext system, known by the BBC as CEEFAX and the IBA as ORACLE. The use of teletext allows the television signal to carry additional information which can be selected and displayed as 'pages' of text and graphics on receivers equipped with the necessary decoders. The system is also used to provide programme subtitles. which are of great benefit to the deaf and hard of hearing. Over 2 million teletext-equipped sets are in use in Britain. More than 95 per cent of teletext sets throughout the world are based on the British system, and working services operating to the British standard are in use or on trial in 13 countries, including Australia, the Federal Republic of Germany and the United States. British Telecom's public viewdata service, 'Prestel', offers a wide range of information which is transmitted via the telephone and viewed on the television screen.

International Relations

The BBC and the IBA (together with the Independent Television Companies Association) are active members of the European Broadcasting Union. This body manages Eurovision, the international network of television news and programme exchange, and is responsible for the technical and administrative arrangements for co-ordinating the exchange of programmes and news over the Eurovision network and intercontinental satellite links; it also maintains a technical monitoring station where frequency measurements and other observations on broadcasting stations are carried out. The Union provides a forum linking the major public services and national broadcasters of Western Europe and other parts of the world and co-ordinates co-operation in radio and television. Co-operation between governments takes place within the Council of Europe which, in 1986, adopted a British proposal to prepare a convention on the regulation of broadcasting across frontiers.

Visnews is the largest television news agency in the world, supplying world newsfilm to 462 subscribers in 85 countries and running bureaux in 21 capital cities. Worldwide Television News, owned by Independent Television News, the American Broadcasting Company and Channel 9 in Australia, supplies services to over 500 broadcasters in 75 countries. Both agencies supply services via the Eurovision network and by satellite.

The BBC and the IBA are associate members of the Asian Pacific Broadcasting Union, and the BBC also belongs to the Commonwealth Broadcasting Association (CBA), whose members extend to one another such facilities as the use of studios, recording channels and programme contributions.

The BBC provides technical aid, particularly in training the staff of other broadcasting organisations throughout the world; members of its staff are seconded for service overseas.

The Government finances a number of overseas students on broadcasting training courses at the BBC, the British Council (which aims to promote a wider knowledge of Britain and the English language abroad and to develop closer cultural relations between Britain and other countries) and the Thomson Foundation Television College in Glasgow, which sends lecturers and arranges courses overseas.

The BBC and the IBA participate in the work of the International Telecommunications Union, the United Nations agency responsible for regulating and controlling all international telecommunications services (including radio and television), allocating and registering all radio frequencies and promoting and co-ordinating the international study of technical problems in broadcasting. The BBC and the IBA are also represented on the United Kingdom Committee of the International Special Committee on Radio Interference.

24 Sport and Recreation

The British invented and codified the rules of many of the sports and games which are now played all over the world, and there is widespread interest in most kinds of sport throughout the country. Large crowds attend occasions such as the football and rugby league challenge Cup Finals at Wembley Stadium, the international rugby union matches at Twickenham, Murrayfield and Cardiff Arms Park, the Wimbledon lawn tennis championships, the classic horse races, Grand Prix motor racing and the cricket Test matches. Extensive coverage on television (2,700 hours in 1986, compared with 1,200 in 1975) has helped to generate interest in a wide variety of sports and recreations including basketball, darts, snooker, ice skating, skiing and athletics, while American football and baseball are becoming known to the British public through televised transmissions from the United States.

Levels of participation in sport have been rising due mainly to the increases in leisure time and facilities, greater mobility and rising living standards. A growing awareness of the importance to good health of regular exercise has been reflected in the upsurge of interest in jogging, keep fit and dance-related forms of exercise. It has been estimated that nearly a half of the adult population regularly takes part in sport, men still outnumbering women. Walking is by far the most popular recreational activity, followed by swimming, snooker and billiards, darts, angling, athletics, football, squash, golf and cycling.

The Government has long recognised the importance of physical recreation for the general welfare of the community; the social role that sport can play has become more important at a time of high unemployment and rapid change in work and leisure patterns. The ten-year strategy for the development of sport in England drawn up by the Sports Council in 1982 is to encourage further increases in participation, particularly among young people and those nearing retirement; to provide adequate facilities for the whole community, especially in the inner cities and in deprived rural areas; and to continue to encourage high standards of performance. Similar strategies are being followed by the Sports Councils for Scotland, Wales and Northern Ireland. The 'Action Sport' programme, supported by the Manpower Services Commission, is designed principally to encourage young people in inner cities to take up sport and recreation; it is intended that 1,100 sports leaders will be provided to work with disadvantaged groups by mid-1988. The Commission has also supported initiatives aimed at strengthening links between football clubs and their local communities. 'What's Your Sport?', a new campaign to increase participation in sports, was launched by the Sports Councils in April 1987.

Gleneagles Agreement In accordance with the statement on apartheid in sport, agreed by the Commonwealth heads of Government at Gleneagles in Scotland in 1977, the Government seeks to discourage sporting contacts with South Africa and withholds any form of support for such contacts; in a democratic society, however, it cannot prevent these contacts if an individual sportsman or sportswoman or the governing body of the sport concerned chooses to ignore its advice.

ORGANISATION AND PROMOTION

Government policy on sport, active recreation and children's play is co-ordinated in England by the Minister for Sport (a Parliamentary Under-Secretary of State at the Department of the Environment). The Secretaries of State for Wales, Scotland and Northern Ireland have similar responsibilities in their countries. Responsibility for the organisation and promotion of sport is largely decentralised, and most sports and recreation facilities are provided by local authorities.

The Government provides financial and other assistance through a number of official bodies and schemes. This 'arm's length' principle of funding safeguards the long-established independence of sports organisations in Britain. Some of these bodies, such as the Sports Councils and the Countryside Commissions, have specific responsibilities for sport and/or recreation, and help other public and private bodies to provide facilities. Others, like the Forestry Commission, the British Waterways Board, the Nature Conservancy Council and the regional water authorities, provide recreational amenities in addition to their main functions.

Individual sports are run by over 370 independent governing bodies whose functions usually include drawing up rules, holding events, regulating membership, selecting and training national teams and promoting international links. There are also organisations representing people who take part in more informal physical recreation, such as walking and cycling.

A National Coaching Foundation has been established to improve the knowledge and practice of coaching. Its work complements that of the four Sports Councils and the governing bodies of sports.

Sports Councils

Government assistance for the development of sport in Great Britain is channelled through three independent bodies—the Sports Council (for England and for general matters affecting Britain as a whole), the Sports Council for Wales and the Scottish Sports Council. In Northern Ireland the Department of Education makes direct grants towards the capital cost of facilities to local authorities and voluntary sports bodies; thus the Sports Council for Northern Ireland has limited grant-making powers. The Councils will allocate government funds amounting to £46.7 million in 1987-88. They make grants for sports development, coaching and administration to the governing bodies of sports and other national organisations, and administer the national sports centres. Grants and loans are also made to voluntary organisations and local authorities (and, in some cases, to commercial organisations) to assist the provision of sports facilities. In all, the Councils supported well over 3,000 projects in 1986-87. The Sports Council assists British representatives at international sports meetings and encourages links with international and overseas organisations. All four Councils have information centres providing data on a wide range of sports topics. The Sports Council consults with the Central Council of Physical Recreation, comprising members of the national governing and representative bodies of sport and physical recreation in England; the equivalent bodies in Scotland. Wales and Northern Ireland are the Scottish and Welsh Sports Associations and the Northern Ireland Council of Physical Recreation.

Ten regional councils for sport and recreation in England, on each of which sporting, recreational, educational, and local authority interests are represented, advise on investment in and the planning of sporting and recreational facilities and the promotion of sport.

Countryside Commissions

Two Countryside Commissions (one for England and Wales, the other for Scotland) are responsible for conserving and enhancing the natural beauty and amenity of the countryside, and encouraging the provision and improvement of facilities for open-air recreation therein. Government support in $1987{-}88$ amounts to $\pounds19{\cdot}5$ million for the Countryside Commission for England and

Wales of which about $\pounds 6.5$ million will be spent on recreation. This will include grant aiding the provision by local authorities and private bodies of country parks, picnic sites and informal recreation facilities. In Northern Ireland, the Ulster Countryside Committee advises the Department of the Environment on the preservation of amenities and the designation of areas of outstanding beauty.

Private Sponsorship

Increasing numbers of sports receive financial sponsorship from commercial organisations, and its importance as a source of funding is recognised by the Government and the Sports Councils. The estimated value of commercial sponsorship was some £160 million in 1986. Sponsorship may take the form of financing specific events, or of grants to individual sports organisations or sportsmen and sportswomen. The Sports Aid Foundation and Sports Aid Trust raise and distribute funds from industry, commerce and private sponsors in order to assist the training of talented individuals; grants are awarded on the recommendation of the governing bodies of sport. The Scottish and Welsh Sports Aid Foundations and the Ulster Sports and Recreation Trust fulfil similar functions. Sponsorship advisory services are also run by the Sports Councils and the Central Council of Physical Recreation.

Successive governments have negotiated voluntary agreements with the tobacco industry to regulate tobacco companies' sponsorship of sport, the last one having come into force in January 1987. This should lead to a reduction in spending by tobacco firms on sports sponsorship and introduces a ceiling on promotional activity. It prohibits sponsorship of events designed to appeal mainly to spectators of less than 18 years of age and the depiction of any participants in a sport in media advertising and places strict controls on siting of signs at televised events and on the size of health warnings on these signs.

PROVISION OF FACILITIES

Local authorities are the main providers of land and large-scale facilities for community recreation: their estimated expenditure on sport and recreation amounted to some £1,000 million in Britain in 1986–87. Provision of facilities was substantially increased in the 1970s to meet the increasing demand and to encourage further expansion of participation. The facilities provided include parks, lakes, playing fields, sports halls, tennis courts, golf courses, swimming pools and sports centres catering for a wide range of activities.

Increased emphasis is being placed on the need to provide new and improved sports facilities in areas of urban stress. A wide range of sports and recreational projects in urban areas are supported under the Government's urban programme, while the Derelict Land Grant scheme provides funding towards sports and recreational facilities on reclaimed sites. In 1985–86 total urban programme and Derelict Land Grant scheme support for sports and recreational projects amounted to just over £37 million.

Many recreational facilities are also made available by local sports clubs. Some cater for indoor recreation, but more common are those providing sports grounds, particularly for games such as cricket, football, rugby, hockey, tennis and golf. Clubs linked to business firms often cater for a wide range of activities. Commercial facilities include tenpin bowling centres, ice and roller-skating rinks, squash courts, golf courses and driving ranges, curling rinks, riding stables, marinas and, increasingly, fitness centres.

Publicly maintained schools must provide for the physical education of their pupils. All (except those solely for infants) are expected to have a playing field or the use of one, and most secondary schools have a gymnasium. Some have other amenities such as swimming pools, sports halls and halls designed for dance and movement. Sports and recreation facilities are also provided at institutions of higher and further education (some of which have departments of physical

education), and there are 'centres of sporting excellence', often at universities and other colleges, which enable selected young athletes to develop their talents and which provide, where appropriate, for their educational needs.

To achieve the maximum use of sports facilities, the Government and the Sports Councils are encouraging greater community use of sports halls and other facilities owned by schools, colleges and other public and private sector institutions, including football clubs.

The Education (No 2) Act 1986 contains a provision aimed at encouraging the wider adoption of schemes allowing community use of school facilities outside school hours.

Safety at sports grounds and stadiums is governed by legislation, but, following the fire at Bradford City Football Ground in 1985 in which 56 people died, and the subsequent findings of a committee of inquiry, safety standards are being strengthened. The Fire Safety and Safety of Places of Sport Act 1987 is designed to improve provisions for the safety of spectators at sports grounds and indoor sports premises.

Sports Centres

Five national sports centres, four in England and one in Wales, are run by the Sports Council, and provide a range of competition and training facilities. As well as offering residential courses for national teams, coaches and enthusiasts from all over Britain, the centres are used extensively by local sports clubs and the local community. Combined facilities for a range of sports are provided at three of the centres: Crystal Palace in south-east London, Bisham Abbey in Buckinghamshire and Lilleshall in Shropshire. Crystal Palace provides major competition venues for athletics and swimming and a variety of indoor sports. and Lilleshall houses the training school of the Football Association. The other two are specialist centres: the National Water Sports Centre at Holme Pierrepont, Nottinghamshire, which caters for rowing, canoeing and water-skiing; and the Plas-y-Brenin National Centre for Mountain Activities in north Wales. The Sports Council for Wales runs the National Sports Centre for Wales in Cardiff and the National Outdoor Pursuits Centre at Plas Menai in north Wales. The Scottish Sports Council operates three national sports training centres: Glenmore Lodge near Aviemore for outdoor pursuits, Inverciyde at Largs for general sports, and a national water sports training centre on Great Cumbrae Isle in the Firth of Clyde. The Sports Council for Northern Ireland operates one national facility, the Northern Ireland Mountain Centre at Tollymore in County Down.

There are some 1,500 swimming pools and 1,000 sports centres serving local rather than national needs; in Northern Ireland there has been a major development of multi-purpose centres. Several privately run centres cater for specialised interests, such as the British Equestrian Centre, run by the British Horse Society, and the Ludwig Guttmann Sports Centre for the Disabled, Stoke Mandeville.

Children's Play

The Minister for Sport has responsibility for co-ordinating policy on children's play. The Department of Education and Science is concerned with play in schools, and the Department of Health and Social Security with play for the under-fives. The Sports Council provides a central service to assist voluntary organisations to develop opportunities for children's play and recreation.

The National Playing Fields Association

The National Playing Fields Association is a charity with a Royal Charter whose purpose is to preserve, improve and acquire playing fields, playgrounds and play space where they are most needed, in particular for children, young people and handicapped people. There are affiliated associations in the counties of England and Wales and branches in Scotland, Northern Ireland and the Isle of Man.

The British Olympic Association

The British Olympic Association, founded in 1905, is the National Olympic Committee for the United Kingdom and its primary function is to organise the participation of British teams in the Olympic Games. The Association comprises representatives of the 29 governing bodies of those sports in the programme of the Olympic Games (summer and winter). It determines the size of the British teams, raises funds, makes all arrangements and provides a headquarter staff for the management of the teams. It has established the British Olympic Medical Centre, which provides a sport-medical back-up service for competitors before and during Olympic Games. The Association has an education programme aimed at encouraging interest in the Olympic Games and to foster the aims and ideals of the Olympic movement in Britain.

Sport for Disabled People

The British Sports Association for the Disabled, founded in 1961, is the co-ordinating body of sport and recreation for people with all forms of disability. The Association, which receives an annual Sports Council grant, encourages all categories of disabled people, including the mentally handicapped, to take part in physical recreation and sport for pleasure and as an aid to rehabilitation and integration with the able-bodied community. It also seeks to secure the provision and improvement of facilities in consultation with national and local authorities.

In 1986 the Council of Europe adopted a European Charter on Sport for All Disabled Persons designed to facilitate participation in sport by disabled people. The Charter makes recommendations to both governments and sporting bodies concerning the financing of sporting activities for disabled people; their representation on sports policy-making bodies; steps to be taken towards integration into traditional sports clubs and organisations; the training of qualified staff; and the encouragement of the training of disabled people as physical education teachers and coaches.

Sports clubs for disabled people throughout Britain are affiliated to the Association, which helps to organise sporting and physical activities at all levels, including national and international meetings. At present it co-ordinates the activities of seven major disability sports organisations and, on behalf of 450 member clubs, provides regional and national championships in 12 sports. As well as offering advice to local clubs and groups, the Association arranges conferences, seminars and coaching courses, and acts as a co-ordinating body for the various disability groups. It serves as the focal point for national team management and selection at world and Paralympic levels, and organises world events on behalf of international bodies. The Scottish Sports Association for the Disabled and the Welsh Committee on Sport for the Disabled have similar co-ordinating roles in Scotland and Wales.

The first sports stadium in the world designed for disabled people was opened at Stoke Mandeville, Buckinghamshire, in 1969, and is owned and maintained by the British Paraplegic Sports Society. Annual national games organised by several of the associations for the disabled take place at Stoke Mandeville, Crystal Palace in London and at other locations; the Seventh World Wheelchair Games (or Paralympics) were held at Stoke Mandeville in 1984.

Drug Abuse

The problem of drug-taking in sport in order to achieve unfair improvements in performance has been a cause of concern both to the Sports Councils and to the governing bodies of sport. A continuous campaign to tackle the problem, launched by the Sports Council, includes the introduction in all competitive sports of random drug-testing procedures which can lead to a life ban for offending competitors. In Scotland the governing bodies of over 85 per cent of competitive sports have voluntarily introduced testing. The Sports Council finances the analysis of samples taken in Britain and some from abroad and funds research into methods of detection for new drugs that unfairly aid performance. An official report published in September 1987 has recommended the institution of a new and strengthened regime for drug testing as well as tough and consistent penalties for offenders.

The Government and the Sports Council have also taken firm action at international level by supporting the adoption of a European Anti-Doping Charter and by chairing an international working party to examine ways of promoting effective anti-doping measures.

POPULAR SPORTS AND RECREATIONS

Some of the major sports and recreations in Britain are described below. The increased provision of sports centres has improved opportunities for participation in indoor sports such as basketball, volleyball, fencing, judo, karate and other martial arts, gymnastics, squash, table tennis and shooting. Almost all outdoor sports have continued to gain in popularity, including the 'high-risk' activities such as rock-climbing and sub-aqua diving. The number of people enjoying the recreational amenities of the countryside, rivers and coastline is similarly growing. Two sports introduced from overseas in the 1970s which have gained rapidly in popularity are board sailing and hang-gliding; the flying of microlight aircraft is one of the newest sports to achieve a keen following.

Sportsmen may be professionals (paid players) or amateurs. Some sports, such as rugby union, hockey and rowing, are amateur but in others the distinction between amateur and professional status is less strictly defined, or does not exist. The Amateur Athletic Association, for example, allows payments to be made into trust funds held by many top-ranking athletes.

The most popular country sport is fishing, and there are about 4 million anglers in Britain. Many fish for salmon and trout, particularly in the rivers and lochs of Scotland and in Wales, but in England and Wales the most widely practised form of fishing is for coarse fish such as pike, perch, carp, tench and bream. There are separate organisations in England, Wales, Scotland and Northern Ireland for game (salmon and trout), coarse and sea fishing clubs which are co-ordinated in England and Wales by the National Anglers' Council. The National Federation of Anglers in England organises national championships for coarse fishing and enters a team in the world angling championships. In 1985 England won both the world team and individual events. Freshwater fishing usually has to be paid for: most coarse fishing is let to angling clubs by private owners, while trout and salmon fishermen may rent a stretch of river, join a club, or pay for the right to fish by the day, week or month. Coastal and deep-sea fishing are free to all (apart from salmon and sea trout fishing which is by licence only).

Association Football

The largest spectator sport and one of the most popular participation sports, association football was first developed and codified in England during the nineteenth century, and is controlled by separate football associations in England, Wales, Scotland and Northern Ireland. In England over 335 clubs are affiliated to the English Football Association (FA) and over 40,000 clubs to regional or district associations. The full-time professional clubs in England and Wales belong to the Football League (92 clubs) and in Scotland to the Scottish Football League (38 clubs); the clubs play in four divisions in England and Wales and three in Scotland. In Northern Ireland, 14 semi-professional clubs play in the Irish Football League. During the season, which lasts from August until May, attendances at over 2,000 English league matches total about 18 million. The Football Association, founded in 1863, and the Football League, founded in 1888, were both the first of their kind in the world.

The annual competitions for the FA Challenge Cup, the Littlewoods Challenge Cup (formerly the League Cup), the Scottish FA Cup, the Skol Cup (formerly the Scottish League Cup), the Irish Cup and the Welsh FA Cup are organised on a knock-out basis, and the finals are played at Wembley Stadium, London, at Hampden Park, Glasgow, at Windsor Park, Belfast, and on a two-match home and away basis in Wales. British clubs were European club champions (Liverpool three times, Nottingham Forest twice and Aston Villa once) for six consecutive years between 1977 and 1982, and Liverpool became champions again in 1984. Aberdeen won the European Cup-Winners Cup in 1983, as did Everton in 1985; Ipswich Town and Tottenham Hotspur won the Union of European Football Associations (UEFA) cup competition in 1981 and 1984 respectively.

The Sports Councils have made grants to a number of clubs and local authorities to enable them to modernise or expand football facilities in areas of urban deprivation. Grants for various improvements such as all-weather pitches are also made throughout Britain by the Football Associations and the Football Trust, a body financed by the football pools (see p 445) companies; the Football Grounds Improvement Trust, is specifically concerned with ground safety.

Spectator violence associated with football both in Britain and overseas has been a subject of widespread concern, and the Government has worked closely with the football authorities and the governments of other European countries to combat the problem. After serious disturbances involving English supporters at the European Cup Final in Brussels in 1985 which led to the deaths of 38 spectators, English clubs were withdrawn from European competitions for the 1985–86 season by the Football Association; an indefinite ban on the clubs was subsequently imposed by UEFA. Britain has signed a Council of Europe Convention, adopted in 1985, which is designed to eliminate spectator violence at all sporting events, including football. The Government has restricted the sale of alcohol in football grounds and banned its sale on transport to matches, and it is an offence to take cans or bottles into grounds.

Under new public order legislation, the courts have powers to ban convicted hooligans from football matches, and a new offence of disorderly conduct has been created covering behaviour which, while not in itself violent, causes unnecessary distress to others. Possession of smoke bombs and fireworks at or on entry to a football ground has also become an offence. Greater use is being made of closed-circuit television, and Football League clubs in England and Wales have been asked by the Government to introduce membership schemes for specific areas of their grounds by the beginning of the 1987–88 season.

Athletics Amateur athletics is governed in England by the Amateur Athletic Association (which, formed in 1880, was the first national governing body for athletics) and by the Women's Amateur Athletic Association. Scotland, Wales and Northern Ireland have their own associations. International athletics and the selection of British teams are the concern of the Amateur Athletic Association, which also administers coaching schemes. For the Olympic Games and the world and European championships one team represents the United Kingdom.

Athletics is attracting increasing numbers of participants, both men and women, in part because of the success of British competitors and the wide coverage of athletics events on television.

Many British athletes, especially middle-distance runners, have enjoyed distinguished reputations: in 1954, for example, Dr Roger Bannister became the first man to run a mile in under four minutes. Britain has one world champion (Fatima Whitbread in the women's javelin) and three Olympic champions (Sebastian Coe in the 1,500 metres, Daley Thompson in the decathlon and Tessa Sandcrson in the women's javelin). In August 1987 Britons held world records in the 800 metres (Sebastian Coe), the mile (Steve Cram) and the decathlon (Daley Thompson).

Highland Games

Scottish Highland Games, at which sports (including tossing the caber, putting the weight and throwing the hammer), dancing and piping competitions take place, attract large numbers of spectators from all over the world. Among better-known Highland Games are the annual Braemar Gathering, the Argyllshire and Cowal Gatherings and the meeting at Aboyne.

Badminton

The origins of badminton are not clear, but the Badminton Association of England, which together with the Scottish, Welsh and Irish Badminton Unions today organises the sport in Britain, was formed in 1893 and the first tournament was promoted five years later. Badminton expanded rapidly in the 1970s and is played in a variety of locations from sports centres to village halls: up to 2 million people are estimated to play the game in Britain, about 1 million of them regularly. Some 6,250 clubs are affiliated to the four governing bodies and the Badminton Association of England organises the All England Championships each year. The England women's team won a silver medal, and the men's a bronze at the 1984 world team championships. The English team (men and women) are reigning Commonwealth Games champions.

Basketball

Basketball is played in Britain both indoors and outdoors. There are about 1,100 registered clubs and the sport is played in most secondary schools and many other institutions; in all, over 1 million people participate and its popularity has been increasing rapidly. The English Basket Ball Association is the governing body of the sport in England, and there are similar associations in Wales, Scotland and Northern Ireland. The leading English clubs play in a Premier League and the main events of the year are the Carlsberg National Championship Finals, held at Wembley Arena in London, and the men's Prudential National Cup Final, staged at the Royal Albert Hall.

Billiards and Snooker

The character of the present game of billiards was established in Britain at the end of the seventeenth century. Snooker, a more varied game invented by the British in India in 1875, has greatly increased in popularity and become a major spectator sport as a result of widespread television coverage of the professional tournaments. It is estimated that between 5 and 6 million people now play the game. British players have an outstanding record in snooker and the major professional championships have been largely dominated by them. The main tournament is the annual Embassy World Professional Championship, held in Sheffield: British winners of this event include Steve Davis (1981, 1983, 1984 and 1987), Joe Johnson (1986), Dennis Taylor (1985) and Alex Higgins (1972 and 1982). Northern Ireland won the world team championship in 1984, 1985 and 1987, as did England in 1981 and 1983.

The controlling body for the non-professional game is the Billiards and Snooker Control Council, which holds the copyright of the rules. The World Professional Billiards and Snooker Association is responsible for professional players, and it organises professional events.

Bowls

Bowls has been played in Britain since the thirteenth century. The game of lawn bowls is played on a flat green; in the midlands and north of England and in North Wales a variation called crown green bowls is played, so named because the centre of the green is higher than its boundaries. Lawn and crown green bowls are mainly summer games; in winter indoor bowls, played on synthetic greens, is growing in popularity. At one time regarded as a pastime for the elderly, bowls is increasingly played by adults of all ages. Some 4,000 lawn bowling clubs are affiliated to the English, Scottish, Welsh and Irish (Northern lreland Region) Bowling Associations, which, together with the Women's Bowling Associations for the four countries, play to the rules of the International Bowling Board. Other associations, including the English Bowling Federation, are not under the Board's control. The British Crown Green Bowling Association is the governing body of crown green bowls, and has 2,500 affiliated clubs.

The outstanding player is David Bryant who, since 1957, has held 24 singles championships.

Boxing

Boxing in its modern form, which has been adopted in many overseas countries, dates from 1865 when the Marquess of Queensberry drew up a set of rules eliminating much of the brutality that had characterised prize-fighting and making skill the basis of the sport. Boxing is both amateur and professional, and in both strict medical regulations are observed.

All amateur boxing in England, including schoolboy, club, association and combined services boxing (in the armed forces), is controlled by the Amateur Boxing Association. England is divided into eight associations and Scotland and Wales have separate associations; Northern Ireland forms part of the Irish Boxing Association. The associations organise amateur boxing championships as well as training courses for referees, coaches and others, and teams take part in international meetings including the Commonwealth Games and European and world championships; a British team competes in the Olympic Games.

Professional boxing is controlled by the British Boxing Board of Control. The Board appoints inspectors, medical officers and representatives to ensure that regulations are observed and to guard against overmatching and exploitation. British boxing has a distinguished record and at various times British boxers have held European, Commonwealth and world championship titles; Lloyd Honeyghan is the current holder of the International Boxing Federation (IBF) and World Boxing Council world welterweight titles, while Terry Marsh holds the IBF light welterweight world title.

Chess

Chess has increased greatly in popularity and England ranks among the top chess-playing nations (Scotland, Wales and Northern Ireland are separately represented), having 11 Grandmasters at present. There are local chess clubs and leagues throughout the country and the game is widely played in schools and colleges. Important domestic competitions include the Kleinwort Grieveson British Championships, the Peterborough Software National Club Championships, the Leigh Grand Prix, the Pergamon British Lightning Championship and *The Times* British Schools Chess Tournament. The best-known international event is the Foreign and Colonial Hastings Chess Congress. The governing bodies of the game are the British Chess Federation, the Scottish Chess Association (the oldest such body in the world, which celebrated its centenary in 1984) and the Welsh and Ulster Chess Unions.

Cricket

Cricket is among the most popular of summer sports and is sometimes called the English national game, having been played as early as the 1550s. Among the many clubs founded in the eighteenth century was the Marylebone Cricket Club (MCC), which reframed the laws of the game. The Club is based at Lord's cricket ground in north London, the administrative centre of the world game. Men's cricket in Britain is now governed by the Cricket Council, consisting of representatives of the Test and County Cricket Board (representing first-class cricket), the National Cricket Association (representing club and junior cricket) the Minor County Cricket Association, the Scottish Cricket Union, the Irish Cricket Union and the MCC.

Cricket is played in schools, colleges and universities, and in most towns and villages amateur teams play weekly games from late April to the end of September. Throughout Britain there is a network of league cricket contested by teams of Saturday afternoon players.

The main competition in professional cricket is the Britannic Assurance County Championship of three-day and four-day games played by 17 county teams, which also take part in three one-day competitions—the Benson and Hedges Cup, the National Westminster Bank Trophy, and the Refuge Assurance League played on Sundays. Some of the best supported games are the annual series of five-day Cornhill Test matches played between England and a touring team from Australia, India, New Zealand, Pakistan, Sri Lanka or the West Indies. A team representing England usually tours one or more of these countries in the British winter. Texaco Trophy one-day international games also attract large crowds. A World Cup is played every four years, with some of the smaller cricketing nations as well as the major countries competing; India and Pakistan will jointly hold the next one in October 1987.

Cricket is also played by women and girls, the governing body being the Women's Cricket Association, founded in 1926. Women's cricket clubs have regular weekend local fixtures and participate in an annual national club knockout competition. The game is also played at county level and Test match series are played by England against Australia, India, New Zealand and the West Indies. A women's World Cup, in which England competes, is held every four years.

Cycling

Since the 1970s there has been a substantial resurgence of interest in cycling, both as a means of transportation and as a sport and recreation, and this has led central and local government to make greater provision for cycling. Cycling activities include road and track racing, cycle speedway, time-trialling, cross-country racing, touring, bicycle polo and bicycle moto-cross.

The British Cycling Federation acts as the governing body for cycling as a sport, while the Cyclists' Touring Club, formed in 1878, is the national association for recreational cycling and represents cyclists' interests in general. The Scottish Cyclists Union controls the sport in Scotland.

Darts

Darts, an indoor game which has its origins in medieval archery, is played mainly in public houses as a casual recreation to accompany drinking. It has gained in popularity as a result of widespread television coverage of the professional game. It is estimated that about 4 million people play the game regularly. Darts is organised in Britain by the British Darts Organisation, which forms part of the World Darts Federation; its rules have become the code for the world sport. The Organisation arranges events in Britain which bring entrants from as many as 45 countries. Every two years a World Cup tournament is held, which England won in 1985 in Brisbane. The main individual title in the game is the Embassy World Professional Championship. British players have dominated the event and in 1987 the title was won by John Lowe.

Field Sports

British field sports include hunting (on horseback and on foot), fishing, shooting, stalking, falconry and hare coursing. Fox hunting on horseback with a pack of hounds is the most popular British hunting sport, and there are over 400 packs of hounds of all kinds in Britain.

Game shooting as an organised sport probably originated in the early part of the nineteenth century, and takes place in many parts of Britain. Game consists of grouse, black-grouse, partridge, pheasant and ptarmigan, species which are protected by law during a close season when they are allowed to breed on numerous estates supervised by gamekeepers. It is necessary to have a licence to kill game and a certificate issued by the police to own a shot-gun.

The British Field Sports Society and the British Association for Shooting and Conservation look after the interests of all field sports. Public opposition to field sports is not inconsiderable and is organised through such bodies as the League Against Cruel Sports.

Golf

Golf originated in Scotland, where for centuries it has borne the title of the Royal and Ancient Game. The Royal Burgess Golfing Society of Edinburgh, the oldest club in the world, celebrated its 250th anniversary in 1985. The Royal and Ancient Golf Club, the ruling authority of the sport for most of the world, is situated at St Andrews on the east coast. Golf is played throughout Britain and there are golf courses in the vicinity of most towns, some of them owned by local authorities. The main event of the British golfing year, and considered by many to be the world's leading tournament, is the Open Golf Championship; other important events include the Walker Cup match for amateurs and the Ryder Cup match for professionals, which are played between Britain and the United States and Europe and the United States respectively. Among the leading British professional players are Nick Faldo, Sandy Lyle, Mark James, Howard Clark, Ian Woosnam, Bernard Gallagher, Sam Torrance and Laura Davies.

Hockey (Field and Indoor) Variants of hockey have been played in Britain for at least five centuries, and some, like hurling in Ireland and shinty in Scotland, are still played. The modern game was started in the nineteenth century by the Hockey Association (of England), which was founded in 1886. There are similar associations in Scotland, Wales and Ireland. Some 1,000 men's hockey clubs are located throughout Britain, many of which have women's and junior sections; large numbers of boys' schools also play the game. Cup competitions and leagues are played at national, division or district, and club levels both indoors (six-a-side) and outdoors, and there are regular international matches.

The controlling body of women's hockey in England is the All-England Women's Hockey Association (founded in 1895) to which are affiliated some 1,000 clubs and about 2,400 schools; there are similar associations in Scotland, Wales and Ireland. County, club and school championships for both outdoor and indoor hockey are played annually in England. The first international women's hockey match took place in 1896; nowadays the main international match is played each year at Wembley Stadium.

Men's and women's hockey are Olympic sports, and the British men's team won a bronze medal at the 1984 Olympic Games.

England won a silver medal in the sixth World Hockey Cup for men in 1986 held at the national hockey centre in Willesden, north London.

Ice Skating

Icc skating became popular in Britain in the late nineteenth and early twentieth centuries and takes three main forms: ice dancing, figure skating and speed-skating. The governing body for the sport is the National Skating Association of Great Britain, founded in 1879. Participation in ice skating is concentrated among the under-25s. There are over 40 ice rinks in Great Britain, a small number compared with many other European countries. In spite of this, British couples have won the world ice dance championship 17 times in its 32-year history, and Jayne Torvill and Christopher Dean were world ice dance champions for four successive years between 1981 and 1984, European champions in 1981, 1982 and 1984, and gold medal winners at the Sarajevo winter Olympic Games in 1984.

Judo

Judo, a modern combat sport derived from the ancient Japanese arts of ju-jutsu, is growing rapidly in popularity in Britain, both as a sport and general fitness training method and as a self-defence technique. Men and women take part in judo at all levels, and in the last four Olympic Games judo has been one of Britain's most successful sports. Recent leading British exponents of the sport include Karen Briggs, Brian Jacks, Neil Adams, Neil Eckersley, Ann Hughes and Diane Bell. More than 1,200 judo clubs are registered with the British Judo

Association, which is the official governing body of the sport throughout Britain.

Other martial arts, such as karate, kung fu and aikido, are attracting increasing numbers of participants.

Lawn Tennis

The modern game of lawn tennis originated in England in 1872 and the first championships were played at Wimbledon in 1877. The controlling body in Great Britain, the Lawn Tennis Association, was founded in 1888; Northern Ireland forms part of the Irish Lawn Tennis Association. The main event of the season is the annual Wimbledon fortnight, widely regarded as the most important tennis event in the world; this draws large crowds, with the ground at the All England Club accommodating over 30,000 spectators. There are also national and county championships and national competitions for boys' and girls' schools. International events include the Davis Cup and European Cup for men and the Federation Cup for women. Women from Britain and the United States compete annually for the Wightman Cup.

Motor and Motorcycle Sports

Motor racing and rallying, and motor-cycle racing, are popular spectator sports in Britain. The governing body for four-wheeled motor sport is the RAC [Royal Automobile Club] Motor Sports Association. The Association issues competition licences for a variety of motoring competitions and organises both the RAC Rally, an event in the contest for the World Rally Championship, and the British Grand Prix, held in alternate years at the Silverstone and Brands Hatch racing circuits as part of the Formula One World Motor Racing Championship.

British car constructors including Lotus, McLaren and Williams have enjoyed outstanding successes in Grand Prix racing, and Britain has had six world champion motor racing drivers; Nigel Mansell and Derek Warwick are among the most successful of current drivers. Other popular types of motor-car sport include autocross, drag racing and karting.

Motor-cycle sport, governed by the Auto-Cycle Union in England and Wales and the Scottish Auto-Cycle Union and Motor Cycle Union of Ireland (in Northern Ireland), caters for all forms of competition on two or three wheels, from low-speed trials to Grand Prix road racing. The major events of the year are the Isle of Man TT races, the British Road Race Grand Prix and other world championship events for trials, motor-cross, speedway and track racing. The Auto-Cycle Union provides training for young riders under 17 years of age.

Mountaineering and Rock-Climbing

The popularity of mountaineering and rock-climbing has increased steadily. Clubs in the British Mountaineering Council and the Mountaineering Council of Scotland, the representative bodies of the sport, number 330, ranging from national clubs such as the Alpine Club (founded in 1857, the oldest mountaineering club in the world) and the Scottish Mountaineering Club to small regional clubs with 20 to 30 members. The National Centre for Mountain Activities is at Plas-y-Brenin in north Wales, and climbing takes place at other centres managed by the Sports Councils at Plas Menai (north Wales), Glenmore Lodge near Aviemore in Scotland and Tollymore in Northern Ireland. A number of local education authorities and national bodies such as the Outward Bound Trust have also established mountaineering training centres. The most popular areas in Britain for climbing include the Peak District of Derbyshire, the Lake District, Snowdonia in north Wales and the Western Highlands of Scotland.

British mountaineers have taken a leading part in exploring mountain ranges and climbing many of the great mountains of the world, achieving, for example, the first ascent of the Matterhorn in 1865, Everest in 1953, Kangchenjunga in 1955, Everest by its south-west face in 1975, and the south face of Gosainthan (in the Himalayas) in 1982.

Racing

Horse-racing takes two forms—flat racing (from late March to early November) and steeplechasing and hurdle racing (from late August to early June). The Derby, run at Epsom, is the outstanding event in the flat racing calendar. Other classic races are: the Two Thousand Guineas and the One Thousand Guineas, both run at Newmarket; the Oaks, run at Epsom; and the St Leger, run at Doncaster. The most important steeplechase and hurdle race meeting is the National Hunt Festival Meeting held at Cheltenham in March. The Grand National, run at Aintree near Liverpool, is the world's best-known steeplechase and dates from 1837.

The Jockey Club administers all horse-racing in Britain. Its rules are the basis of turf procedure and it also licenses racecourses. Racing takes place on most days (excluding Sundays) throughout the year and about 12,500 horses are in training. British thoroughbreds continue to be a source of the world's best bloodstock.

The racing of greyhounds after a mechanical hare (one of Britain's most popular spectator sports) takes place at 91 tracks licensed by local authorities. Meetings are usually held two or three times a week at each track with at least ten races a meeting. The rules for the sport are drawn up by the National Greyhound Racing Club, the sport's judiciary body. The Stewards of the Club are also responsible for overall administration and organisation. The representative body is the British Greyhound Racing Board.

Riding

Horse riding takes a number of forms ranging from recreational riding to show jumping. The art of riding is promoted by the British Horse Society, which is concerned with the welfare of horses, road safety, bridleways and training. It also runs the British Equestrian Centre at Stoneleigh in Warwickshire. With some 38,000 members the Society is the parent body of the Pony Club and the Riding Club movements, which hold rallies, meetings and competitions culminating in annual national championships. Horse trials are held during the spring and autumn under the auspices of the Society. Three-day events (comprising dressage, cross-country riding and show jumping) held each year include those at Badminton (Avon), Windsor (Berkshire), Bramham (Yorkshire), Burghley House (Lincolnshire), and Wylye (Wiltshire).

Show jumping is promoted by the British Show Jumping Association, which has over 15,000 members and some 1,820 shows affiliated to it. The major show jumping events each year include the Royal International Horse Show at the National Exhibition Centre, Birmingham, the Horse of the Year Show at Wembley in London, and the Olympia International Show Jumping Championships in London.

The authority responsible for equestrian competitions (other than racing) at international level is the British Equestrian Federation, which co-ordinates the events of the British Horse Society and the British Show Jumping Association. British equestrian teams have an outstanding record in international competitions: a British team won the three-day event world championship held in Australia in 1986, and Virginia Leng won the individual gold medal. The British show jumping team won the team silver medal at the 1986 world championships and Nick Skelton won the individual bronze medal. Silver medals were won by both the three-day event and the show jumping teams at the 1984 Olympic Games, while Virginia Leng won the bronze medal in the three-day individual competition.

Rowing

Oarsmanship is taught in many schools, colleges and rowing clubs (including women's clubs) throughout Britain. The governing body of the sport in England is the Amateur Rowing Association, and there are similar bodies in Scotland, Wales and Northern Ireland. There are about 500 rowing clubs, and each year

about 250 regattas and head races are held in England, Wales and Scotland under Association rules.

The University Boat Race (between eight-oared crews from Oxford and Cambridge) originated in 1829 and has been rowed on the Thames almost every spring since 1836. The Head of the River Race (also on the Thames) is the largest assembly of racing craft in the world, with more than 420 eights racing in procession. At the Henley Regatta in Oxfordshire, founded in 1839, crews from all over the world compete each July in various kinds of race over a straight course of 1 mile 550 yards (about 2.1 km).

The National Water Sports Centre at Holme Pierrepont, near Nottingham, has a rowing course of Olympic 2,000-metre standard, as does Strathclyde Park in west-central Scotland. Britain won the gold medal in the coxed fours event at the 1984 Olympic Games.

Rugby Football

Rugby football takes its name from Rugby School, in Warwickshire, where it was first played in 1823. The game is played according to two different codes: rugby union (a 15-a-side game) is played by amateurs while rugby league (a 13-a-side game) is played by professionals as well as amateurs. Rugby union is played under the auspices of the Rugby Football Union in England and similar bodies in Wales, Scotland and Ireland. Important domestic competitions include the Divisional and County Championships in England, the national club knock-out competitions in England and Wales and the Scottish League Cup Championship. The Five Nations Tournament between England, Scotland, Wales, Ireland and France is played each year and there are overseas tours by the national sides and by the British Lions, a team representing Great Britain and Ireland. In May and June 1987, teams from 16 countries competed for the first time for the Webb Ellis Trophy in a tournament in Australia and New Zealand.

Rugby league is played mainly in the north of England. The governing body of the professional game is the Rugby Football League, which sends touring teams representing Great Britain to Australia, New Zealand and Papua New Guinea; annual matches are also played against France. The Challenge Cup Final, the major club match of the season, is played at Wembley Stadium in London. The amateur game is governed by the British Amateur Rugby League Association; matches between England and France take place each year. A national league consisting of ten leading clubs was launched in 1986.

Sailing

Sailing has always been popular in Britain, and the Royal Yachting Association (RYA) has more than 1,500 affiliated clubs and classes. Over 1,000 practical or shore-based teaching centres offer RYA and RYA Scotland courses in sailing, windsurfing and navigation and over 50,000 people attend each year. One of the world's principal regattas takes place each summer at Cowes, and major events are held at other sailing centres. British sailors have undertaken many notable voyages. Sir Francis Chichester was the winner of the first single-handed transatlantic race in 1960 and made a solo circumnavigation of the world in 1966-67. The first non-stop solo circumnavigation was achieved by Robin Knox-Johnston in 1968. In 1976 Clare Francis held the record for the fastest single-handed crossing of the Atlantic, as did Naomi James in 1980. Jo Richards and his crew Peter Allam won a bronze medal in the 'Flying Dutchman' class in the 1984 Olympics.

Board sailing, recognised as a type of yachting, has grown rapidly in popularity since its introduction into Britain in 1974. Penny Way is the women's world windsurfing champion title-holder.

Skiing

When there is sufficient snow, skiing takes place in several parts of Britain. The governing body of the sport is the British Ski Federation and there are separate

national councils. Skiing in Scotland has become very popular, especially at the winter sports centres established in the Cairngorms, Deeside, Glencoe and Glenshec, where ski-runs equal to those in other areas of Europe have been developed. Ski-lifts, ski-tows and professional instruction of a high quality are now available. There are also some 100 artificial ski-slopes throughout Great Britain. Interest in cross-country skiing has been increasing. There are nearly 300 ski clubs in Britain, and it is estimated that about half a million people take part in the sport.

Squash Rackets

Squash rackets originated at Harrow School in the 1850s. The Squash Rackets Association was formed in 1928 to promote and organise the men's game and there are separate governing bodics for Scotland, Wales and Ireland. The governing body of women's squash in England is the Women's Squash Rackets Association, founded in 1934. Squash enjoyed a period of very rapid growth during the 1970s and remains a popular sport. There are 9,000 squash courts in England, and the estimated number of players in Britain is about 3 million. The main tournament is the British Open Championship.

Sub-Aqua

Underwater activities are varied and include exploratory diving (for example, wreck and reef diving), snorkel diving and underwater photography. The British Sub-Aqua Club is the governing body for all underwater activities and promotes underwater exploration, science and sport. The Club is the largest of its kind in the world, with some 35,000 members and more than 1,000 clubs in Britain and overseas. The Scottish Sub-Aqua Club governs the sport in Scotland.

Swimming

Swimming is enjoyed by millions of people in Britain, many of whom learn to swim at public baths, schools or swimming clubs. Instruction and coaching are provided by qualified teachers who hold certificates awarded by the Amateur Swimming Associations in England, Wales, Scotland and Northern Ireland (Northern Ireland forms part of the Irish Amateur Swimming Association) to which nearly 2,000 clubs are affiliated. The Associations also control swimming, diving, synchronised swimming and water polo championships and competitions. For major international competitions, such as the Olympic Games and the world and European championships, England, Scotland and Wales compete together as one team under the auspices of the Great Britain Amateur Swimming Federation. At the 1984 Olympics, Britons won a silver and four bronze medals and at the 1986 world championships two bronze medals.

GAMBLING

Various forms of betting and commercial gaming are permitted in Britain under strict regulations. Spending on gambling fell by about 40 per cent in real terms in the ten years to 1985; in 1985–86 the total money staked (excluding gaming machines) was about £6.870 million.

Gaming includes the playing of casino and card games, gaming machines and registrable bingo. Betting takes place mainly on horse or greyhound racing, and on football matches (usually through football pools). Racing bets may be made at racecourses and greyhound tracks, or through some 10,400 licensed off-course betting offices which take nearly 90 per cent of the money staked. A form of pool betting (totalisator betting) is organised on, and off, course by the Horserace Totalisator Board (HTB). Bookmakers and the HTB contribute a levy to the Horserace Betting Levy Board, which promotes the improvement of horse racing and breeding and the advancement of veterinary science.

In addition, legislation allows local authorities and certain other bodies to hold lotteries.

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Appendix 1

Currency

1.

The unit of currency is the pound sterling divided into 100 new pence (p). There are seven coins: £1; 50p; 20p; 10p; 5p; 2p and 1p.

Bank of England notes are issued for sums of £5, £10, £20 and £50.

Length

Metric Conversions for British Weights and Measures

		1 inch	= 2.54 centimetres
12 inches	=	1 foot	= 30.48 centimetres
3 feet	=	1 yard	= 0.914 metre
760 yards	=	1 mile	= 1.609 kilometres

Area

	1 square inch	= 6.452 square centimetre
144 square inches	= 1 square foot	= 929.03 square centimetres
9 square feet	= 1 square yard	= 0.836 square metre
4,840 square yards	= 1 acre	= 0.405 hectare
640 acres	= 1 square mile	= 2.59 square kilometres

Capacity

			l pint	=	0.568 litre
2 pints	=	=	1 quart	=	1·136 litres
4 quarts	=	=	1 gallon	=	4.546 litres
8 gallons	=	=	1 bushel	=	36.37 litres
8 bushels	-		1 quarter	=	2.909 hectolitres

Weight (Avoirdupois)

	l ounce (oz)	=	28.35 grammes
16 oz	= 1 pound (1lb)	=	0.454 kilogramme
14 lb	= 1 stone (st)	=	6.35 kilogrammes
112 lb	= 1 hundredweight (cw	r(t) =	50.8 kilogrammes
20 cwt (2,240 lb)	= 1 long ton	=	1.016 tonnes
2,000 lb	= 1 short ton	=	0.907 tonne

Double Conversion Tables for Measures and Weights (Use the figures in the central column with those to the left or right, depending on which conversion is required. For example, 1 centimetre = 0.394 inch, and 1 inch = 2.540 centimetres.)

Centi- metres		Inches	Metres	3	Yards	Kilo- metres		Miles	Hec- tares		Acres
2.540	1	0.394	0.914	1	1.094	1.609	1	0.621	0:405	1	2.471
5.080	2	0.787	1.829	2	2.187	3.219	2	1.243	0.809	2	4.942
7.620	3	1.181	2.743	3	3.281	4.828	3	1.864	1.214	3	7.413
10.160	4	1.575	3.658	4	4.374	6.437	4	2.485	1.619	4	9.884
12.700	5	1.969	4.572	5	5.468	8.047	5	3.107	2.023	5	12.355
15.240	6	2.362	5.486	6	6.562	9.656	6	3.728	2.428	6	14.826
17.780	7	2.756	6.401	7	7.655	11.265	7	4.350	2.833	7	17.298
20.320	8	3.150	7.315	8	8.749	12.875	8	4.971	3.237	8	19.768
22.860	9	3.543	8.230	9	9.843	14.484	9	5.592	3.642	9	22.239
25.400	10	3.937	9.144	10	10.936	16.093	10	6.214	4.047	10	24.711

Kilo- gramm	es	Av. Pounds	Litres		Pints	Litres	C	Gallons	Metric Quintal per Hectare	7	Hun- dred- weight er Acre
0.454	1	2.205	0.568	1	1.760	4.546	1	0.220	1.255	1	0.797
0.907	2	4.409	1.136	2	3.520	9.092	2	0.440	2.511	2	1.593
1.361	3	6.614	1.705	3	5.279	13.638	3	0.660	3.766	3	2.390
1.814	4	8.818	2.273	4	7.039	18.184	4	0.880	5.021	4	3.186
2.268	5	11.023	2.841	5	8.799	22.730	5	1.100	6.277	5	3.983
2.722	6	13.228	3.409	6	10.559	27.276	6	1.320	7.532	6	4.780
3.175	7	15.432	3.978	7	12.319	31.822	7	1.540	8.787	7	5.576
3.629	8	17.637	4.546	8	14.078	36.368	8	1.760	10.043	8	6.373
4.082	9	19.842	5.114	9	15.838	40.914	9	1.980	11.298	9	7.169
4.536	10	22.046	5.682	10	17.598	45.460	10	2.200	12.554	10	7.966

Thermometrical Table

0° Centigrade = 32° Fahrenheit

100° Centigrade = 212° Fahrenheit

To convert °Fahrenheit into °Centigrade: subtract 32, then multiply by 5/9; °Centigrade into °Fahrenheit: multiply by 9/5, then add 32.

Bank and Public Holidays in Britain, 1988

Friday 1 January Monday 4 January Thursday 17 March Friday 1 April Monday 4 April

Monday 2 May Monday 30 May Tuesday 12 July Monday 1 August Monday 29 August

Friday 23 December

Monday 26 December

New Year's Day

Bank Holiday (Scotland only)

St Patrick's Day (Northern Ireland only)

Good Friday

Easter Monday (England, Wales and

Northern Ireland only)
Early May Bank Holiday
Spring Bank Holiday

Orangeman's Day (Northern Ireland only)

Bank Holiday (Scotland only)

Summer Bank Holiday (England, Wales

and Northern Ireland only)

Extra day because Christmas Day falls on

a Sunday

Boxing Day

Appendix 2

Guide to Sources

The principal official periodical sources used in the preparation of this edition are given below:

Chapter 1 Land and People

Social Trends, Population Trends, Regional Trends, General Household Survey, Family Expendi-

ture Survey

Chapter 3 Overseas Relations

British Aid Statistics, British Overseas Aid, Arms Control and Disarmament Newsletter,

Developments in the European Community

Chapter 4 Defence

Statement on the Defence Estimates

Chapter 5 Justice and the Law

Criminal Statistics, England and Wales; Criminal Statistics, Scotland

Chapter 8 The Environment

General Household Survey, Housing and Construction Statistics, Digest of Environmental

Protection and Water Statistics

Chapter 10 National Economy

United Kingdom National Accounts (the 'Blue Book'), Employment Gazette

Chapter 11 Framework of Industry

United Kingdom National Accounts (the 'Blue Book'), British Business

Chapter 12 Manufacturing and Service Industries

Report on the Census of Production, Monthly Digest of Statistics, Employment Gazette, British

Business

Chapter 13 Energy and Natural Resources

Digest of United Kingdom Energy Statistics, Development of the Oil and Gas Resources of the

United Kingdom (the 'Brown Book'), United Kingdom Mineral Statistics

Chapter 14 Agriculture, Fisheries and Forestry

Annual Review of Agriculture

Chapter 15 Transport and Communications

Transport Statistics, Great Britain

Chapter 16 Employment

Employment Gazette, New Earnings Survey

Chapter 17 Public Finance

Financial Statement and Budget Report, The Government's Expenditure Plans (the public

expenditure White Paper)

Chapter 19 Overseas Trade

Monthly Review of External Trade Statistics, United Kingdom Balance of Payments (the 'Pink

Book'), British Business

Chapter 23 Television and Radio

BBC's Annual Report and Handbook, IBA's Television and Radio and Annual Report and

Accounts

Full purchasing details of these and other British Government publications can be obtained from the annual list *Government Publications* issued by Her Majesty's Stationery Office (HMSO), which has agents overseas. The list includes all Bills and Acts of Parliament and the official parliamentary report *Hansard*, White Papers, annual reports, reports of official committees and most publications of government departments including the Central Statistical Office, which publishes a *Guide to Official Statistics*. HMSO also sells in Britain many titles published by international organisations such as the United Nations, the European Community and the Organisation for Economic Co-operation and Development.

A Catalogue of British Official Publications not published by HMSO, published by Chadwyck-Healey, lists the more specialised departmental publications. Details of this and other commercial publications are available from bookshops or, overseas, from the British Council.

Index

Items are indexed under England, Northern Ireland, Scotland or Wales only where they are matters peculiar to these countries; otherwise they are indexed under the relevant subject headings.

Bold type in a sequence of figures indicates main references.

A

Abortion 142 Accidents 70, 309-10 fire casualties 70 road 309-10 Administrative tribunals 130 Advertising 268, 421, 428 broadcasting 428 industry 268 press, practice 421 Advisory Board for the Research Councils 389 **Advisory bodies** 52 Advisory, Conciliation and **Arbitration Service 345** Aerospace industry 251-3 Agriculture 53, 56, 57, 77, 293-303, Agricultural and Food Research Council 302-3, 391-2 Agricultural Development and Advisory Service 301 agricultural workers 300-1 health and safety 301 tenancy legislation 300 and Fisheries, Department of, for Scotland 56 animals 294-6, 301-2, 303 diseases, control of 301-2, 303 welfare 295-6 Common Agricultural Policy 298-9 crofts 299 crops 296 Department of (Northern Ireland) 57 diseases and pests, control of 301-2 education and training 303 European Community policies 77 exports 296-8 farms 293-4 Fisheries and Food, Ministry of 53 government policy 298-301 grants and subsidies 299 health and safety 301

horticulture 296 land use 293 livestock 294-6 cattle 294-5 pigs 295 poultry 295 sheep 294-5 welfare 295-6 marketing 298 co-operatives 298 pesticides 302 plant diseases and pests, control of 302 price guarantees 299 production 294-6 professional, scientific and technical services 301 protection of countryside 300 research 302-3, 391-2 smallholdings 299 tenancy legislation 300 veterinary medicinal products 302 Aid to developing countries 79-80, 82-3. **91-5** bilateral aid 92 European Community 79-80 evaluation 94 financial aid 92 multilateral aid 94 official and other flows 91-2 projects 93 technical co-operation 82-3, 93-4 voluntary agencies 95 Aircraft 103, 251-3, 321-4 aerospace industry 251-3 civil 321-4 military 103 Alcoholic drinks 257-9 Alcoholism 145 Ambulance services 140 Ancient monuments 195 **Arbitration Committee, Central** 345-6

Architecture 196 Armed forces 100-3 Arms control and disarmament 86-8 chemical and biological weapons 87 conventional weapons 87-8 nuclear weapons 86-7 Army 102 combat forces 102 see also Defence Arts 53, 397-411 administration 397-8 and design, training 408-9 and Libraries, Office of 53 art market 409 British Council 400 broadcasting and 400 centres 399-400 community arts 399 Councils 398-9 crafts 408 dance 402, 403, 404 drama 400-2 ethnic minorities 399 festivals 400 films 404-6 finance 398 government policies 397 literature and libraries 409-11 local arts councils 400 museums and art galleries 407-8 music 402-3, 404 opera 402, 403, 404 promotion of 397-411 Regional Arts Associations 399 visual 406-9 Atomic energy see Nuclear energy **Auction houses 269**

B

Balance of payments 382–4
capital flows 382–3
external assets and liabilities 384
Bank of England 362–3
Banking 362–6
see also Financial institutions
Beverages industry 257–9
Birth rates 20
Blood transfusion 140
Books 411
Botanical gardens 394
Britain 1–4, 19–30

economic and social pattern 24-30 historical outline 2 physical features 1-2 population 19-24 social framework 19-30 see also England, Northern Ireland. Scotland and Wales **British Airways** 322 **British Broadcasting Corporation** 423-4, 425-6, 426-8 see also Broadcasting **British Coal Corporation 279** British Council 72-3, 400 **British Film Institute** 405 **British Nuclear Fuels 285 British Olympic Association 435** British Overseas Trade Board 381-2 British Rail 313-17 British School Technology 169-70 **British Technology Group 233** see also Science and technology British Telecom 325-7 see also Telecommunications Broadcasting 328, 400, 423-30 advertising 428 arts, broadcasting of 400 audience research 429 British Broadcasting Corporation 423-4, 425-6, 426-8 External Services 427-8 radio 426-7 television 425-6 cable services 328, 426 educational 427 Independent Broadcasting Authority 424-6 programme companies 424-5 television 425-6 international relations 430 parliamentary 428 political 428 technical developments 429-30 Budget 353 Building see Construction industry Building societies 191, 366–7 Bus services 312-13 **Business and Technician Education Council** 176 **Business services** 268–9

C

Cabinet 49-50

meetings 49–50 Office 50 Cable TV 328, 426 Cancer screening 146 Capital 356, 382-3 flows 382-3 taxes on 356 see also Taxation and duty Cars see Motor vehicles Catering trades 267-8 Ceramics 254 **Channel Islands** 4 historical outline 4 Charities 393 research sponsored by 393 Chemicals industry 250-1 Children 124-6, 141-2, 150-2, 157, 172, 405, 434 child benefit 157 child care 150-2 adoption 152 custodianship 152 children's play 434 films for 405 health services for 141-2, 172 in trouble 124-6 Churches 205-8, 209-10 Anglican Communion 206-7 co-operation among 209-10 England, Church of 205-6 Free Churches 207-8 non-Christian religious communities 209 Roman Catholic Church 208 Scotland, Church of 207 Civil aviation 321–4 air traffic 322 airline operations 322 British Airways 322 airports 323-4 development 324 ownership and control 323-4 Authority 321–2 government responsibilities 321 helicopters 323 navigation services 323 safety 323 traffic control 323 Civil defence 104-5 Civil engineering 263 Civil Service 58-61 central management 59 conditions of service 60

Diplomatic Service 59-60

political and private activities 60-1 promotion 60 recruitment and training 60 security 61 structure 59 Clothing industry 259-61 Coal 238, 279-81 British Coal Corporation 279 consumption 281 development 279-81 European Coal and Steel Community 238 industry 279-81 production 279 research 281 **Commission for Racial** Equality 29 Commodity, shipping and freight markets 373 Commons, House of see Parliament Commonwealth 53, 80-84 consultation 81-2 dependencies 83-4 Foreign and, Office 53 organisations 83 Secretariat 80 technical co-operation 80-1 Communications see Post Office and **Telecommunications** Companies 236-7, 241-2, 268-9, 354-6, 370 advertising 268 business and technical advisory services 236 company law 241-2 computer services 268 corporation tax 354-6 factoring 370 management consultancy 268 market research 268-9 small firms 236-7 Competition policy 130, 238-41 anti-competitive practices 239 European Community policy 240 financial services 240 monopolies and mergers 238-9 public sector 239 Restrictive Practices Court 130 restrictive trade practices 239-40 Comptroller and Auditor General 352

Computers 169, 268

in schools 169

services 268

Confederation of British Industry 344 Conference centres 269 Conservation 194-200, 300, 394. 432 - 3agriculture and protection of countryside 300 ancient monuments 195 architectural standards 196 areas 195 areas of outstanding natural beauty 197-8 coastal 196-7 Countryside Commissions 197, 432-3 derelict land, reclamation 199-200 environmental improvement 200 green belts 196 historic buildings 195 land registers 200 national parks 197-8 national scenic areas 197-8 nature conservation 198-9 open country 198

tree preservation 196
zoological gardens 394
Construction industry 262–3
civil engineering projects 263
housing construction 262
overseas construction 263

public rights of way 198

research and advisory services 263 structure 262

Consumer protection 240–1 consumer advice and information 241 Copyright, authors' 409

Coroners' courts 119

Council for National Academic Awards 175

Countryside Commissions 197, 432–3

Courts 57, 114, 115–19, 127–30

civil 127–30 coroners' 119 criminal 115–19

grant of bail by 114 Restrictive Practices Court 130 Scottish Courts Administration 57

Crafts 408

Crime 107–30, 133–4 criminal courts 115–19 *appeals* 117

Criminal Injuries Compensation Scheme 109 criminal justice 107–30 criminal proceedings, aid in 133–4 changes in system 133–4 criminals, treatment of 119–26 criminological research 109 statistics 108–9

Crown Office 57

Crown Prosecution Service 53 Crown. The

see Monarchy and Royal family Cultural and social life 10, 12, 14–15, 19

HM Customs and Excise 53, 358 duties 358

D

Dance 402, 403, 404 dance and mime companies 403 training 404 Defence 53, 97-105, 387 armed forces 100-1 Army 102 civil 104-5 combat forces 101-3 commitments outside NATO area 100 contribution to NATO 98-9 Europe and NATO 99-100 Ministry of 53 NATO co-operation 104 NATO strategy 98 Northern Ireland 100 organisation and management 97-8 overseas commitments 100 personnel 100-1 procurement 103-4 production 104 research and development 103-4, 387 reserve and auxiliary forces 101 Royal Air Force 103 Royal Navy 101-2 sales 104 Strategic Defence Initiative 104 strategic nuclear forces 101 see also North Atlantic Treaty Organisation Dependencies 83-4 Deposit-taking institutions 363-7 Design 228, 408-9

industrial 228

435

training in 408-9

Development see Economy

and Regional development

Diplomatic Service 59–60

Disabled people 149-50, 158, 335,

benefits and pensions 158
employment services for 335
social services for 149–50
sport for 435
Discount houses 366
Divorce 21
Drama 400–2
amateur theatre 402
professional theatre 400–1
training 402
young people, theatre for 401–2
Drugs 142–3, 435–6

E

East-West relations 78, 85-6 Berlin 86 CSCE 85-6 Economy 7-10, 11, 13-14, 17-19, 24-30, 57, 211-19, 223-9 background 211-14 economic growth 212 employment 213 inflation and competitiveness 212 investment 212-13 oil, offshore 214 output, industrial 212 productivity 213, 223-9 sterling 214 trade 213-14 economic and social pattern 24-30 Economic Development, Department of (Northern Ireland) 57 government policy 214-16 economic management 216 fiscal policy 215 monetary policy 215 supply side policies 215-16 national income and expenditure 216 see also Balance of payments; Industry; Public finance; and Trade, overseas Education 53, 56, 57, 123, 145-6, 163-82, 226-7, 303, 306, 388, 392-3, 402, 404, 405, 408-9, 427 administration 164 adult and continuing 177-8 agricultural 303 aids in 171 and Science, Department of 53, 388 art and design 408-9 Business and Technician Education Council 176

careers education and guidance 171 - 2computers in schools 169 Council for National Academic Awards 175 curriculum 168-9 dance 404 Department of (Northern Ireland) 57 drama 402 educational broadcasting 427 English (as foreign language) teaching 180 examinations, secondary school 170-1examining bodies 175-6 film production 405 finance 164-5 forestry 306 health 145-6 management 226-7 music 404 Open University 175 overseas links 178-80 English (as foreign language) teaching 180 exchanges 180 overseas students in Britain 179-80 policies 163-4 polytechnics 175 post-school 172-8 prison, education in 123 records of achievement 171 religious 170 research on 178 schoolchildren, health and welfare 172 schools 165-72 Scottish Education Department 56 special educational needs 168 standards of 171 students 173-4, 179-80 teacher training 176-7 teachers 168, 176-7, 178 Technical and Vocational Education Initiative 169 universities 174-5, 392-3 Vocational Education, National Council for 176 vouth service 181-2 see also Students, Training and Universities Elderly 149, 156-7 retirement pension 156-7 social services for 149

Elections 37–8, 63–4 local government 63-4 parliamentary 37-8 Electrical engineering 247-50 Electricity supply industry 281-6 consumption 283 generation 283-4 nuclear energy 284-6 research 286 structure 281-3 Electronic engineering 247-50 **Employers' organisations** 344 Confederation of British Industry 344 Employment 53, 76, 158-60, 213, 301, 331-47 additional benefits 340 conditions of 338-40 Department of 53 earnings 339-40 employee share schemes 340 equal opportunities 339 European Community policies 76 health in 346-7 holidays 340 immigrants 338-9 industrial relations 344-6 law 339, 342-3, 346 pattern of 331 safety in 301, 346-7 services 334-6 careers service 336 disabled people, services for 335 Professional and Executive Recruitment 335-6 sickness benefit 158 trade unions 340–3 training services 336-8 trends 213, 331 unemployment 158-60, 331-2, 332-4 work, hours of 340 see also individual industries, Employers' organisations, Industrial relations, Trade unions and Unemployment Energy 53, 271-91 coal 279-81 consumption 272, 275-6, 278-9, 281, 283 Department of 53 efficiency 272–3 electricity 281–6 gas 276-9 natural resources, and 271-91

Offshore Supplies Office 273

oil 273-6

see also Coal, Electricity supply industry, Gas, Nuclear energy and Petroleum Engineering 227, 247-50, 255-6, 257, 263, 389-91 civil engineering projects 263 Council 227 electrical 247-50 electronic 247-50 instrument 247-50 marine 257 mechanical 255-6 Science and Engineering Research Council 389-91 see also individual industries England 1-2, 5-12, 115, 116-17, 124-5, 126, 127-8, 130-1, 205-6, 290, 415-16 Church of 205-6 civil courts 127-8 appeals 128 criminal courts 115, 116-17 appeals 117 criminal prosecutions 115 cultural and social life 10 economy 7-10 government 7 historical outline 2-3 law, government responsibility in administration of 130-1 regional newspapers 415-16 water resources 290 young offenders, treatment of 124-5, 126 Enterprise zones 188 Environment 24-5, 53, 58, 76-7. **183-204**, 300, 391, 432-3 agriculture and protection of countryside 300 air, control of pollution of 203 architecture 196 coast 196-7 conservation 194-200 Countryside Commissions 197, 432-3 Department of 53 Department of (Northern Ireland) 58 environmental improvement 200 European Community policies 76-7 green belts 196 housing 24-5, 188-94 land 199-200, 201 Natural Environment Research Council 391

policy 271-2

renewable sources 286-7

nature protection 198–9
noise 203–4
open country 198
planning 183–8
pollution control 200–4
public rights of way 198
radioactive waste disposal 204
radioactivity 204
recycling and materials reclamation
201–2
sea, control of pollution in 202–3
trees and woodland 196
water quality 202
Equal opportunities 27–8, 339 Ethnic minorities 28–9, 338–9, 399,
416
arts of 399
employment 338–9
publications 416
see also Race relations
European Community 73–80, 148,
162, 237–8, 238, 240, 298–9, 305,
368, 380
Common Agricultural Policy 298–9
competition policy 240
European Coal and Steel Community
238
European Investment Bank 237–8
European Regional Development Fund
237
external relations 78–80
Afghanistan 78–9
aid 80
Central America 78
East–West relations 78
Middle East 78
South Africa 79
terrorism 79
trade 79–80, 380
finance 75
fisheries policy 305
health arrangements 148
institutions 74–5
insurance, directives 368
internal policies 75–8, 148, 162,
237–8, 240, 298–9, 368
agriculture 77
employment 76
environment 76–7
fisheries 77
industry 76
internal market 75–6 transport 76
regional policy and aid 237–8
social security 162

trade policy 79-80, 380 Exchange 372 foreign exchange market 372 **Excise duties** see Taxation and duty **Exhibition and conference** centres 269 Expenditure 216-19, 350-3, 356-8 personal 217-18 public 217, 218, 350-3 taxes on 356-8 see also Public expenditure Exports 53, 237, 381, 382 controls 381 credit insurance 382 **Export Credits Guarantee** Department 53, 382 support for 237 see also individual industries and Trade, overseas

F

Factoring companies 370 Families 141-2, 150, 160 family credit 160 health services for 141–2 social services for 150 Family planning 142 Farming see Agriculture Films 269, 404-6 British Film Institute 405 children's 405 cinema licensing 405-6 film classification 405-6 government support 404-5 industry 269 training in production of 405 videos 406 Finance and Personnel, Department of (Northern Ireland) 58 Financial institutions 191, 237-8, 361-73 Bank of England 362-3 British overseas banks 366 building societies 191, 366-7 commodity, shipping and freight markets 373 deposit-taking institutions 363-7 discount houses 366 euromarkets 372 European Investment Bank 237-8 factoring companies 370

finance corporations 370

finance houses 369 financial futures 372 financial markets 370-3 financial services 240, 361-2 supervision 361-2 foreign exchange market 372 insurance companies 367 investing institutions 367-9 investment and unit trusts 369 leasing companies 369 London gold market 372 merchant banks 365 money markets 371-2 National Savings Bank 367 overseas banks 365-6 pension funds 368-9 retail banks 364-5 assets 364 branches and accounts 364 deposits 364 payment systems and services 364-5 securities markets 370-1 Stock Exchange 370-1 see also Insurance Fire services 68-70 fire casualties 70 fire losses 70 fire prevention 69 research 69 special services 70 Fisheries 304-5 administration 304-5 European Community policy 305 fleets 304 freshwater 305 landings 304 limits 305 research 305 Food 147, 257-9, 294-6, 296-8, 302 - 3,391 - 2Agricultural and Food Research Council 302-3, 391-2 exports 296-8 home production 294-6 industries 257-9 marketing 298 research 302-3, 391-2 safety of 147 Footwear industry 259-61 Foreign and Commonwealth Office Forestry 305–6 Commission 306 education 306

Northern Ireland 306
policy 306
private 306
research 306
Freight services 310–11, 315–16, 318–19, 319–20, 322
Fuel see Coal, Electricity supply industry, Energy, Gas, Nuclear energy and Petroleum

G

Gambling 445 Gas 53, 273, 276-9 Office of Gas Supply 53 offshore 273, 276-9 consumption 278-9 production 278 research 279 structure 278 transmission and storage 278 Government 7, 11, 13, 15-17, 31-68 advisory bodies 52 Cabinet 49-50 meetings 49-50 Office 50 composition 47-9 departmental ministers 48 junior ministers 48-9 Lord Chancellor and Law Officers Ministers of State 48 non-departmental ministers 48 Prime Minister 47-8 departments of 51-8 functions 52-8 information services 52 see also Civil Service, Local government, Ministers, Monarchy, Parliament, Public expenditure and Public finance Great Britain see Britain, England, Scotland and Wales Green belts 196

H

Handicapped people see Disabled people Health 54, 56, 58, 123–4, 135–48, 172, 346–7, 391 AIDS 145–6 and Safety Commission 347 and Safety Executive 347 and Social Security, Department of 54 and Social Services, Department of (Northern Ireland) 58 arrangements with other countries 148 centres 138 diet and 144 district nurses 138 education 145-6 employment, health in 346-7 environmental 146-7 family practitioner services 138 group practices 138 infectious diseases, control of 146 midwives 138 National Health Service 135-48 administration 136-7 finance 137 health service commissioners 137 hospitals and specialist services 138-46 primary health care 137-8 specialist services 138-46 organ transplants 140 parents and children 141-2 primary, care 137–8 prisoners, health services for 123-4 private medical treatment 139-40 professions 147–8 rehabilitation 140-1 research 147, 391 safety of medicines 147 schoolchildren, health services for 172 Scottish Home and Health Department 56 smoking and 144 visitors 138 see also Safety Health and Safety Commission 347 Health and Safety Executive 347 Historic buildings 195 Home and Health Department, Scottish 56 Home Office 54 Horticulture 296 Hospices 141 Hospitals 138-46 and specialist services 138-46 rehabilitation 140-1 Hotels and catering 267-8 **House of Commons 37** see also Parliament House of Lords 36-7

see also Parliament
Housing 24–5, 160–1, 188–94, 262, 366–7
administration 190
associations 193
benefit 160–1
building societies 191, 366–7
construction 262
home ownership 190–1
mortgage loans 191
improvements 193
privately rented 192
public sector 191
Human fertilisation and embryology 142
Human rights 17, 88

Immigration 23-4, 338-9

employment of immigrants 338-9

T.

Imports 381 controls 381 see also Trade, overseas Income 34, 160, 216–19, 339–40, 346, 354-6 Manpower Economics, Office of 346 national, and expenditure 216-19 personal, and expenditure 217-18 roval 34 sources of 218, 339-40 support 160 taxes on 354-6 **Independent Broadcasting Authority** programme companies 424-5 Industrial relations 342-3, 344-6 Advisory, Conciliation and Arbitration Service 345 Central Arbitration Committee 345-6 collective bargaining 345 joint consultation 345 legislation 342-3 Manpower Economics, Office of 346 wages councils 346 Industry 55, 56, 57, 76, 123, 212, 213, 219, **221-42**, **243-70**, 387-8, 392-3, 393, 417-18 British Technology Group 233 business and technical advisory services 236 construction, 262-3 Department for Scotland 56 development agencies 234

Economic Development, Department of (Northern Ireland) 57 European Community and 76, 237-8 government policies for 229-38 gross domestic product, by industry 219 industrial and intellectual property, protection of 242 industrial association 223 industrial awards 231 industrial design 228 industrial financing 222-3 industrial output 212, 223-4 innovation, government support for 232 - 3investment in 212–13, 222–3, 224, 230-1, 233-4 management education 226-7 manufacturing 243-61 nationalised industries 231-2 privatisation 232 organisation 222-3 prison industries 123 productivity, and profitability 213, 223-9 regional development 233-4 research and development 225-6, 387-8, 393 rural industries 234-6 science parks 392-3 services 263-70 small firms 236-7 standards 228-9 technical and vocational training 227 - 8technological advance 224-5, 245-7, 417-18 Trade and, Department of 55, 387-8 see also individual industries, Employment, European Community and Research and development Inflation 212 Information, Central Office of 54 Inland Revenue, Board of 54 see also Taxation and duty Inner cities 185-8 Instrument engineering 247-50 Insurance industry 367-8 brokers 368 companies 367 European Community directives 368 Lloyd's 367-8 Investment 212-13, 222-3, 224, 230-1, 233-4, 237-8, 367-9, 384

European Investment Bank 237-8 in industry 212-13, 222-3, 224, 230-1.233-4investing institutions 367-9 insurance companies 367 pension funds 368-9 unit trusts 369 national selective assistance 233 overseas 384 Invisible trade 378-9 see also Trade. overseas Ireland: historical outline 3-4 Iron and steel 238, 253 European Coal and Steel Community 238 products 253 Isle of Man 4 historical outline 4

J

Jewry 208–9 Judges 132 Justice 107–34 and the law 107–34 civil 127–30 criminal 107–26 Crown Prosecution Service 53

L

Land 1-30, 199-200, 201, 293 and people 1-30 pollution control 201 reclamation 199-200 registers 200 use 199-200, 293 Law 41-3, 48, 54, 107-34, 241-2, 300, 339, 342-3, 421-4 administration of the 130-4 agricultural holdings 300 centres 133 civil courts 127-30 appeals 128 civil justice 127-30 civil proceedings 128–9 legal aid 133 company 241–2 coroners' courts 119 criminal courts 115–19 Criminal Injuries Compensation Scheme 109

criminal justice 107-26 criminal trials 118-19 jury 118-19 legal aid 133-4 employment 339, 342-3 government responsibilities, in administration of 130-1 judges 132 legal aid, advice and assistance 132 - 4legal profession 132 legislative proceedings, parliamentary 41-3 delegated legislation 43 Officers 48 Officers' Department 54 press, legal requirements 421-2 prosecution 116-17 reform 134 terrorism, measures to combat trade unions, legal framework 342-3 Learned societies 393-4 Leasing companies 369 Leather industry 259-61 Legal profession 132 Leisure trends 29-30 Libraries 53, 409-11 Arts and, Office of 53 public 411 special 411 university 411 Life, expectation of 20-1 Literature 409-11 literary and philological societies 410 Living standards 25-7 Lloyd's insurance market 367-8 Local government 61-8, 191-2 authorities, types of 62-3 complaints system 68 elections 63-4 finance 66-8 capital expenditure 67 control of 68 current expenditure 66-7 loans 68 rates 67-8 functions and services 64-5 housing 191-2 internal organisation 65 officers and employees 65-6 public access 65 London 367-8, 370-1, 372 Financial Futures Exchange, International 372

gold market 372 Lloyd's insurance market 367–8 Stock Exchange 370–1 Lord Advocate's Department 57 Lord Chancellor's Department 54 Lords, House of see Parliament Lorries 310–11

M

Management consultancy 268 Man-made fibres 250-1 Manpower Economics, Office of 346 Manufacturing 243-61 advanced technology, take-up 245-7 growth 243-4 high-technology industries 245 industries 243-61 structure 243 Marine engineering 257 Market research 268-9 Marriage 21 Mechanical engineering 255-6 Medicine and medical equipment 147, 391 medical research 147, 391 Medical Research Council 391 safety of medicines 147 Mental health services 123-4, 150 Merchant banks 365 Mercury 327-8 Metal manufacture 253-4, 255-6 iron and steel 253 metal products 255-6 non-ferrous metals 253-4 Migration 22-3 Minerals 253-4, 287-9 mineral products 253-4 non-fuel 287-9 exploration 287 production 287-9 Mines and quarries 279-81 coal 279-81 research 281 see also Coal Ministers 47-51 departmental 48 junior 48-9 Lord Chancellor and Law Officers 48 ministerial responsibility 50-1 ministerial salaries 49 non-departmental 48 of State 48

Navv

Prime Minister 47–8 Monarchy 31-4 accession 33 acts of government 33-4 ceremonial 34 coronation 33 royal income and expenditure 34 roval visits 34 succession 33 Monopolies and mergers 238-9 see also Competition policy Motor vehicles 256-7, 267, 358 car tax 358 industry 256-7 retail distribution 267 Museums and galleries 394, 407-8 Museums Association 407 national and other collections 407-8 scientific museums 394 Music 402-3, 404 choirs 402-3 jazz 403 orchestral and choral 402 pop and rock 403 training in 404

N

National Council for Vocational Education 176 National Debt 359 National Health Service 135-48 see also Health National income 216-19 gross domestic product, by industry National Insurance 156-60 benefits and allowances 156-60 contributions 156 National parks 197–8 **National Playing Fields Association** 434 **National Savings Bank** 367 Nationalised industries 231-2 see also individual industries Nationality 23 NATO see North Atlantic Treaty Organisation Natural Environment Research Council 391 Natural resources 271-91

see Royal Navy New towns 185 News agencies 418-19 Newspapers 413–16 see also Press Non-departmental public bodies 51 - 2**North Atlantic Treaty** Organisation 98-9, 104 Britain's contribution 98-9 co-operation 104 Europe and 99-100 strategy 98 Northern Ireland 15-19, 57-8, 100, 109-10, 116, 118, 126, 128, 131, 234, 291, 306, 342, 347, 416 civil courts 128 criminal courts 116, 118 cultural and social life 19 defence 100 economy 17-19 employment, health and safety in 347 forestry 306 government 15-17 Anglo-Irish Agreement 16-17 background to civil disturbances 15 - 16direct rule and political initiatives 16 human rights and security policy government departments 57-8 Agriculture 57 Economic Development 57 Education 57 Environment 58 Finance and Personnel 58 Health and Social Services 58 industrial development measures 234 law, government responsibility in administration of 131 press 416 terrorism, measures to combat 109-10 trade unions 342 water resources 291 young offenders, treatment of 126 Nuclear energy 284-6, 289-90 British Nuclear Fuels 285 nuclear power programme 284-5 research 289 safety 289-90 Nuclear weapons 86-7, 101

O

Offenders, treatment of 119-26 children 124-6 non-custodial treatment 120-1 probation 121 prisons 122-4 sentencing 119-20 young adult offenders 126 Offshore Supplies Office 273 Oil see Petroleum Old people see Elderly Open University 175 Opera 402, 403, 404 training 404 Ordnance Survey 54 **Overseas Development Administration** 54 Overseas relations 71–95, 400 administration 71–2 British Council 72–3, 400 Commonwealth 53, 80-4 development co-operation 91-5 international organisations, membership of 83, 88-91 international peace and security 84-8 United Nations 88-90 see also European Community

P

Parliament 35-46, 54, 352-3, 428 broadcasting of proceedings 428 functions 35 House of Commons 37 House of Lords 36-7 legislative proceedings 41-3 delegated legislation 43 meeting of 35-6 parliamentary committees 43-5 joint committees 44 of the whole House 43 party committees 44-5 select committees 44, 352-3 standing committees 43-4 parliamentary control 45-6 Parliamentary Commissioner for Administration 46 Parliamentary Counsel 54 parliamentary electoral system 37-8 parliamentary privilege 46 parliamentary procedure 40–1

political party system 38-40 Parliamentary Counsel 54 Patents 242 Paymaster General's Office 54 Pension funds 368-9 Pensions 156-7, 158, 161 retirement 156-7 war 161 widows' 158 Periodicals 417 Petroleum 214, 267, 273-6, 356 consumption 275-6 land-based oilfields 275 North Sea fields 275 offshore 214, 273-6 effect on economy 214 offshore supplies 273 oilfields 275 petrol retail trade 267 pipelines 276 refineries 275 research 276 revenue tax 356 structure of industry 275 trade 275-6 Planning 183-8, 200 development plans 183-4 enterprise zones 188 inner cities 185-8 Urban Programme 185-8 land registers 200 major schemes 184-5 new towns 185 public participation 184 simplified planning zones 188 Police 110-15 authorities and chief constables 111 central authorities 111 charging 113-14 common services 112 detention, treatment and questioning in Scotland 114-15 forces 110-11 grant of bail 114 powers of arrest 113 status and duties 111-12 Political parties 38-40, 428 broadcasts 428 party system 38-40 Pollution control 200-4 administration 200-1 air 203 land 201 marine 202-3

noise 203–4 radioactive waste disposal 204 radioactivity 204 recycling and reclamation 201–2

water 202
Polytechnics 175

Population 19–24, 28–9, 54

age distribution 21 birth rates 20

Censuses and Surveys, Office of 54

distribution 21–2 divorce rates 21

ethnic minorities 28-9

immigration 23-4

marriage rates 21 migration 22–3

mortality, causes of 20-1

nationality 23 sex ratio 21

Ports 317–19

development 319 traffic 318–19

Post Office 328–9

specialist services 329 **Power stations** 283–5

Press 413-22

advertising practice 421

Council 420-1

England 415–16

ethnic minority publications 416 free distribution newspapers 416

institutions 420-1

journalism, training for 419–20

 $legal\ requirements\ 421-2$

national 415

new technology 417-18

news agencies 418-19

newspapers 413-16

Northern Ireland 416

ownership 413-15

periodical 417

regional 415–16

Scotland 416

Wales 416

Prime Minister 47-8

Printing and publishing 411, 417–18 newspapers, new technology 417–18

Prisons and prisoners 122-4

discharge and after-care 124

education 123

industries 123

life licence 122–3

medical service 123-4

parole 122-3

privileges and discipline 124

psychological service 123–4 remission of sentence 122

repatriation 123

welfare 124

Privy Council 46–7

committees 47

Probation 121

Procurator General 55

Public expenditure 218–19, **350–3** audit and examination of 352

Comptroller and Auditor General 352

Public Accounts Committee 352 cash limits 351–2

central government financial funds 353

Estimates 352

reserve 350-1

Public finance 216-19, 349-59

Budget 353

government planning 349 planning cycle 349

public expenditure 218–19, 350–3 public sector borrowing 358–9

revenue, sources of 353–8

see also Balance of payments,

Public expenditure and

Taxation and duty

Public sector borrowing 358-9

National Debt 359

Publishing 409, 411, 417–18

authors' copyright 409

books 411

printing and publishing industries 411, 417–18



'Quangos' 51-2

R

Race relations 28-9, 339

Commission for Racial Equality 29 employment, equal opportunities in 339

Race Relations Act 28-9

Radio 423-5, 426-7, 427-8

BBC External Services 427–8

see also Broadcasting

Railways 313-17

British Rail's subsidiary activities 316 Channel Tunnel 316–17

freight 315-16

INDEX operations 313 passenger services 313-15 private 316 urban 316 **Rates** 67–8 Recreation see Sport Refineries see Petroleum Regional development 56, 233-4, 237-8 assisted areas and related measures 233 - 4development agencies 234 European Community policy and aid European Regional Development Fund 237 investment incentives 233-4 Northern Ireland 234 Scottish Development Department 56 Religions 205-10 Churches 205-8, 209-10 Jewry 208-9 non-Christian religious communities Renewable sources of energy 286-7 Research and development 69, 103-4, 109, 147, 178, 225-6, 232-3, 263, 276, 279, 281, 285, 286, 291, 302-3, 305, 306, **385–96**, 429–30 Agricultural and Food Research Council 302-3, 391-2 broadcasting 429-30 charitable foundations 393 coal industry 281 construction 263 criminology 109 defence 103-4, 387 educational 178, 388 electricity supply industry 285, 286 expenditure 387

> fire prevention 69 fisheries 305

medical 147, 391

nuclear energy 285

petroleum technology 276

professional institutions 393

Council 391

gas supply and use 279

government responsibilities 385-7

Medical Research Council 391

Natural Environment Research

industrial 225-6, 232-3, 387-8, 393

food 302-3 forestry 306 Research Councils 389-92 Advisory Board for the 389 Science and Engineering Research Council 389-91 astronomy 390 engineering 390 natural sciences 390-1 nuclear physics 390 space 395-6 university 392-3 water industry 291 Restrictive Practices Court 130 Retail trades 265-8 hotels and catering 267-8 trends 265-7 diversification 267 promotions 267 shopping centres 266 supermarkets, superstores and hypermarkets 265-6 technology, use of 267 vehicle and petrol retailing 267 Roads 307-13 developments 308 government responsibilities 308-9 haulage 310-11 international 311 licensing 311 structure of industry 311 passenger services on 311-13 safety 309-10 traffic in towns 310 Royal Air Force 103 see also Defence Royal family see Monarchy Royal Navy 101-2 see also Defence Royal Society 393-4

S

Safety 68-70, 147, 204, 285, 301, 309-10, 320-1, 323, 346-7 agricultural workers 301 civil aviation 323 employment, safety in 346-7 Northern Ireland 347 fire services 68-70 food, safety of 147 Health and Safety Commission 347 Health and Safety Executive 347 medicines, safety of 147 nuclear industry 285 radioactive waste disposal 204

radioactivity 204 roads 309-10 sea, safety at 320-1 Schools 165-72, 402, 404, 405 British School Technology 169-70 careers education and guidance 171 - 2computers 169 curriculum 168-9 dance schools 404 drama schools 402 educational aids 171 educational standards 171 examinations, 170-1 film schools 405 health and welfare in 172 independent 167 management of 166 nursery 166-7 primary 166-7 records of achievement 171 religious education in 170 secondary 167 special educational needs 168 teachers 168 Technical and Vocational Education Initiative 169 see also Education Science and technology 53, 224-5, 233, 245-7, 267, **385-96**, 417-18 Advisory Board for the Research Councils 389 astronomy 390 botanical gardens 394 British Technology Group 233 Education and, Department of 53, 388

government responsibilities 385–7 international co-operation 395-6 learned societies 393-4 natural sciences 390-1 newspaper production, new technology in 417-18 nuclear physics 390 professional institutions 393 promotion of 385-96 research councils 389-92 retail trades, use of technology in 267 Royal Society 393-4 Science and Engineering Research Council 389-91

science parks 392-3

7,417-18

scientific museums 394

space technology 395-6

technology and industry 224-5, 245-

and Universities Scotland 3, 12-15, 55-7, 114-15, 117-18, 125-6, 131, 197, 207, 290-1, 342, 416 Church of 207 civil courts 128 criminal courts 115, 117-18 cultural and social life 14-15 economy 13-14 government 13 government departments 55-7 Agriculture and Fisheries 56 Central Services 56 Crown Office 57 Development 56 Education 56 Home and Health 56 Industry 56 Lord Advocate's 57 Scottish Courts Administration 57 historical outline 3 law, government responsibility in administration of 131 national scenic areas 197 police 114-15 press 416 trade unions 342 water resources 290-1 young offenders, treatment of 125-6 Sea 202-3, 319-21 marine pollution, control of 202-3 safety at 320-1 transport 319–21 Service industries 237, 263-70 business services 268-9 distribution 264 film and TV 269 retail trades 265-8 tourism 237, 270 wholesale trades 264-5 Shipbuilding and marine engineering Shipping 317–19, **319–21**, 373 cargo services 320 commodity, shipping and freight markets 373 government responsibilities 320 passenger services 320 ports 317-19 safety 320-1 Simplified planning zones 188 Small firms 236–7

Smoking 144

zoological gardens 394

see also Research and development

Social life 10, 12, 14–15, 19 Social security 54, 155-62 arrangements with other countries 162 benefits 156-60, 162 contributions 156 family credit 160 Health and, Department of 54 housing benefit 160-1 income support 160 National Insurance 156-60 reform 155 taxation 161-2 war pensions 161 see also Children, Disabled people, Employment, Health, Housing, National Insurance, Pensions and Women Social services 58, 148-54 Health and, Department of (Northern Ireland) 58 personal 148-52 children 150-2 disabled 149-50 elderly 149 families 150 mentally ill and mentally handicapped 150 social workers 152 voluntary 153-4 Social welfare 135-62 see also Health, Social security, Social services and Voluntary social services Solvent abuse 143-4 Space activities 395-6 Sport 431-45 British Olympic Association 435 children's play 434 Countryside Commission 432-3 disabled people, sport for 435 drug abuse in 435–6 facilities, provision of 433-6 gambling 445 Gleneagles agreement 431 National Playing Fields Association organisation and promotion 432-3 popular sports 436-45 angling 436 association football 436-7 athletics 437-8 badminton 438 basketball 438 billiards and snooker 438

bowls 438-9 boxing 439 chess 439 cricket 439-40 cycling 440 darts 440 field sports 440 golf 441 Highland Games 438 hockey 441 ice skating 441 judo 441-2 lawn tennis 442 motor sports 442 mountaineering and rock climbing 442 racing 443 riding 443 rowing 443-4 rugby football 444 sailing 444 skiing 444–5 squash rackets 445 sub-aqua 445 swimming 445 private sponsorship 433 sports centres 434 Sports Councils 432 Standards 228-9 measurement 229 quality and 228-9 Stationery Office, Her Majesty's 55 Steel see Iron and steel Sterling 214 Stock Exchange 370-1 Students 173-4, 179-80 overseas, in Britain 179-80

T

Tariffs and Trade, General
Agreement on 380
Taxation and duty 161–2, 353–8
capital gains tax 356
car tax 358
corporation tax 354–6
customs and excise duties 358
income tax 354
petroleum revenue tax 356
social security benefits and 161–2
stamp duty 358
value added tax 356–8
Teachers 168, 176–7, 178
teaching methods 178

training 176–7 Technology see Science and technology Telecommunications 55, 325-8 British Telecom 325-7 general services 326 international services 326 network modernisation 326 broadband cable systems 328 Mercury 326-7 Office of 55 Television 269, 328, 425-6 broadband cable systems 328 cable 328, 426 industry 269 see also Broadcasting Terrorism 79, 109-10 Textiles 250, 259-61 industries 259-61 man-made fibres 250 Theatre see Drama Tobacco industry 257-9 **Tourism** 237, 270 government support 237 industry 270 Trade, overseas 55, 79-80, 213-14, 237, 275-6, 375-84 and Industry, Department of 55 balance of payments 382-4 British Overseas Trade Board 381-2 commodity composition 376-7 controls on 381 European Community policy 79-80, 380 export credit insurance 382 exports, support for 237 General Agreement on Tariffs and Trade 380 geographical distribution 377-8 government services 381-2 invisible 378-9 oil 275-6 policy 379-81 trends 213-14 visible 375-8 see also Balance of payments, European Community, Exports, Imports and Visible trade Trade unions 340-3 government proposals 343 legal framework 342-3 Northern Ireland 342 Scotland 342 Trades Union Congress 341–2 see also Industrial legislation

Training 60, 169, 176-7, 227-8, 303, 336-8, 402, 404, 405, 408-9, 419-20 agricultural 303 Civil Service 60 dance 404 dramatic 402 film production 405 journalism 419-20 musical 404 operatic 404 services 336-8 teachers 176-7 technical and vocational 227-8 Technical and Vocational Education Initiative 169 visual arts and design 408-9 vocational qualifications 337 vouth 336-7 Transplant surgery 140 Transport 55, 76, 256-7, 307-24 air 321-4 bus services 312-13 Channel Tunnel 316-17 Department of 55 equipment manufacturing 256-7 European Community policies 76 inland 307-17 passenger services 311-13, 313-15, 320 policy 320 ports 317-19 railways 313-17 urban 316 roads 307-13 haulage 310-11 safety measures 309-10, 320-1, 322 sea 319-21 taxis 313 traffic in towns 310 waterways, inland 317 see also Civil aviation; Waterways, inland; Ports; Railways; Roads; and Shipping Travel see Tourism **HM Treasury** 55 Solicitor's Department 55

U

Ulster see Northern Ireland Unemployment 158–60, 331–2, **332–4** benefit 158–60 help for the unemployed 332–4

Community Programme 333

Enterprise Allowance Scheme
332–3

Job Release Scheme 334

Jobclubs 333–4

Restart Programme 334

Unit trusts 369

United Nations 88–90
economic and social affairs 89–90
human rights 88–9
international peace and security 88

Universities 174–5
libraries

Urban Programme 185–8

Open University 175 research 392–3

\mathbf{v}

Visible trade 375–8
commodity composition 376–7
geographical distribution 377–8
see also Trade, overseas
Visual arts 406–9
crafts 408
museums and art galleries 407–8
training in 408–9
Voluntary social services 153–4,
181–2
organisations 153–4
young people 182
youth services 181–2

W

Wages councils 346
Wales 2–3, 10–12, 55, 115, 116–17, 124–5, 126, 127–8, 130–1, 290–1, 416
civil courts 127–8
criminal courts 115, 116–17
criminal prosecutions 115
cultural and social life 12

economy 11–12
government 11
historical outline 2–3
law, government responsibility in
administration of 130–1
press 416
water resources 290–1
Welsh Office 55
young offenders, treatment of 124–5,
126
War pensions 161

War pensions 161
Water resources 203, 289–91
development projects 291
England and Wales 290
statutory water companies 290
supplies 290
water authorities 290

Northern Ireland 291 pollution control 203 research 291 Scotland 290–1 **Waterways, inland** 317

cancer screening 146

Waterways, inland 317
Welsh Office 55
Wholesale trades 264–5
Widows 158
Women 27–8, 146, 157–8, 339
benefits and pensions 157–8

equal opportunities 27-8, 339

Y

Youth 126, 336–7, 401–2 theatre for 401–2 training services 336–7 young adult offenders 126 Youth service 181–2 organisations 182 voluntary service 182 workers 182



Zoological gardens 394

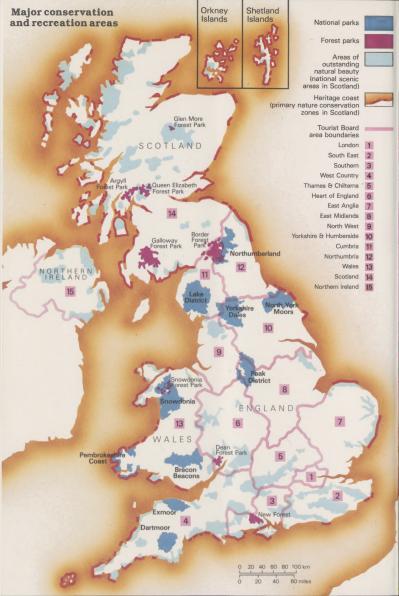
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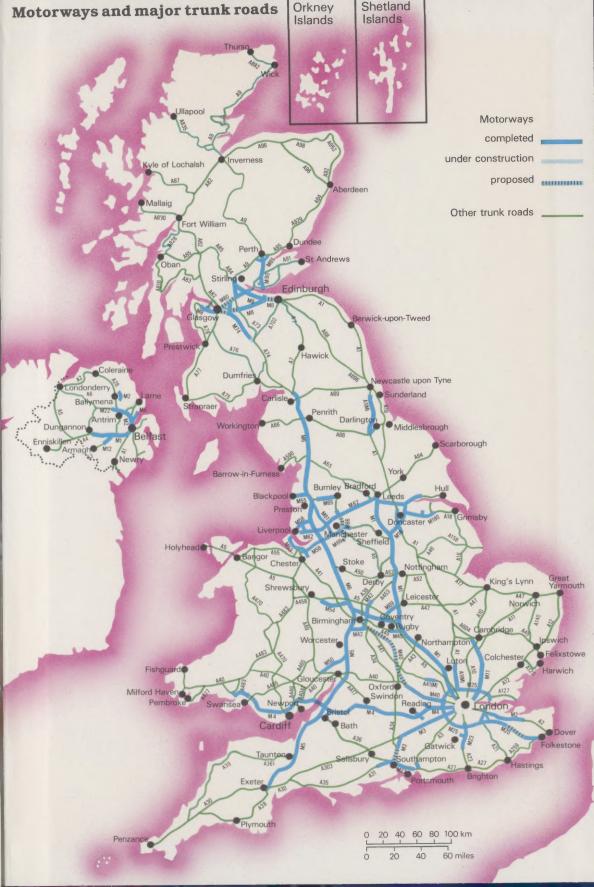
David Clarke (facing p 40). Civic Trust (facing p 41). Post Office (facing p 136). Design Council, and A.P. Valves, CFM-Metal Fax Ltd, Simon Engineering (Dudley) Ltd, Elga Ltd (between pp 136 and 137). Royal Observatory, Edinburgh (facing p 296). All-Sport Ltd, David Higgs (between pp 392 and 393). British Geological Survey (facing p 393).











This valuable reference work on Britain contains over 400 pages of information, illustrated with 16 pages of colour plates plus maps and diagrams. Prepared by the Central Office of Information with the co-operation of other government departments and many national organisations, the Handbook is updated every year to include the latest facts and figures from official sources. History, politics and law, economic and social affairs, arts and sport – *Britain 1988* provides readers with the essential facts on all aspects of British life.