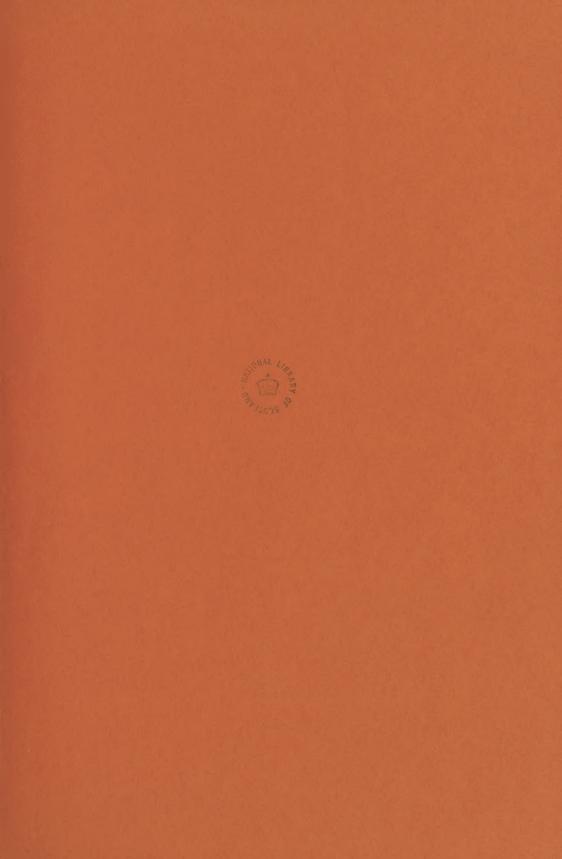
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Britain 1980 An official handbook





Britain 1980

An official handbook

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Introduction

Britain 1980 is the thirty-first official handbook in the series prepared and revised each year by Reference Division of the Central Office of Information. The handbook is widely known as an established work of reference and is the mainstay of the reference facilities provided by the British Information Services in many countries. It is distributed overseas in a limited free edition and is on sale by Her Majesty's Stationery Office throughout the world.

Britain 1980 is primarily concerned to describe the machinery of government and other institutions, together with the necessary physical and social background, and to show the part played by government in the life of the country. It does not attempt an analytical approach to current events. The text, generally, is based on information available up to September 1979, but it has been amended to include some major government decisions announced in October and November.

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 Kindgom (Great Britain and Northern Ireland) as a whole.

The factual and statistical information in *Britain 1980* 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 in the Bibliography towards the end of the book.

Introduction

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1 The Land and the People

THE PHYSICAL BACKGROUND

Britain, also known as the United Kingdom of Great Britain and Northern Ireland, constitutes the greater part of the British Isles, a group of islands lying off the north-west coast of mainland Europe. The largest islands are Great Britain (comprising the mainlands of England, Wales and Scotland) and Ireland (comprising 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 numerous islands and to the north-east are the Orkneys and Shetlands. 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 have a large measure of administrative autonomy and are not part of England, Wales, Scotland or Northern Ireland.

TABLE 1: Area of the United Kingdom

	Total		Land		Inland water	
	square	square	square	square	square	square
	km	miles	km	miles	km	miles
United Kingdom¹ Great Britain England Wales Scotland Northern Ireland	244,102	94,249	241,006	93,051	3,096	1,196
	229,982	88,797	227,523	87,845	2,459	950
	130,439	50,362	129,712	50,081	727	281
	20,768	8,019	20,640	7,969	128	50
	78,775	30,416	77,171	29,795	1,604	619
	14,120	5,452	13,483	5,206	637	246

¹ Excludes the Isle of Man, 588 square km (227 square miles), and the Channel Islands, 194 square km (75 square miles).

The latitude of 50° North cuts across the southernmost part of the British mainland (the Lizard Peninsula) and latitude 60° North passes through the Shetland Islands. The northernmost point of the Scottish mainland, Dunnet Head, near John o' Groats, is in latitude 58° 40′. The prime meridian of o° passes through the old observatory at Greenwich (London), while the easternmost point of England is nearly 1° 45′ East and the westernmost point of Northern Ireland is 8° 10′ West. It is just under 1,000 km (some 600 miles) from the south coast to the extreme north of mainland Britain and just under 500 km (some 300 miles) across in the widest part. There are numerous bays and inlets and no place is as much as 120 km (75 miles) from tidal water.

The seas surrounding the British Isles are shallow—usually less than 90 metres (50 fathoms or 300 feet)—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 metres (some 600 feet) to 900 metres (about 3,000 feet). These shallow waters are important because they provide excellent fishing grounds as well as

breeding grounds for fish. The North Atlantic current, the drift of warm water which reaches the islands from across the Atlantic, spreads out over the shelf and its ameliorating effect on the air is thus magnified. The effect of tidal movement is also increased by the shallowness of the water.

Geology and Topography

Despite its small area, Britain contains rocks of all the main geological periods. In general, the oldest rocks appear in the highland regions in the north and west, and the youngest in the lowland areas in the south and east. This is mainly the result of persistent slow sinking over many millions of years in the south and east accompanying the formation of the deep North Sea and English Channel sedimentary basins.

Beneath the lowland areas in the south and east of England lie the younger rocks. The harder chalk and limestone formations stand out as ranges of low, grass-covered hills (rarely reaching 300 metres, 1,000 feet, above sea level) separated by clay vales of rich farm land. These younger formations rest on an old volcanic foundation present at a depth of a few hundred metres under much of central England. This volcanic foundation, containing the oldest British fossils, comes to the surface as craggy hillocks in north-west Leicestershire. At greater depths beneath southern England lies the continuation of the older rock formations of Belgium and the Rhineland.

The south-western peninsula of England, mainly the counties of Devon and Cornwall, is composed of very old slate and sandstone formations into which has been forced a large mass of metal-bearing granite whose outcrops now form

most of the high ground such as Dartmoor.

Still older rocks form most of the mountainous and hilly terrain in Wales, the English Lake District, the southern uplands of Scotland and the southern border counties of Northern Ireland.¹ These rocks were subjected to compressions 400 million years ago which folded the strata and turned muddy sediment into slate. In Wales and the Lake District thick volcanic formations, eroded by rivers and Ice-Age glaciers, form spectacular mountain scenery.

Carboniferous limestone formations form the Mendip Hills, south of Bristol, and the Pennines in northern England. In Scotland similar strata of a partly volcanic character underlie the midland valley. These and other carboniferous strata contain the coal measures which were the foundation of British industrial expansion. The outcrops and shallow seams of coal which have now largely been exhausted were found on the edge of the plains and up the valleys leading to the high land. Most of the present deep coal workings lie underneath the fertile lowlands. The continental shelf under the North Sea contains large, exploitable quantities of oil and natural gas.

The Scottish Highlands are built from very thick formations of crystalline rock, now deeply eroded, which was deposited between 1,000 million and 500 million years ago. Far older rocks, including the oldest in Britain, emerge from beneath the Highlands on the north-western seaboard of Scotland and in the Outer Hebrides, forming barren and rocky land. On the mainland of Scotland a cover of red sandstone between 800 million and 1,000 million years old has

been partly eroded, leaving imposing isolated peaks.

Extensive areas in Antrim in Northern Ireland and in the islands of the Inner Hebrides are composed of volcanic lava flows which erupted 50 million to 60 million years ago when the North Atlantic Ocean was in the process of open-

¹ The highest peaks are: in Scotland, Ben Nevis, 1,342 metres (4,406 feet); in Wales, Snowdon, 1,085 metres (3,560 feet); and in England, Scafell Pike (in the Lake District, Cumbria), 978 metres (3,210 feet). The highest peak in Northern Ireland is Slieve Donard, 852 metres (2,796 feet).

ing out. The lavas and the roots of the volcanoes which fed them are deeply eroded into wild mountain scenery.

The landscape of Britain is mainly the result of cycles of uplift and erosion in the past 25 million years, culminating in the last Ice Age. Around 750,000 years ago great glaciers built up in the mountainous areas of Britain and Scandinavia and spread out as ice-sheets into the lowland areas. The mountains and the valleys were formed by the glaciers while the ice sheets deposited a thick blanket of boulder clay, gravel and sand over the lowlands north of a line from Bristol to London. Large lakes of meltwater held back by the ice gradually dried up, leaving deposits of sand and silt. Throughout much of the country the blanket of glacial debris affords soils of great fertility.

Britain's complex geology is one of the main reasons for its rich variety of scenery and the stimulating contrasts found within short distances, particularly on the coasts. The ancient rocks of the highland area often reach the coast in towering cliffs; elsewhere the sea may penetrate in deep lochs, as along much of the west coast of Scotland. Bold outstanding headlands are notable features in other parts of the varied coastline: the granite cliffs of Land's End; the limestone masses and slates of the coast of south-west Wales; the red sandstone of St. Bees Head on the coast of Cumbria; and the vertically jointed lavas of Skye and the island of Staffa in the Inner Hebrides. Even around the lowlands there are striking contrasts. In some parts the soft, white limestone—the chalk—forms white cliffs as at Dover and in the Needles off the Isle of Wight; while other parts of the south and south-east coastline have beaches of sand or shingle. The eastern coast of England between the Humber and the Thames estuary is mostly low-lying, and for centuries some stretches of it have been protected against the sea by embankments.

The marked tidal movement around the shores of Britain sweeps away much of the sand and mud brought down by the rivers and makes the estuaries of some British rivers¹ valuable as natural harbours.

Britain has a generally mild and temperate climate. The prevailing winds are south-westerly and the weather from day to day is controlled mainly by a succession of depressions from the Atlantic. The weather is subject to frequent changes but to few extremes of temperature. Although the winds are largely determined by those of the eastern Atlantic, occasionally during the winter months easterly winds may bring cold, dry, weather which, once established, may persist for many days or even weeks. During the summer months the Azores high pressure system usually extends its influence north-eastwards towards north-west Europe, and the depressions take a more northerly course, often passing entirely to the north of the country.

South-westerly winds are the most frequent, and those from an easterly direction the least; such winds occur about one-third as often as south-westerlies although easterly winds are appreciably more frequent in the spring than at any other time of the year. In hilly country, wind direction may differ markedly from the general direction owing to local topography. Winds are generally stronger in the north than in the south, stronger on the coasts than inland, and stronger in the west than in the east. The strongest winds usually occur in the winter; the average speed at Lerwick, Shetland Islands, varies from about 29 km/h (18 mph) in January to about 19 km/h (12 mph) in August, while at Kew Observatory,

Climate

Winds

¹ The longest rivers in England—the Severn and the Thames—are only about 354 and 338 km (220 and 210 miles) long respectively; those in Scotland (the Tay and the Clyde) about 188 km and 170 km (117 and 106 miles) long.

BRITAIN 1980: AN OFFICIAL HANDBOOK

on the western outskirts of London, the average speed varies from about 15 km/h (9 mph) in January to about 12 km/h (7 mph) in August. The stormiest region is along the north-west coast with over 40 gales a year; south-east England and the east Midlands are the least stormy, with gales occurring on about two days a year inland and on some 10 to 15 days on the Channel coast.

Temperature

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 12°C (54°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). During a normal summer, the temperature occasionally rises above 30°C (86°F) in the south, but temperatures of 32°C (90°F) and above are infrequent. Minimum temperatures depend largely on local conditions, but —10°C (14°F) may occur on a still, clear winter's night in inland areas. Lower temperatures are rare.

Rainfall

Britain has an annual rainfall of about 1,100 mm (over 40 inches), while England alone has some 830 mm (about 33 inches). The geographical distribution of annual rainfall is largely governed by topography and exposure to the Atlantic, the mountainous areas of the west and north having far more rain than the lowlands of the south and east. Between 3,800 and 5,000 mm (roughly 150–200 inches) of rain fall on the summits of Snowdon, the Lake District and northwest Scotland during the average year, whereas some places in the south-east of England record less than 500 mm (about 20 inches). Rain is fairly well distributed throughout the year, but, on the average, March to June are the driest months and October to January the wettest. A period of as long as three weeks without rain is exceptional, and is usually confined to limited areas.

Sunshine

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 half an hour a day in some parts of the Highlands of Scotland and two hours a day on the south coast of England.

Visibility

In fine, still weather there is occasionally haze in summer and mist and fog in winter. Fogs have become less frequent and less severe as a result of changes in fuel usage and the operation of clean air legislation. In London, for example, the frequency of dense fogs in winter is about half what it was 20 years ago.

Soil and Vegetation Many parts of the surface of highland Britain have only thin, poor soils. These stretches of moorland are found over the Highlands of Scotland, the Pennines, the Lake District, the mountains of Wales and in parts of north-east and south-west England. In most areas the farmer has cultivated only the valleys and the plains where soils are deeper and richer; villages and towns are often separated by uplands with few if any habitations.

With the exception of a few patches of heath and forest, almost the whole of lowland Britain has been cultivated, and farmland covers the area except

where there are urban and industrial settlements. Elaborate land drainage has been developed through the centuries to bring under cultivation the fertile soil of the low-lying fenland of Lincolnshire and part of East Anglia.

With its mild climate and varied soils, Britain has a diverse pattern of vegetation. When the islands were first settled, oak forest probably covered the greater part of the lowland, giving place to extensive marshlands, forests of Scots pine on higher or sandy ground and perhaps some open moorland. In the course of the centuries the forest area was progressively diminished and, in spite of planting by estate owners in the eighteenth and nineteenth centuries and the establishment of large forests by the Forestry Commission in the past 60 years, woodlands now occupy only about 9 per cent of the land area. The greatest density of woodland occurs in northern Britain, in some parts of south-east England and on the Welsh border. Yet much of Britain appears to be wooded because of the numerous hedgerows and isolated trees. The most common trees are oak, beech, ash and elm and, in Scotland, pine and birch. The number of elms, especially in southern England, has been severely reduced however since the late 1960s by 'Dutch' elm disease.

There are various types of wild vegetation, including the natural flora of woods, fens and marshes, foreshores and cliffs, chalk downs and the higher slopes of mountains; the most widespread is that of the hilly moorland country, which consists mainly of heather, grasses, gorse and bracken, with cotton grass in the wetter parts. Nearly 80 per cent of Britain however is used for agriculture (including rough grazing land) with most of the prime farming land in England. The amount of land in urban use is less than a tenth of the agricultural land.

Farming land is divided into fields by hedges, stone walls or fences and, especially in the mixed farms which cover most of the country, presents a pattern of contrasting colour. The cool temperate climate and the even distribution of rainfall ensure a long growing season; streams rarely dry up, grassland is green throughout the year with many wild flowers from spring to autumn; in most years there is scarcely a month without some flowers in hedgerows and woodlands.

The fauna of the British Isles is, in general, similar to that of the rest of north-western Europe, though there are fewer species. Some of the larger mammals, including the wolf, the bear, the boar and the reindeer, have become extinct; but red deer, protected for sporting reasons, flourish in the Scottish Highlands and on Exmoor in the counties of Devon and Somerset, roe deer are found in Scotland and in the wooded areas of southern England, and fallow deer (which are probably not indigenous) have been introduced into parks and are wild in some districts. The badger, a nocturnal animal, is rarely seen; there are foxes in most rural (and increasingly in urban) areas. Common and grey seals may be seen on parts of the coast, though not usually in the same localities. Smaller mammals include mice, rats, voles, shrews, hedgehogs, moles, squirrels (the imported grey much more numerous than the native red), hares, rabbits, weasels and stoats. Less common species include the otter, the pine marten and the polecat. Species which have established themselves as wild populations after escape from captivity include the muntjac, coypu and mink.

About 460 species of birds have been recorded in the British Isles. Some 200 species breed; the rest are regular migrants to, or pass through, the country, or are casual stragglers. Visitors to Britain are often struck by the abundance, variety and tameness of song birds in towns and villages. The pigeon, blackbird and chaffinch are widely distributed but sparrows usually predominate near

Fauna

houses. London and some other large towns have huge flocks of starlings which congregate to roost on buildings, especially in winter. Most species of birds have maintained their numbers over the last few decades, owing to their success in adapting themselves to man-made surroundings, and in London there has been an increase in the number of species breeding as a result of the improvement in the environment brought about by anti-pollution measures. Some large birds, on the other hand, have tended to decrease, but several species, such as the osprey and the ruff, have re-established themselves after disappearing from Britain in the nineteenth century.

Many species of gulls and other sea birds nest around the coast, and gulls may regularly be seen feeding far inland; some nest in inland sites such as gravel pits and sewage farms. The drainage and reclamation of marshlands have diminished the natural habitat of ducks, geese and other aquatic birds, but the survival of such species is largely assured on the nature reserves and bird sanctuaries which have recently been established on an increasing scale. Nearly all British wild birds are protected; the principal exceptions are those considered injurious to agriculture and game birds shot for sport in the open season (these are protected when breeding in the close season).

About 30 kinds of freshwater fish are found, salmon, trout, pike, roach, dace and perch being widely distributed. Stocks of trout, rainbow trout (an introduced species), carp, tench and roach are frequently supplemented by introductions for angling purposes. In a number of rivers measures to control pollution have resulted in fish becoming more numerous; in the Thames in London, where pollution levels have been reduced to a quarter of those in the 1950s, nearly 100 kinds of fish have been found, compared with only one in 1958.

Reptiles and amphibians are few. The former are represented by three species of snakes, of which only the adder is venomous, and three species of lizards, including the snake-like slow-worm. The amphibians are represented by three species of newts and five species of frogs and toads. Most British reptiles and amphibians are indigenous but at least one, the marsh frog, has been recently introduced from continental Europe. Ireland has no snakes.

There are more than 21,000 different kinds of insects. Among the largest are the rare swallowtail butterfly (8–10 cm, 3–4 inches) and the stag beetle (6 cm, 2½ inches). The insect fauna is less varied than that of continental Europe and lacks a number of common European species. With modern methods of pest control, extensive insect damage to crops or timber and serious outbreaks of diseases spread by insects are not common but there is some anxiety that chemical protection against insects may be reducing the population of creatures which feed on them, and of their predators in turn. These and other effects of agricultural chemicals on wildlife are the subject of special government safeguards supported by the agricultural chemicals industry.

THE DEMOGRAPHIC BACKGROUND

The people who now inhabit Britain are descended mainly from the people who inhabited the area nine centuries ago. The last of a long succession of invaders and colonisers from Scandinavia and the continent of Europe were the Normans, a branch of the Norsemen or Scandinavian Vikings who, after settling in northern France, intermarrying with the French, and assimilating their language and customs, crossed the Channel to England and conquered it in 1066.

Obviously it is not possible to estimate the relative importance of various early peoples—pre-Celts, Celts, Romans, Anglo-Saxons and the Norsemen,

including the Danes—in the ancestry of the present English, Scots, Welsh and Irish. Over most of England and the lowlands of Scotland the language which soon came to predominate was English, mainly a marriage of Anglo-Saxon and Norman-French, while the use of Celtic languages persisted in Wales, Cornwall, the Isle of Man, the highlands of Scotland and in Ireland.

The available records do not enable any precise estimates to be made of the size of population or of the extent or direction of population movement until the beginning of the nineteenth century. It is believed, however, that at the end of the eleventh century the population of Great Britain was about 2 million, while at the end of the seventeenth century reasonable contemporary estimates put the population at about $6\frac{1}{2}$ million. The main factor in this gradual growth of population was a slow natural increase, with high death rates and, in particular, very high infant and maternal mortality. Immigration from the continent of Europe has been an influence at certain times and immigration from Commonwealth countries more recently.

Statistics and Censuses

From the beginning of the nineteenth century there is relatively plentiful and reliable information about the British people—their number, sex, age, geographical distribution, births, marriages, deaths, occupations, language, and family structure. Most of it comes from two main sources: the regular flow of statistical information based on compulsory registration of births, marriages and deaths, and the periodic censuses taken regularly every ten years since 1801 (because of war there was no census in 1941). The last census was in 1971; the next will be held in 1981.

Numbers

Britain's estimated mid-1978 home population was 55,836,000 (see Table 2). The populations of the Isle of Man, Jersey, and Guernsey and associated islands are about 60,500, 74,500 and 54,400 respectively. In the period 1975–78 for the first years since records began (other than in war) the population fell slightly. This trend, common to much of western Europe, is mainly the result of a sharp

TABLE 2: Populations 1901-78a

thousands

paration 170	1 70				inousunas
	1901 census	1931 census	1961 census	1971 census	1978 mid-year estimate
Males	14,714	17,839	21,012	22,355	22,572
Females	15,795	19,520	22,448	23,663	23,777
Persons	30,509	37,359	43,461	46,018	46,349
Males	1,014	1,294	1,292	1,328	1,341
Females	1,004	1,300	1,352	1,404	1,427
Persons	2,019	2,593	2,644	2,731	2,768
Males	2,174	2,326	2,483	2,515	2,494
Females	2,298	2,517	2,697	2,714	2,685
Persons	4,472	4,843	5,179	5,229	5,179
Males	590	601 ^b	694	755	762
Females	647	642 ^b	731	781	777
Persons	1,237	1,243 ^b	1,425	1,536	1,539
Males	18,492	22,060	25,481	26,952	27,170
Females	19,745	23,978	27,228	28,562	28,666
Persons	38,237	46,038	52,709	55,515	55,836
	Males Females Persons	Males 14,714 Females 15,795 Persons 30,509 Males 1,014 Females 1,004 Persons 2,019 Males 2,174 Females 2,298 Persons 4,472 Males 590 Females 647 Persons 1,237 Males 18,492 Females 19,745	1901 1931	Males 14,714 17,839 21,012 Females 15,795 19,520 22,448 Persons 30,509 37,359 43,461 Males 1,014 1,294 1,292 Females 1,004 1,300 1,352 Persons 2,019 2,593 2,644 Males 2,174 2,326 2,483 Females 2,298 2,517 2,697 Persons 4,472 4,843 5,179 Males 590 601b 694 Females 647 642b 731 Persons 1,237 1,243b 1,425 Males 18,492 22,060 25,481 Females 19,745 23,978 27,228	Males 14,714 17,839 21,012 22,355 Females 15,795 19,520 22,448 23,663 Persons 30,509 37,359 43,461 46,018 Males 1,014 1,294 1,292 1,328 Females 1,004 1,300 1,352 1,404 Persons 2,019 2,593 2,644 2,731 Males 2,174 2,326 2,483 2,515 Females 2,298 2,517 2,697 2,714 Persons 4,472 4,843 5,179 5,229 Males 590 601b 694 755 Females 647 642b 731 781 Persons 1,237 1,243b 1,425 1,536 Males 18,492 22,060 25,481 26,952 Females 19,745 23,978 27,228 28,562

^a Figures may not add up to the totals shown because of rounding.
^b Estimates.

fall in the birth rate (see below). Births in 1978 just out-numbered deaths but the direction of net migration, as in other recent years, was outward.

The total population of New Commonwealth and Pakistani ethnic origin (including children born in Britain and children with only one parent of such ethnic origin) was 1.9 million in 1978, about 3.5 per cent of the total population of Britain.

Now that population growth has, for the time being at least, stopped, many official policies, such as those on housing, the planning of the new towns and the supply of school teachers, have been re-examined in the light of the implications, for the short term, of a static or declining population.

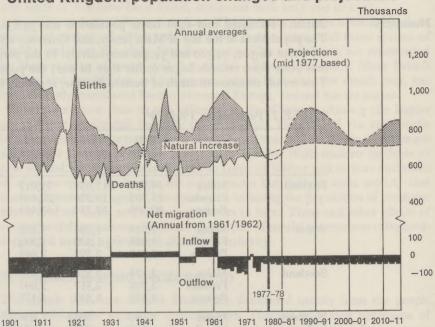
Projections for the future suggest that the traditional increase in population will be resumed, though growth will take place at a much slower rate than was expected a few years ago. Britain's total population is expected, on 1978 estimates, to be 56·3 million in 1986, 58 million in 2001 and 59·2 million in 2018.

The country as a whole has a population density of about 229 people to the square kilometre (592 per square mile), but in England the figures are 355 people to the square kilometre (920 per square mile), and in London 4,379 people per square kilometre (11,344 per square mile).

Birth Rates

Annual births have fallen by some 30 per cent since the mid-1960s. The birth rate declined from 18 live births per 1,000 people in 1966 to 11.8 in 1977, an unprecedentedly low figure. The most recent information suggests that the fall

United Kingdom population changes and projections



in the birth rate may be coming to an end, births in England and Wales rising in 1978 for the first time since 1971. The number of births in 1978 was 687,000 (compared with 980,000 in 1966), of which about 10 per cent were illegitimate, and the birth rate was 12.3.

Several factors may have contributed to the fall in the birth rate. Family planning, particularly the use by women of the contraceptive pill, has become

more widespread, and sterilisation of men and women has also become more common. An appreciable proportion of pregnancies outside marriage and of

pregnancies to older women are ended by legal abortion.

There are indications that the proportion of childless marriages may be increasing a little, and for marriages which do produce children there is a continuing tendency for the interval between marriage and the first birth to be longer. The numbers of third and later children born have fallen substantially. The biggest falls have been in the births of third and later children to manual workers, but the pattern is similar for all social classes. A rise in first and second births to professional families appears to be an exception, but may be due to an increase in the number of families in those groups.

The fertility of women born overseas, particularly those from the Irish Republic, the West Indies and the Indian sub-continent, was higher on average in 1971 than that of the indigenous population, but has since been falling. The population of New Commonwealth and Pakistani ethnic origin contains a larger proportion of young people than the indigenous population and so contributes

disproportionately to the number of births.

Mortality

At birth the expectation of life for a man is just over 69 years and for a woman it is nearly 76 years. The corresponding expectations in 1901 were 48 years for men and 52 years for women. The improving health of the population has 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 50 years, at about 12 per 1,000 population, but this figure takes no account of the ageing population, and at every age there has been a considerable decline in mortality—

particularly among children and young adults.

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 the family, which has reduced the strain on mothers and enabled them to take greater care of their children.

Mortality from tuberculosis is a tiny fraction of what it was in the midnineteenth century, and mortality from acute infectious diseases in infancy has virtually been eliminated. The infant mortality rate (deaths of infants under one year old per 1,000 live births) was 14·1 in 1977; neonatal mortality (deaths of infants under four weeks old per 1,000 live births) was 9·5; and maternal mortality was 0·13 per 1,000 live births.

The mortality from each major cause often reflects factors directly linked to occupation and the wide variations between the life patterns and living

standards of the different social classes.

Migration

Traditionally Britain has a net outflow of people to the rest of the world (net loss by migration between 1871 and 1931 for instance was about 4 million) though there have been exceptional periods—in the 1930s when there was a considerable flow of refugees from continental Europe, and in the late 1950s and early 1960s, mainly the result of a large influx of people from the West Indies and the Indian sub-continent.

The traditional pattern of migration in Britain has been maintained in the past few years.

Between 1968 and 1978 Britain lost about half a million people by migration: 2.8 million emigrants and 2.2 million immigrants; in both totals about a third of the people were returning to their country of origin.

Sex Ratio

There are about 6 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 45 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. In the population as a whole there are more than 105 females to every 100 men.

Marriage and Divorce

Marriage trends since the 1930s have been towards a higher proportion of people marrying and an earlier age pattern. The proportion of the population of Great Britain who were or had been married rose from about 52 per cent in 1939 to 60 per cent in 1977, while the proportion of single persons in the population aged 15 years or over fell from 33.3 per cent to 23.4 per cent. Wideranging changes in family life appear to have occurred in the 1970s and include a record decline since 1945 in rates of first marriage, particularly among teenagers; later starts to family building; and a continued rise in the proportions of people divorcing, including those divorcing for a second or subsequent time, and of people marrying for a second or subsequent time. In 1977 over 10 decrees of divorce were made absolute for every 1,000 married people in England and Wales, compared with 2 in 1961; some 85 per cent of divorces in England and Wales in 1977 occurred among couples both of whom were in their first marriage. The average age of people at the time of divorce in England and Wales is about 38 for men and 36 for women. Remarriage rates among younger divorced people are high, and births in remarriage are likely to become a more important component of total births in the future.

Age Structure

The estimated age distribution of the British population in mid-1978 was roughly as follows; under 15 years, about 22 per cent; 15-64, 63 per cent; and 65 and over, 15 per cent. Some 17 per cent of the population were over the normal retirement ages (65 for men and 60 for women).

The changing age structure has for the time being produced a balance between those who are primarily producers of resources and those who are primarily consumers that is more unfavourable than at any time since the early 1930s. This 'dependency ratio' of children and older people to the size of the population of working age is, however, projected to fall from 67 per cent in 1976 to 58 per cent in 2001. This will be the result principally of the decreasing proportion of children in the population.

Perhaps the main feature of the changing age structure is the increasing number of elderly people, reflecting birth patterns in the early years of the century and the final decades of the nineteenth. Between mid-1970 and mid-1978 the number of people over the normal retirement ages rose by 8 per cent. Proportionately there was a particularly large increase in the number of people aged 85 and over, 22.3 per cent over the same period.

Distribution of Population

The population of England is, and has been for centuries, greater than that of all other parts of Britain. The distribution of the British population by country is shown in Table 2 on p 7.

The standard regions of England, sub-divisions of the country used for most statistical and economic planning purposes, have the following populations (provisional mid-1978 estimates): East Anglia 1,872,700; East Midlands 3,749,700; Northern 3,098,000; North-West 6,498,400; South-East 16,831,900; South-West 4,295,700; West Midlands 5,154,100; and Yorkshire and Humberside 4,878,200.

Table 3 gives figures of some of Britain's largest urban areas. About half

the population lives in a belt across England with south Lancashire and West Yorkshire at one end, and the London area at the other, having 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. The seven major metropolitan areas which have been denoted as 'conurbations' in successive population censuses accommodate a third of Great Britain's people while comprising less than three per cent of the total land area. They are: Greater London, Central Clydeside, Merseyside, South East Lancashire, Tyneside, the West Midlands and West Yorkshire.

TABLE 3: Size and Population of Some of the Main Urban Areas, Mid-1978

	Aı		
	square km	square miles	Population estimate (provisional)
C			(thousands)
Greater London	1,580	609.7	6,918.0
Birmingham	264	102.0	1,041.0
Glasgow	157	60.5	809.7
Leeds	562	217.0	728.5
Sheffield	368	141.9	547.9
Liverpool	113	43.6	528.0
Manchester	116	44.9	489.3
Bradford	370	142.9	563.1
Edinburgh	135	52.0	456.5
Bristol	110	42.3	411.5
Belfast	140	54.0	354.0
Coventry	97	37.3	340.1
Cardiff	120		
Cardin	120	46.3	278.4

Most of the mountainous parts including much of Scotland, Wales and Northern Ireland and the central Pennines in northern England, are very sparsely populated.

These differences in average density between different regions have been widening. There has 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. The proportion resident in Greater London and most of the metropolitan counties of England has recently been falling. People, particularly the young and skilled, have tended to leave city centres and conurbations, although such migration may not necessarily mean a change of job but rather an increase in the distance of travel to and from work. In other cases it has been a consequence of falling employment in city centres, a trend which has led to special measures, worked out for each city, to attract small industries back there.

Language

In England, Wales, Scotland and Northern Ireland, English is the language predominantly spoken. In Wales, however, Welsh, a form of British Celtic, was spoken by 21 per cent of the population (some 542,000 people) aged three years and over at the time of the 1971 census. The Welsh Language Council, an official body, promotes the use of the language. The Welsh Language Act 1967 affirms the equal validity of Welsh with English in the administration of justice

and conduct of government business throughout Wales. The number of bilingual schools is increasing. In Scotland some 88,000 persons in 1971, mainly in the Highlands and western coastal regions, were able to speak the Scottish form of Gaelic. A few families in Northern Ireland still speak the Irish form of Gaelic. The Cornish variety of Celtic is no longer effectively a living language, although there is a revival of cultural interest.

Some of the country's ethnic minorities have their own languages, normally as well as English. Among the Asian community, for example, the most usual languages are Punjabi, Gujarati, Bengali or Urdu.

Immigration Control and Nationality Immigration into Britain is controlled by the Immigration Act 1971. The Act confers a right of abode—and exemption from control—on citizens of the United Kingdom and Colonies who are connected with Britain by birth, adoption, naturalisation or registration or are children or grandchildren of such persons, on citizens of the United Kingdom and Colonies from overseas who have been resident in Britain for a continuous period of five years, and on Commonwealth citizens with a parent born in the United Kingdom. Those having this right of abode are known as 'patrials'. In general, others wishing to enter Britain for employment must hold work permits. Exceptions are Commonwealth citizens with a grandparent born in Britain, certain permit-free categories, and nationals of European Community countries. The dependants of work permit holders and of those who may enter without work permits may also be admitted.

Under the British Nationality Act 1948, people born in the United Kingdom, the Channel Islands, the Isle of Man, a ship or aircraft registered in the United Kingdom, or a territory which is still a colony, are, with insignificant exceptions, citizens of the United Kingdom and Colonies by birth. Citizenship may also be acquired: by descent from a father who is himself a citizen otherwise than by descent and, in certain specified circumstances, from a father who is a citizen by descent only; by registration, for citizens of Commonwealth member countries or of the Irish Republic, for minor children and for women married to citizens of the United Kingdom and Colonies; in consequence of a United Kingdom adoption order; and, for aliens, by naturalisation. The requirements for naturalisation include five years' residence in the United Kingdom or Colonies, good character, a sufficient knowledge of English and the intention to reside in the United Kingdom or a colony. The requirements for registration are similar except that most Commonwealth and Irish citizens settled in Britain by 1973 have the right to be registered after completing five years' ordinary residence without satisfying any other requirement. In 1978, 24,971 people acquired citizenship by naturalisation and registration.

A citizen of the United Kingdom and Colonies does not forfeit his citizenship by acquiring or possessing the nationality or citizenship of another country (although he can lose it automatically if the territory from which he derives it becomes independent); nor does a woman who is a citizen of the United Kingdom and Colonies lose her citizenship by marriage to a foreign national. Indeed, a citizen cannot be deprived of his citizenship against his will except in very exceptional circumstances (for example, if he has obtained naturalisation or registration as a citizen by fraud). Any man or woman who is a citizen is, however, at liberty to renounce citizenship if he or she possesses or acquires the

nationality or citizenship of another country.

Citizens of the other independent Commonwealth countries are, in United Kingdom law, British subjects or Commonwealth citizens and, as such, enjoy full political and civic rights if resident in Britain.

THE SOCIAL FRAMEWORK

This section gives some points of general interest about household structure and social characteristics in Britain as a background to the information given in later chapters. It deals with topics in very broad and informal terms and many

exceptions apply to the generalisations.

The way of life of the people of Britain has been changing rapidly throughout the twentieth century. As in many other countries underlying causes include two major wars, a lower birth rate, longer expectation of life, a higher divorce rate, widening educational opportunities and technical progress, particularly in communications and transport and a better standard of living. One of the features of the change in social attitudes has been the development of a more informed tolerance of others' behaviour and an unwillingness to penalise individuals with particular problems. Relationships between the generations, too, are changing, and young people are more ready to criticise traditional values and institutions and to seek greater influence in shaping society.

The following account applies primarily to Great Britain. Many of the same factors are at work in Northern Ireland but their effect is modified by both

the Province's history and the emergency of recent years.

Homes and the Environment

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. Of approximately 27.5 million married people at the time of the 1971 population census about 25 million were estimated to be married couples living together in some 12.5 million separate families containing some 46 million people, the remainder living either on their own or with other persons or families, except for a small number living in institutions. Nearly 8 million of the families, comprising 32 million people, contained a married couple and their children or grand-children. There were, in addition, 1.2 million families consisting of a parent living with children or grandchildren. About half, mostly women, were bringing up between them about 1 million dependent children; the rest were living with adult children or grandchildren.

The average size of households has continued to fall progressively, from over four persons in 1911 to 3·1 in 1961 and 2·7 in 1977, largely reflecting increases in the numbers of people living alone and the trend towards smaller families. It is estimated that in 1977 21 per cent of households consisted of one person only, 33 per cent of two, 17 per cent of three, 18 per cent of four and 11 per cent of five or more. The number of one-parent families has been increasing rapidly.

Three British households out of four live in houses rather than flats. Terraced housing, most of it built in the early years of the present century, still provides accommodation for over a quarter of all households. In inner urban areas, which have increasing priority in the Government's housing and planning policies, slum clearance and redevelopment have been major features of post-1945 public housing programmes, but, with help from public funds, the modernisation and conversion of sub-standard housing has increasingly been encouraged as an alternative to clearing and rebuilding. Emphasis in new building is on low-rise, high density layouts, often incorporating gardens or patios. Nearly half of Britain's housing stock has been built since 1945.

The main housing development of the past 50 to 60 years, however, has been suburban. Many British 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. Many such houses, built in the 1920s and 1930s, are located in 'ribbon development' along main roads, but recent patterns have involved housing estates set back from the main thoroughfares with amenities such as health and community centres.

Housing standards are continually improving; some 93 per cent of households in Great Britain have exclusive use of a bath or shower, and 97 per cent sole use of a lavatory—high percentages by international standards. Most housing built nowadays is centrally heated, and just over half of all households now have central heating. About 57 per cent of British households have a telephone, 57 per cent one or more cars, 90 per cent a refrigerator, 75 per cent a washing machine, 40 per cent a deep freeze and 3 per cent a dish washer.

Over half of all families now own their own homes, though more than half of these home owners still have further repayments of mortgages to make. Most of the other households rent an unfurnished house or flat either from a local authority or housing association (an increasing trend) or from a private landlord (a falling trend). People in unskilled manual jobs are more likely to live in rented accommodation, particularly local authority housing, than people in non-manual

occupations. One-third of all families move house every five years.

An important influence on the planning of housing and services has been the growth of car ownership. 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, as well as changes in the design of housing and shopping areas. Most detached or semi-detached houses in new suburban estates have garages, and out-of-town shopping centres, frequently including large supermarkets, are often specially planned for the motorist and offer an alternative to shopping in the centres of older towns. The 32 new towns and the 'expanding towns' (generally seen as one of the most successful achievements of British planning since 1945) have set high standards in accommodating people and traffic.

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. Public transport, too, has been affected, and many services have been reduced or eliminated, especially in rural areas. The people without access to a car include those among the poorer sections of the community, or the elderly or infirm; mobility allowances help the disabled. The Government is proposing to relax restrictions on bus licensing in order to make it easier for

new services to develop, and is encouraging car-sharing.

In a densely populated modern industrial society there is much scope for conflict between the need for communal facilities and the desire to preserve existing beauty or places of historic interest, and between potential users of a new service and people whose way of life is threatened by the need to accommodate it. As a result the activities of the established amenity societies, such as the National Trust and the Council for the Protection of Rural England, are supplemented to a growing extent by those of groups formed expressly to safeguard the amenities of a particular area and to publicise the views of the people they represent.

Growing public concern about the dangers both to health and to the natural environment which can be caused by the disposal of industrial and human waste, by exhaust fumes and by the rising volume of noise is reflected in the appointment by the Government of a standing Royal Commission on Environmental Pollution and an Advisory Council on Noise. Voluntary societies include the National Society for Clean Air, the Noise Abatement Society, the Keep Britain

Tidy Group, Friends of the Earth, and the Council for Nature.

The Economic and Social Pattern

Marked improvements in the standard of living have taken place during the twentieth century. Nonetheless considerable inequalities of income and wealth, among them regional disparities, remain. The gap between social classes in such matters as infant mortality rates, educational progress, working conditions and ill-health remains wide. There has, however, been a long-term tendency to a reduction in the proportion of semi-skilled and unskilled workers, and an increasing number of people in professional or managerial occupations are children of manual workers.

The working population comprises nearly half the total population. For a long period an increase in real earnings was a principal factor in British working and social life. Between 1950 and 1974 real personal disposable income1 more than doubled to £75,051 million (1975 prices). It fell in 1975, steadied in 1976 and fell again in 1977 but rose in 1978 with reduced personal taxation and a faster rise in incomes than in prices.

The combined effect of the tax system and the receipt of transfer payments and direct and indirect benefits in kind is to redistribute incomes on a more equal basis. There has been an almost continuous decline in the share of the top 5 per cent of income recipients from about 20 per cent of income before tax in 1959 to just over 16 per cent in 1976-77, accounted for largely by the drop in the share of the top I per cent from about 8 per cent to 5.5 per cent over the same period. (The fall in the share of the top 1 per cent since 1938-39 had been about two-thirds.) The share of the bottom 20 per cent had increased between 1959 and 1976-77 from 5.3 to 6.2 per cent. However, more recently during a period of inflation and wages restraint when the standards of living of all income groups were falling, those of higher income groups tended to fall more, and customary differentials between higher and lower employment incomes were somewhat reduced.

There is very little knowledge about long-term trends in the distribution of wealth, but such estimates as there are show a substantial fall in the share owned by the richest people in the community. In 1977 about 24 per cent of personal wealth was owned by the top I per cent of the adult population, and nearly 85 per cent by the top 25 per cent. The value of State pension rights has an especially marked effect on these figures; it lowers the share of the top 1 per cent by a third while the share of the bottom 80 per cent of the adult population is increased by two-thirds. The proportion of personal wealth held in the form of physical assets rose from less than a third in 1960 to just over 50 per cent in 1976, reflecting especially the increasing importance of dwellings. There has been a marked decline in the relative importance of company securities in the composition of personal wealth.

The volume of consumer spending in Britain, after allowing for inflation, decreased in 1977 but rose in 1978 and showed some signs of growth in early 1979. Over the period 1970-78 there were some significant changes in the pattern of expenditure. The shares spent on food, clothing and footwear and tobacco fell while those spent on housing and on alcoholic drink, particularly wines and spirits, increased substantially. A large increase in spending on radio and electrical goods was mainly due to people buying colour televisions (well over half the television licences are issued for colour), and more recently, video tape recorders. Expenditure on television rental, too, more than doubled, while that on admission to cinemas, theatres, spectator sports and the like increased by more than 29 per cent in real terms.

¹ Total personal income less taxes on income, national insurance contributions, transfers abroad (net) and taxes paid abroad, adjusted to take account of inflation.

Some 12.6 million visitors to Britain in 1978, a record number, spent a total of £2,502 million. More overseas visits than ever before were made by British residents, 13.5 million or 12 per cent higher than the previous highest level in 1975. Visits for holidays were the main reason for this; visits for other reasons also increased but not as substantially. Following the pattern of recent years, overseas visitors to Britain spent at a higher average rate per visit than did British residents visiting overseas.

The general level of nutrition is high. The movement towards a greater use of convenience (including frozen) foods, and imported foods, in the 1960s has been partly offset by a reversion to a slightly less expensive diet. Other trends include the continuing popularity of health foods and slimming products, an increase in the number of meals eaten away from home, either at work or in restaurants, and a growth in consumption of food from 'take-away' and 'fast food' shops. The last 20 years or so have seen a gradual decline in total food supplies per person, which is regarded as consistent with reductions in physical activity and the greater proportion of less active people in the population. The trend is common to most developed countries.

Over the period 1967-77 total estimated consumption of beer (Britain's most popular alcoholic drink) rose by 25 per cent per head; that of wine by 83 per cent; and that of spirits by 67 per cent. A notable development in the 1970s was the large increase in consumption of lager, now estimated to account for a

quarter of the beer consumed.

The Role of Women

The greatest social changes have probably been in the economic and domestic lives of women. Almost all theoretical sex discrimination in political and legal rights has been removed.

The changes have been significant but, because tradition and prejudice can still handicap women in their working careers and personal lives, major legislation to help to promote equality of opportunity and pay was passed during

the 1970s.

At the heart of women's changed role in society has been the rise in the number of women at work, particularly married women. As technology and society permit highly effective and generally acceptable 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, related to this, there has been a rapid increase, which is still continuing, in the number of women with young children who return to work when their children are old enough not to need constant care and attention.

Since 1951 the proportion of married women who work has grown considerably, to more than half of those under 45 and three-fifths of those between 45 and 60. Compared with their counterparts elsewhere in the European Community, British women comprise a relatively high proportion of the workforce, about two-fifths (only Denmark has a comparable percentage). There is still a significant difference between women's average earnings and men's, but the equal pay legislation which came into force at the end of 1975 appears to have helped to narrow the gap between women's and men's basic rates. During the 1970s women's wages rose proportionately more than men's but remain relatively low because women tend to work in lowly-paid sectors of the economy, they often work in predominantly female workforces, and they work less overtime than men. In 1970 the average hourly earnings of men were 60 per cent greater than those of women (for full-time employment); by 1977 this differential had been almost halved.

As more and more women joined the workforce in the 1960s and early 1970s

there was an increase in the collective incomes of women as a whole and a major change in the economic role of large numbers of housewives. Families have come to rely on married women's earnings as an essential part of their income rather than as 'pocket money' or a means of buying 'extras'. At the same time social roles within the family are increasingly being shared.

Ethnic and National Minorities Britain has a long history of accommodating minority groups and in the last hundred years or so a variety of people have settled in the country, some to avoid political or religious persecution, others seeking a better way of life and an escape from poverty.

Many Irishmen have made homes in Britain, and comprise the largest single minority group. 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, Poles in particular, also came to settle. The large communities from the West Indies and the Indian subcontinent date from the 1950s and the early 1960s. There are also sizeable groups of Americans, Australians, Chinese and various European communities such as Greek and Turkish Cypriots, Italians and Spaniards. In the last generation British society has therefore become more multi-racial as ethnic minority groups from almost all parts of the world have made a permanent home in the country. Although a small proportion of the total population, they represent a significant element in certain areas.

The minority communities tend to live mainly in the urban centres, especially the largest towns, and in particular areas within these centres. The most recent immigrants, such as the West Indians and the Asians, are usually concentrated in the poorer inner city areas, whereas earlier arrivals have tended to move out to the suburbs.

Most minorities share a way of life that is broadly similar to that of the British community as a whole, though some of the newer arrivals, mainly from Commonwealth countries and sometimes with a poor command of the English language, may face problems of limited employment opportunities and inadequate housing. Many have, however, opened small family businesses such as general stores and restaurants which widen the range of choice and services for local communities. In areas with large and fairly recently-arrived immigrant populations arrangements are made in schools and elsewhere to enable host and minority communities to understand each other's traditions better and to help immigrants who need special language training.

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 (about 45 on average for manual workers) because of voluntary overtime work, while the hours worked by women and girls average somewhat less. Most employees work a five-day week.

Almost all full-time employees are entitled to a paid holiday each year in addition to public holidays and in practically every case the minimum period is three weeks.

The number of holidays (of four or more nights) taken in Great Britain by British residents was 43 million in 1978 compared with 31 million in 1966. More than two holidays in five in Great Britain are spent at the home of a friend or relative, and a quarter involve camping or caravanning. Holidays abroad in 1978 numbered 7.5 million, compared with 5.5 million in 1966, and well over half involved 'package' arrangements. Spain is by far the most popular destination,

and receives well over a quarter of all British holiday-makers abroad. A third of the population each year, however, takes no holiday away from home.

Leisure patterns generally are determined by age, sex, social class, income, access to a car and education. The most common activities are home based, or social, with television-watching the most popular; about 98 per cent of households have a television set and in winter the population aged five and over spend on average 20 hours a week watching programmes.

Other popular pursuits include: listening to the radio, records or tapes; reading; do-it-yourself (DIY; work done by amateur handy-men such as painting and decorating their homes); photography, needlework and many other hobbies; going out for a meal or for a drink to a public house (the 'pub' or 'local' is a traditional social centre for many people); gardening (a majority of British families have some garden or allotment despite the high proportion living in urban areas); open-air outings; games and sports (as both spectator and participants); dancing; going to social clubs¹ and leisure centres; cinema going (especially among young people); visits to buildings and museums; and social and voluntary work. The social activity with perhaps the largest participation is the visiting or entertaining of friends or relatives.

¹ These include clubs run by political groups; trade unions; church groups; social, cultural and academic groups; youth clubs and organisations; and groups of local business and professional people. The longer-established clubs organised on a national basis include the Working Men's Clubs and Institutes, the Townswomen's Guilds and the Women's Institutes.

2 Government

GENERAL SURVEY

The origins and traditions of the United Kingdom are to be found in each of its four component parts: England, Wales, Scotland and Northern Ireland. England was united as a kingdom a thousand years ago, and Wales formally became part of the kingdom in 1536. The thrones of England and Scotland were dynastically united in 1603, and in 1707 legislation passed in the two countries provided for the establishment of a single Parliament of Great Britain with supreme authority both in England and Wales and in Scotland. Ireland had had links with the kingdom of England since the thirteenth century, and in 1800 the creation of the United Kingdom was completed by a union joining the Irish Parliament to that of Great Britain. In 1922 Southern Ireland (now the Irish Republic) became a self-governing country. The six counties of Northern Ireland had in 1920 been given their own subordinate Parliament, and voted to remain within the United Kingdom (arrangements in Northern Ireland are described on p 53).

The United Kingdom Parliament at Westminster in London-with an elected chamber comprising members from English, Scottish, Welsh and Northern Ireland constituencies—therefore represents people whose backgrounds and traditions vary considerably from one part of the country to another. It has ultimate authority for government and law-making, but administrative arrangements have developed in such a way as to take account of the particular needs of different areas.

The United Kingdom is a member of the Commonwealth and of the European Community (see Chapter 3).

Devolution

The Scotland Act and the Wales Act passed in July 1978 provided for the establishment in Scotland and Wales of assemblies with responsibility for a wide range of their domestic affairs, subject to affirmation in referenda by at least 40 per cent of those entitled to vote. In the referenda which took place in Scotland and Wales on I March 1979, a small majority of votes cast in Scotland (but less than 33 per cent of total electorate) was in favour of an assembly, and in Wales a large majority was against. In accordance with the requirement of the Acts the legislation was repealed and the Government is considering ways of improving the administration of Scotland and Wales. Talks with the political parties in Scotland have been proposed and the special arrangements in Parliament for Scotland and Wales are being extended.

Channel Islands The Channel Islands and the Isle of Man (which are Crown dependencies, not and Isle of Man part of the United Kingdom) have their own legislative assemblies and systems of local administration and of law, and their own courts. At the same time, they have a special relationship with the United Kingdom because of the antiquity of their connection with the Crown. The United Kingdom Government is responsible for their defence, their international relations and, ultimately, their good

government. They have separate arrangements with the European Community which take into account their special relationship with the United Kingdom.

The Constitution

The United Kingdom constitution is formed partly by statute, partly by common law and partly by conventions, which have never been codified and are not directly enforceable in a court of law, but which, nevertheless, are regarded as rules of the constitution. Because the constitution is not contained in any single document, and because it can be altered by the passing of an Act of Parliament or by general agreement to vary, abolish or create a convention, it can the more readily be adapted to changing political conditions and ideas.

The organs of government are readily distinguishable although their functions

often intermingle and overlap. They are:

1. the legislature, the supreme authority in the realm (see p 24);

2. the executive, which consists of: (a) the Government—that is the Cabinet and other ministers of the Crown, who are responsible for initiating and directing national policy (see p 36); (b) government departments, most of them under the direct control of ministers and all staffed by civil servants, which are responsible for administration at the national level (see p 39); (c) local authorities, which administer and manage many services at the local level (see p 59); and (d) public corporations which may be responsible for the operation of particular nationalised industries or, for example, of a social or cultural service, and which are subject to ministerial control in varying degrees; and

3. the judiciary, which determines common law and interprets statutes, and

is independent of both the legislature and the executive.

THE MONARCHY

The monarchy is the most ancient secular institution in the United Kingdom. Its continuity has been broken only once in over a thousand years; and, in spite of interruptions in the direct line of succession, the hereditary principle upon which it was founded has never been abandoned. 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. (For a full list of members of the Commonwealth see

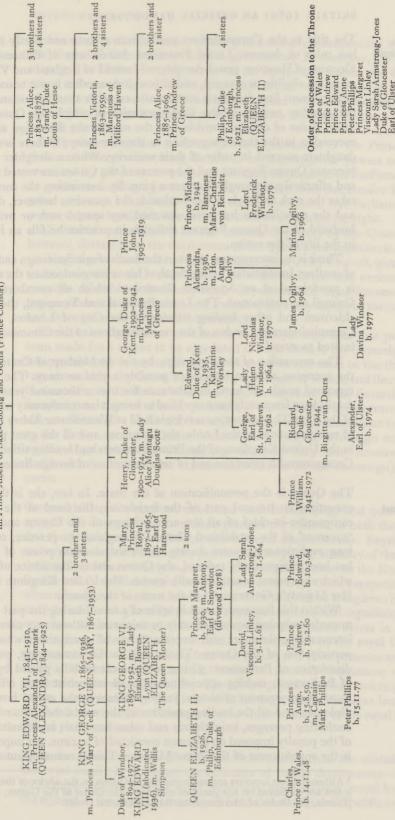
The seat of the monarchy is in the United Kingdom. In the Channel Islands and the Isle of Man the Queen is represented by a Lieutenant-Governor. In the other member nations of the Commonwealth of which the Queen is head of State, her representative is the Governor-General, who is appointed by her on the advice of the ministers of the country concerned and is wholly independent of the United Kingdom Government. In the United Kingdom dependencies the Queen is usually represented by governors who are appointed by the Crown, having various executive and legislative powers, and are responsible to the United Kingdom Government for the good government of the

countries concerned.

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

The Royal Family

QUEEN VICTORIA, 1819-1901, m. Prince Albert of Saxe-Coburg and Gotha (Prince Consort) From the reign of Queen Victoria up to September 1979



In the Order of Succession the sons of the Sovereign and their descendants have precedence over the daughters. The daughters and their descendants have precedence over lateral lines.

20 Nov. 1947 6 Feb. 1952 2 June 1953 21 April Early in June

Birthday: Official Birthday Celebration:

Accession to throne:

Coronation:

Dates Relating to Queen Elizabeth II

Lord Frederick Windsor Princess Alexandra Earl of St. Andrews Lord Nicholas Windsor Lady Davina Windsor

Lady Helen Windsor

Duke of Kent

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 Princess Sophia (the Electress of Hanover, grand-daughter of James I of England and VI of Scotland) are alone eligible to succeed, and although succession is not bound to continue in its present line, it cannot now be altered other than by common consent of the member nations of the Commonwealth of which the Queen is head of State. Rules of descent provide that the sons of the Sovereign are in order of succession to the throne according to their seniority; if there are no sons, the daughters succeed in order of their seniority. When a daughter succeeds, she becomes Queen-Regnant and the powers of the Crown are vested in her as fully and effectively as though she were a king. By convention, the consort of a king takes the rank and style of her husband; the converse, however, does not apply and the constitution has never attached any special rank or privileges to the husband of the Queen-Regnant although in practice he fills an important role in the life of the nation.

There is no interregnum between the death of one Sovereign and the accession of another. Immediately on the death of his or her predecessor the new Sovereign is proclaimed at an Accession Council to which all members of the Privy Council are summoned. The Lords Spiritual and Temporal, the Lord Mayor, aldermen and other leading citizens of the City of London, and the High Commissioners in London of the member nations of the Commonwealth are also invited to attend.

The coronation of the Sovereign, by the Archbishop of Canterbury, follows the accession after an interval of possibly a year or more. The ceremony has remained much the same in substance for over a thousand years although the details have frequently been modified to bring it into conformity with the customs of the time. The coronation service is held at Westminster Abbey in the presence of representatives of the Lords, the Commons and all the great public interests in the United Kingdom, of the Prime Ministers and leading citizens of the other Commonwealth countries and of representatives of foreign States.

Acts of Government

The Queen is the personification of the State. In law, she is the head of the executive, an integral part of the legislature, the head of the judiciary, the commander-in-chief of all the armed forces of the Crown and the temporal 'governor' of the established Church of England. In practice, as a result of a long evolutionary process during which the absolute power of the monarchy has been progressively reduced, the Queen acts on the advice of her ministers which she cannot constitutionally 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 without any necessity for royal intervention, there are still important acts of government which require the participation of the Queen. These include the summoning, prorogation and dissolution of Parliament; giving royal assent to Bills passed by both Houses of Parliament; making appointments to all important State offices, including those of government ministers, judges, officers in the armed forces, governors, diplomats and all the leading positions in the established 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 the appointment of the Prime Minister. This is normally automatic, and the

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.

Queen must invite the leader of the political party commanding a majority in the House of Commons to form a government. If, however, no party has a majority, or if the majority party has no recognised leader, the Queen must select a Prime Minister, and can consult anyone she wishes. 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 (such as in the appointment of the Prime Minister) these and other acts involving the use of 'royal prerogative' powers are nowadays exercised by government ministers who are responsible to Parliament and can be questioned about a particular policy. The law does not require Parliament's prior authority before such powers can be exercised, but Parliament has the

power to pass legislation to restrict or abolish a prerogative right.

Ministerial responsibility for the exercise of powers by the Crown does not, however, detract from the importance of the Queen's participation in the smooth working of government. She holds meetings of the Privy Council, gives audiences to her ministers and other holders of office at home and overseas, receives accounts of Cabinet decisions, reads dispatches and signs innumerable State papers; she must be informed and consulted on every aspect of the 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 fulfil them if the Sovereign is totally incapacitated (or is under the age of 18 years on accession to the throne). The regent would be the Queen's eldest son, the Prince of Wales, and thereafter those in succession to the throne who are of age. In the event of the Sovereign's partial incapacity or absence abroad, provision is made for the appointment of Counsellors of State (the Duke of Edinburgh, the four adult persons next in succession to the Crown, and the Queen Mother) to whom the Sovereign may delegate certain royal functions. Counsellors of State may not, however, dissolve Parliament (except on the express instructions of the Sovereign), or create

Ceremonial and Royal **Visits**

Ceremonial has always been associated with British kings and queens, and, in spite of the changes that have taken place in the outlook of both the Sovereign and the people, many traditional customs and usages remain. Royal marriages and royal funerals are marked by public ceremony. The birthday of the Sovereign is officially celebrated early in June by Trooping the Colour on the Horse Guards Parade and is also celebrated as Commonwealth Day. State banquets take place when a foreign monarch or head of State visits the United Kingdom; investitures are held at Buckingham Palace; and royal processions add significance to such occasions as the opening of Parliament, when the Queen drives in state from Buckingham Palace. The Queen and other members of the royal family visit many parts of the United Kingdom every year, and their presence at scientific, artistic, industrial and charitable events of national importance encourages nationwide interest and publicity. The Queen pays State visits to foreign governments, accompanied by the Duke of Edinburgh, and undertakes lengthy tours in other countries of the Commonwealth. Other members of the royal family pay official visits overseas.

Royal Income Expenditure

More than three-quarters of all expenditure arising from the official duties of the royal family is borne on the accounts of public departments-including, for example, the costs of the royal yacht, the Queen's Flight, travel by train and the upkeep of the royal palaces. Apart from this 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. 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. Annual allowances approved by Parliament are specifically made to certain other members of the royal family. No allowances are made 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 has voluntarily agreed to surrender half the revenue to the nation). The Queen meets from her Privy Purse the official expenses of members of the royal family for whom Parliament has not specifically provided.

PARLIAMENT

Parliament is the supreme legislative authority in the United Kingdom. The three elements of Parliament, the Queen, the House of Lords and the elected House of Commons, are outwardly separate; they are constituted on different principles; they work in different places; and they 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 lawmaking organ of State, however, Parliament as a rule needs the concurrence of all its parts.

The Parliament at Westminster can legislate for the United Kingdom as a whole, or any of the constituent countries separately, or for any combination of them. Parliament can also legislate for the Channel Islands and the Isle of Man, which are Crown dependencies and not part of the United Kingdom, and have

subordinate legislatures² which legislate on island affairs.

Because it is not subject to the type of legal restraints imposed on the legislatures of countries with formal written constitutions, Parliament is free 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 is slow to exercise its supremacy in this way. Its members bear in mind the common law and have tended to act in accordance with precedent and tradition. Moreover, although the validity of an Act of Parliament that has been duly passed, legally promulgated and published by the proper authority cannot be disputed in the law courts, 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 (see p 71). The first direct elections

to the European Parliament took place in June 1979 (see p 72).

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.

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 member of the Privy Council primarily concerned with ideal of the April 2019. primarily concerned with island affairs, to scrutinise each legislative measure before it is submitted to the Queen in Council.

The Functions of Parliament

The main functions of Parliament are (1) to pass laws regulating the life of the community, (2) to provide, by voting taxation, the means of carrying on the work of government; and (3) to scrutinise government policy and administration, particularly proposals for expenditure. In discharging these three 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 (in the sense of a parliamentary period) 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 passed in the usual way in such rare circumstances as during the two world wars. Dissolution is ordered by the Queen on the advice of the Prime Minister, by means of a royal proclamation which, besides dissolving the existing Parliament, orders the issue of writs for an election, and announces the date on which the new Parliament is to meet (not less than 20 days after the dissolution). The proclamation is followed by the issue of writs in each constituency to cause an election to be held on the day named.

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 spring holiday and during a long summer recess starting late in July or early in August. The average number of 'sitting' days in a session is about 175 in the House of Commons and about 140 in the House of Lords. At the start of each session the Queen's speech to both Houses of Parliament outlines the Government's broad policies and proposed legislative programme. Each session is terminated by prorogation, a prerogative act which appoints the day of meeting in a new session (on rare occasions Parliament has been dissolved without prorogation), and a short speech is made on behalf of the Queen summarising Parliament's work during the past session. Parliament then 'stands prorogued' until the new session opens. Whereas an adjournment does not affect uncompleted business, the effect of a prorogation is at once to terminate nearly all parliamentary business, so that all public Bills not completed in the session lapse, and must be reintroduced in the next 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 21 other bishops of the Church of England, according to their seniority as diocesan bishops. The Lords Temporal consist of (1) all hereditary peers and peeresses of England, Scotland, Great Britain and the United Kingdom who have not disclaimed their peerages under the Peerage Act 1953, (2) all life peers and peeresses created by the Crown under the Life Peerages Act 1958, and (3) those Lords of Appeal created life peers under the Appellate Jurisdiction Acts 1876 and 1887 (as amended) who are appointed to assist the House in the performance of its judicial duties. Hereditary peerages carry with them a right to sit in the House of Lords (subject to certain statutory disqualifications), provided the holder 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 of Lords but they gain the right to vote at parliamentary elections and to

offer themselves for election to the House of Commons. Some 15 peers have so far disclaimed. No hereditary peerage has been conferred since 1965.

Not all peers with a right to sit in the House of Lords attend the sittings of that House. Those who do not wish to attend may apply for leave of absence for the duration of a Parliament.

Peers who frequently attend the House of Lords (the average daily attendance is about 310) include elder statesmen and others who have spent their lives in public service. Lords receive no salary for their parliamentary work, but they are entitled to recover expenses incurred in attending the House (except for judicial sittings) and certain travelling expenses.

The House of Lords is presided over by the Lord Chancellor, who takes his place on the woolsack as ex officio Speaker of the House. In the absence of the Lord Chancellor his place may be taken by a deputy speaker appointed by the Crown or a deputy chairman appointed by the House or, if neither a deputy speaker nor a deputy chairman is present, by a speaker chosen by the Lords present. The first of the deputy speakers is the Lord Chairman of Committees, who is appointed each session and takes the chair in all committees, unless the House otherwise directs. 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; the other Clerks at the Table; the Gentleman Usher of the Black Rod, who is also Serjeant-at-Arms in attendance upon the Lord Chancellor; and the Yeoman Usher who is Deputy Serjeant-at-Arms.

The House of Commons

The House of Commons is a representative assembly elected by universal adult suffrage and consists of men and women (members of Parliament, 'MPs') from all sections of the community. There are 635 seats in the House of Commons (516 for England, 36 for Wales, 71 for Scotland, and 12 for Northern Ireland¹).

General elections are held after a Parliament has been dissolved and a new one summoned by the Queen. If a vacancy occurs in the House as a result of the death or resignation² of a member, or as a result of his elevation to the House of Lords, a by-election takes place. Members are paid an annual salary of £9,450 (to be increased to £12,000 in 1981 with an interim increase in 1980) and an allowance for secretarial and research expenses. They also have a number of other allowances, including travel allowances, a supplement for London members and, for provincial members, subsistence allowances. (For ministers' salaries, see p 38.)

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

Permanent officers of the House (that is, those who are not members of

¹ The House of Commons (Redistribution of Seats) Act 1979 provides for the number of parliamentary constituencies in Northern Ireland to be increased from 12 to 17, with the Boundary Commission for Northern Ireland having power to vary this number between a minimum of 16 and a maximum of 18. The Boundary Commission is drawing up the new constituencies.

² If a member wishes to resign from the House, he or she may apply for what is technically an office of profit under the Crown (Bailiff of the Chiltern Hundreds or Steward of the Manor of Northstead) which automatically involves disqualification from membership of the House but to which, in fact, no remuneration attaches.

Parliament) include the Clerk of the House of Commons, who conducts the business of the House in the official department under his control and is the accounting officer for the House of Commons Estimate, and the Serjeant-at-Arms, who attends upon the Speaker, executes the orders of the House, is the official housekeeper of the Commons part of the building, and is responsible for its security.

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 (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 for some other reason.

Election to the House of Commons is decided by secret ballot. British subjects (except members of the House of Lords) and citizens of the Irish Republic resident in the United Kingdom are entitled to vote provided they are 18 years of age or over, are registered in the annual register of electors, and not subject to any legal incapacity to vote (that is, are not convicted and sentenced offenders in penal institutions or persons found guilty of illegal election practices within the past five years). Service voters (that is, members of the armed forces, Crown servants and staff of the British Council employed overseas, together with their wives and husbands if accompanying them) may also be registered for an address in a constituency, if they normally reside there. Each elector may cast one vote at a polling station in person, but service voters, voters who are abroad on polling day because of the nature of their occupation (and their wives or husbands who accompany them), may vote by proxy. Absent voting facilities also exist for merchant seamen. Voters entitled to vote by post include those who have a service vote but happen to be in the United Kingdom at the time of an election, persons employed on polling day as constables or by the returning officer, candidates in another constituency and their wives and husbands, and electors who are blind or physically incapacitated.

Voting is not compulsory but, of nearly 41 million people entitled to vote in the general election of May 1979, 76 per cent cast their votes. The candidate who polls the most votes in any constituency is elected; an absolute majority (a greater number of votes than those cast for all other candidates combined) is not

required.

Anyone, man or woman, who is a British subject and who has reached the age of 21 can stand for election. Undischarged bankrupts, clergymen of the Church of England, Church of Scotland, Church of Ireland and Roman Catholic Church, peers, and certain people holding offices of profit under the Crown are, however, not eligible. The House of Commons Disqualification Act 1975 defines those who may not become a member of Parliament. They include holders of judicial office, civil servants and some local government officers, members of the regular armed forces, members of the police forces and members of public corporations and government commissions. A candidate usually belongs to one of the main national political parties, although smaller parties or groupings also nominate candidates, and individuals may be nominated without party support.

The maximum sum of money that a candidate may spend on an election campaign is $f_{1,750}$, plus $f_{2,750}$ pence for each elector in a borough constituency or 2 pence for each elector in a county constituency. A candidate may send by post (free of postal charge) an election address to each elector in the constituency. All other expenses, apart from the candidate's personal expenses, must not exceed

the statutory limit.

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

The present system is based upon the existence of organised political parties, each laying its own policies before the electorate. Whenever there is a general election or a by-election, the parties may put up candidates for election; any other citizen who wishes may also stand. The electorate then indicates, by its choice of candidate at the poll on election day, which of the opposing policies it would like to see put into effect.

The percentages of votes cast for the main political parties in the general election held in May 1979 and the resulting distribution of seats in the House of

Commons are given in Table 4.

TABLE 4: Percentages of Votes Cast, and Members Elected, in the May 1979
General Election

Party	% of Votes Cast	Party	Members Elected
Conservative Labour Liberal Others	43.9 36.9 13.8 5.4 100.0	Conservative Labour Liberal Scottish National Plaid Cymru (Welsh Nationalist) Official Unionist (Northern Ireland) Democratic Unionist (Northern Ireland) United Ulster Unionist Ulster Unionist Social Democratic and Labour (Northern Ireland) Independent (Northern Ireland) Speaker	339 268 11 2 2 5 3 1 1 1 1 635

The party which wins the majority of seats (although not necessarily the majority of 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 appointed Prime Minister by the Sovereign; 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 38) on the advice of the Prime Minister. The largest minority party becomes the official Opposition with its own leader¹ and its own council of discussion or 'shadow Cabinet'; while the members of any other parties or any independents who have been elected may support or oppose the Government according to their party's or their own view of the policy being debated at any given time. Similar arrangements for the parties also apply in 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 of the Chamber.

The effectiveness of the party system in Parliament largely rests 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

¹ The Leader of the Opposition in the House of Commons receives an annual salary for that post, as well as a parliamentary salary; in the House of Lords the Leader of the Opposition receives an annual salary.

formulation of policy and its expression in legislation by constructive criticism of the Government's approach; to oppose specific government proposals that it considers objectionable; to secure concessions on government Bills; and to increase support outside Parliament and enhance its chances of success in byelections or at the next general election.

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 in the House of Commons when the question of the possibility of finding time for debating some particular issue is discussed. The direction of the business of the Houses is primarily the responsibility of the Leaders of the Houses and it is their duty to provide all reasonable facilities for the House 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 voting strength of their parties by ensuring the attendance of members at important debates, and conveying upwards to the party leadership the opinions of their back-bench members. The Chief Government Whip in the House of 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 likewise paid to the Chief Opposition Whips in the House of Commons and the House of Lords, and to two of the Assistant Whips for the Opposition in the House of Commons. The Government Whips in the House of Lords hold offices in the Royal Household and act as spokesmen for the Government in debates.

Annual financial assistance from public funds helps opposition parties in Parliament to carry out their business. It is limited to parties which had at least two members elected at the last general election or one member elected and a minimum of 150,000 votes cast. The formula is: £550 for every seat and £1.10 for every 200 votes, up to a maximum of £165,000.

Parliamentary Procedure

Parliamentary procedure is based on custom and precedent, mainly formulated in standing orders governing details of practice in each House. The system of debate is much the same in the two Houses: for instance, every matter is determined upon questions put from the chair or woolsack and resolved in the affirmative or negative, as the case may be; and members speak from wherever they have been sitting and not from a rostrum. The main difference is that in the House of 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 must guard against abuse of procedure or any infringement of minority rights, and has a discretion whether to allow or disallow any closure motion (that is, a motion to end discussion so that the matter may be put to the vote). The Speaker has certain powers to check irrelevance and repetition in debate, and to save the time of the House in various other respects. In case of grave disorder the House can be adjourned or the sitting suspended on the Speaker's own initiative. Voting in the House of 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 must give

the casting vote, but he does so only in accordance with rules which preclude an expression of opinion on the merits of the question.

The procedure on voting in the House of Lords is similar to that in the House of Commons, except that the Speaker or chairman has an original, but no casting vote. The general principle is that Bills and subordinate legislation are 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 (see pp 106 and p 117) the judgment under appeal is not changed if the votes are equal.

The House of Commons has a public register of members' pecuniary interests. Members with a direct pecuniary interest in a matter before the House must declare it when participating in debate and must abstain from voting in connection with it, though in order to operate as a disqualification the interest must be immediate and personal, and not merely of a general or remote character. In any proceedings of the House or in transactions with other members or with ministers or civil servants, members must disclose any relevant pecuniary interest or benefit.

All proceedings of either House are public, except on extremely rare occasions; the minutes (in the House of Commons called Votes and Proceedings and in the House of 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 the Houses, are available to the public in the House of Lords Record Office. There are radio broadcasts of some of the proceedings of both Houses but no television transmissions. A Parliamentary Sound Archive has been established.

Legislative Proceedings

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

Draft legislation 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. Public Bills can be introduced either by a Government minister or by a private member of either House of Parliament who does not hold office in the Government. Most public legislation is in practice drafted on behalf of ministers, and has the support of the Cabinet before being presented to Parliament.

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

Public Bills can be introduced in either House. As a rule, however, 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. 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 to 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, which gives the Government consider-

able control over legislation.

At the beginning of each session private members of the Commons ballot for precedence in introducing a Bill during time specially allocated for private members' Bills; the first 20 are successful. A private member may also present a Bill after question time on notice given, or seek leave 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, without notice, 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 of Parliament, The Bill receives a formal first reading on introduction, it is printed, and after a while (between one day and several weeks depending on the nature of the Bill) it 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 recommend whether it should be taken as 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 32). If the House so decides, the Bill may be referred to the whole House sitting in committee. The House may vote to limit the time devoted to examining a Bill by passing a timetable motion, commonly referred to as a 'guillotine'. In the Lords a Bill is considered by a committee of the whole House as a matter of course, unless the House takes the rare decision to refer it to a Public Bill Committee. The committee stage is followed by the report stage, during which previous amendments may be altered and new amendments incorporated. At the third reading a Bill is reviewed in its final form. In the Commons this stage is taken without a debate unless there is a motion in the name of six members that the question 'be not put forthwith'—a procedure of which substantial use is made.

After the third reading a Commons Bill is sent to the Lords where it goes through broadly the same stages. Similarly 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, should any non-governmental Lords Bill be unacceptable to the Commons it would not generally become law because no debating time would be allotted to it. The Lords, on the other hand, cannot in general prevent a Bill insisted upon by the Commons from finally becoming law. In the normal course of events they either accept a Commons Bill without changes, or they amend and return it for consideration by the Commons, who frequently agree to the amendments made. In practice, the Lords pass without amendment such financial Bills as the Finance Bill, which authorises taxation, or the Consolidated Fund or Appropriation Bill, which authorises 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 have agreed to it, unless the Commons directs to the contrary. 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 becomes law in the form originally passed by the Commons. Bills to lengthen the life of a Parliament require the full assent of both Houses in the normal way. The limitations on the power of the Lords 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, which can be promoted by people or organisations outside Parliament, go through substantially the same procedure as public Bills, but most of the work is done in committee, where proceedings follow a semijudicial pattern: the promoter must prove the need for the powers or privileges he seeks, and objections on the part of the opposing interests are heard. Both parties may be legally represented.

Delegated Legislation The system of delegated legislation, which is used to relieve pressure on parliamentary time, empowers ministers and other authorities to regulate administrative details after a Bill has become an Act. In order to minimise the risk that powers thus conferred on the executive might supersede or weaken parliamentary government, they are normally delegated to the Queen in Council or to authorities directly responsible to Parliament, that is, to government ministers, government departments for which ministers are responsible, or to organisations whose regulations are subject to confirmation or approval by ministers who thereby become responsible to Parliament for them. Moreover, the Acts of Parliament by which particular powers are delegated normally provide for some measure of parliamentary control over legislation made in the exercise of 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 which will be affected thereby before rules and orders (in the form of statutory instruments) are made.

A joint committee of both Houses reports on the technical propriety of statutory instruments. In the Commons, in order to save time, discussions on the merits of the instruments are often referred to standing committees with any decisions reserved to the House.

Parliamentary
Committees
Committees of
the Whole House

Either House may resolve itself into a committee, known as a committee of the whole house, to consider Bills in detail, clause by clause, after their second reading. A committee of the whole house is presided over by the Chairman of Ways and Means (the Chairman of Committees 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. Each has between 16 and 50 members with the balance of the parties reflecting as far as possible that in the House as a whole. The Scottish Grand Committee, which comprises

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all 71 Scottish members and 10 to 15 others, considers the principles of Scottish Bills referred to it at second reading stage, the Scottish estimates and other matters relating exclusively to Scotland. The Welsh Grand Committee, with all 36 Welsh members and up to five others, considers Bills referred to it at second reading stage, and matters relating exclusively to Wales. The Northern Ireland committee considers matters relating specifically to the province. A standing committee on regional affairs comprising the 516 members from English constituencies considers matters relating to the English regions. The Lords equivalent to a standing committee, a Public Bill Committee, is rarely used.

Select Committees Select committees are generally set up, by either House, to help Parliament with the control of the executive by examining some aspect of administration and reporting to the House. They may be appointed as occasion demands, or for a session, or for the rest of the life of a Parliament. On rare occasions a parliamentary Bill is examined by a select committee (a procedure additional to the usual legislative process). Select committees are constituted on a party basis, in approximate proportion to party strength in the House.

A new structure of select committees has been agreed and it is intended to replace committees dealing with specific topics, for example, nationalised industries and science and technology by 12 new committees, each of which will examine the work of one of the main government departments. The Committee of Selection and the Standing Orders Committee have duties relating to private Bills, and the Committee of Selection also chooses members to serve on standing and select committees.

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

In the House of Lords, as well as the Appeal and Appellate Committees in which the bulk of the House's judicial work is transacted, there are sessional committees on the European Communities, House of Lords offices, hybrid instruments, leave of absence and lords' expenses, personal Bills, private Bills, standing orders, privileges, procedure, selection and sound broadcasting.

Joint Committees The two Houses may agree to set up joint select committees, and joint committees are also appointed in each session to deal with Consolidation Bills and delegated legislation.

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, popularly known as the 1922 Committee, consists of the back-bench membership of the party. 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 a Parliamentary Committee.

Control

Other Forms of The effectiveness of parliamentary control of the Government is a subject of continuing discussion, both inside Parliament and in Britain generally. Control of the Government is exercised in the final analysis by the ability of the House

of Commons to force it to resign either 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. A number of opportunities for a searching examination of government policy by both the Opposition and the Government's own back-benchers are provided in the procedure of the House of Commons. As well as the system of scrutiny by select committees, these include:

1. Question time, which is an hour of parliamentary time on Monday, Tuesday, Wednesday and Thursday during which ministers, in rotation, answer questions put to them on matters for which they are responsible. 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 members' notice by constituents.

2. The right of members to use motions for the adjournment of the House to initiate discussions on constituency cases or matters of public concern. There is a half-hour adjournment period at the end of public business; and immediately before the adjournment for each recess (Christmas, Easter, spring and the summer) a day is spent discussing matters raised by private members. Moreover, a member 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 member asks the House for leave for it to be put forward. Leave can be given unanimously, or if 40 or more members 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 following day.

3. The 29 'supply' days each session, which were formerly used to discuss details of proposed government expenditure, and which are nowadays time for the Opposition to choose subjects for debate. (Scrutiny by small committees has been found more apt for detailed expenditure proposals.)

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 of the Government are also provided in the House of Lords at question time, during debates on specific motions and in 'unstarred'

(that is, debatable) questions at the end of the day's business.

The involvement of Parliament, and more particularly the House of Commons, in the management of the revenues of the State and payments for the

public service is described in Chapter 18, Finance.

Arrangements have been made in Parliament to keep the two Houses informed about European Community developments, and to enable them to scrutinise and debate proposals for Community legislation and other policies which are to be decided in the Council of Ministers.

Parliamentary Commissioner for Administration The Parliamentary Commissioner for Administration (the 'Parliamentary Ombudsman') is an independent statutory officer whose function is to investigate complaints of maladministration when so requested by members of the House of Commons on behalf of members of the public. Powers of investigation extend to actions taken by central government departments in the exercise of their

administrative functions, but not to policy decisions (which are the concern of the Government and can be questioned in Parliament). Certain administrative actions also outside the Commissioner's jurisdiction include 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 Parliamentary Commissioner has access to all departmental papers in the course of an investigation and reports findings to the member of Parliament who presented the complaint. The Parliamentary Commissioner reports annually to Parliament and may submit other reports, for example, of individual investigations.

A select committee of the House of Commons makes recommendations in connection with the Parliamentary Commissioner's work but does not review

individual cases.

Parliamentary Privilege

Each House of Parliament enjoys certain rights and immunities designed to protect it from unnecessary obstruction in carrying out its duties. Those rights

apply collectively to each House and individually to each member.

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

The privileges of the House of Lords include: freedom of speech in debate; freedom of access to the Sovereign for each peer individually; and the right to commit for contempt. These privileges are not formally claimed by the Speaker

as in the House of Commons; they exist independently.

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 of its powers were transferred to the Cabinet as an inner committee of the Privy 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 Privy Council is responsible for advising the Queen to approve Orders in Council, of which there are two kinds, differing fundamentally in constitutional principle: those made by virtue of the royal prerogative, such as Orders approving the grant of royal charters of incorporation; and those made under statutory powers, which are the highest form of delegated legislation. It is an accepted principle that members of the Privy Council attending meetings at which Orders in Council 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) of the same validity as Acts of Parliament. The Privy 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 of the Council on first assuming office, membership of the Privy Council (which is retained for life) is accorded by the Sovereign on the recommendation of the Prime Minister to certain eminent persons in independent monarchical countries of the Commonwealth. There are about 360 Privy Counsellors. The whole Privy Council is called together 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 which deal with legislative matters submitted by the legislatures of the Channel Islands and 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 elected to discontinue the appeal, courts of the Channel Islands and the Isle of Man, and certain other courts, some professional and disciplinary committees and church sources.

The administrative work of the Privy Council committees is carried out in the Privy Council Office under the Lord President of the Council, a senior Cabinet minister, with responsibility for work relating to the development of political institutions.

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 House of Commons. However, the Government must be fully represented by ministers in the House of Lords as it requires spokesmen of standing to expound its policy and justify its actions to that House. The Lord Chancellor is always a member of the House of Lords.

Composition

The composition of the Government is subject to variation from time to time, both in the number of ministers and in the titles of some offices. The creation of a paid ministerial office with entirely new functions requires legislation, but the abolition of an office, the transfer of functions from one minister to another, or a change in the designation of a minister may be effected by Order in Council. Ministers may be classified as follows:

Prime Minister

The Prime Minister is also 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 unique position of authority enjoyed by the holder of this office derives from the ability to command a majority in Parliament and from the power to submit a personal choice of ministers to the Queen and to obtain their resignation or dismissal individually. By convention, the Prime Minister always sits in the House of Commons.

The Prime Minister informs the Queen of the general business of the Govern-

ment; presides over the Cabinet; and is responsible for the allocation of functions

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among ministers.

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

Departmental Ministers

Departmental ministers are in charge of government departments. The holders of these offices, who are usually in the Cabinet, are known as 'Secretary of State' or 'Minister', or they may have a special title, as in the case of the Chancellor of the Exchequer (who is responsible for the Treasury and a number of sub-departments).

Non-Departmental Ministers

Non-departmental ministers include the holders of various traditional offices 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. These ministers may have few or no departmental duties and are thus available to perform any special duties which the Prime Minister may wish to entrust to them. The Chancellor of the Duchy of Lancaster, for example, has ministerial responsibility for the arts and the Paymaster General is responsible for co-ordinating information. (The Lord President of the Council and the Lord Privy Seal, however, have been given departmental responsibilities within the Civil Service Department and the Foreign and Commonwealth Office respectively.)

Lord Chancellor and Law Officers The Lord Chancellor holds a special position, being a Minister of the Crown with departmental functions and also head of the judiciary in England and Wales. 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 are usually appointed to work with ministers in charge of government departments. Although the departmental minister is ultimately responsible for the department, Ministers of State may be responsible to him or her for specific functions and sometimes their titles reflect these particular functions. More than one Minister of State may be appointed to a particular department. It is possible for a Minister of State to be given a seat in the Cabinet and paid accordingly.

Junior Ministers

Junior ministers generally have the title of Parliamentary Secretary or, where the senior minister is a Secretary of State, Parliamentary Under Secretary of State. They share in parliamentary debates, answering parliamentary questions, and assisting in departmental duties. In certain cases, however, they may be

given responsibility, directly under the departmental minister, for specific aspects of the department's work. The Parliamentary Secretary to the Treasury and the other Lords Commissioners of the Treasury are in a different category as Government Whips (see p 29).

Ministerial Salaries

The salaries of ministers in the House of Commons range from £9,811 a year for junior ministers and £12,625 to £15,339 for more senior ministers to £19,650 or £19,764 for Cabinet ministers. The Prime Minister receives £22,000 a year. The Lord Chancellor receives £22,228 a year, including £2,500 for the speakership of the House of Lords. (Increased rates for 1981 have been agreed, with an interim increase in 1980; the Prime Minister and Lord Chancellor have declined an increase until 1981).

Ministers in the House of Commons, including the Prime Minister, also have parliamentary salaries of £5,265 (£5,650 for non-Cabinet ministers) in recognition of their constituency responsibilities and are entitled to claim the allowances paid to all members of the House.

The Cabinet

The Cabinet is composed of about 20 ministers personally selected by the Prime Minister and may include the holders of departmental and non-departmental offices. Its origins can be traced back to the informal conferences that 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 the policy to be submitted to Parliament; the supreme control of the national executive in accordance with the policy agreed by Parliament; and the continuous coordination and delimitation of the authority of government departments. The exercise of these functions is vitally affected by the fact that the Cabinet is a group of party representatives, depending for its existence upon the support of a majority in the House of Commons.

Cabinet Meetings

The Cabinet meets in private and its proceedings are strictly confidential. Its members are bound by their oath as Privy Counsellors not to disclose information about its proceedings. The Official Secrets Acts forbid the publication of Cabinet as well as of other State papers (although after they have been in existence for 30 years they may be made available for inspection in the Public Record Office) and a resigning minister wishing to make a statement involving disclosure of Cabinet discussions should first obtain the permission of the Queen through the Prime Minister.

In normal times the Cabinet meets for a few hours once or twice a week during parliamentary sittings, and rather less frequently when Parliament is not sitting. Additional meetings may be called by the Prime Minister at any time if a matter urgently requiring discussion should arise. To keep the amount of work coming before the Cabinet within manageable limits, a great deal of the work of the Cabinet is carried on through the committee system, which involves the reference of any issue 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; a home and



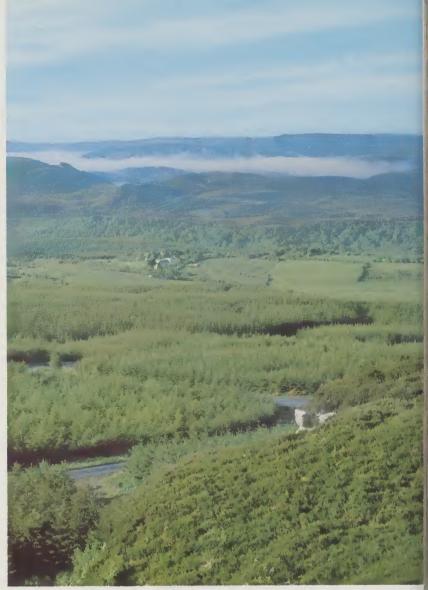


The House of Commons waiting to be summoned to hear the Queen's Speech at the State opening of Parliament on 15 May 1979.

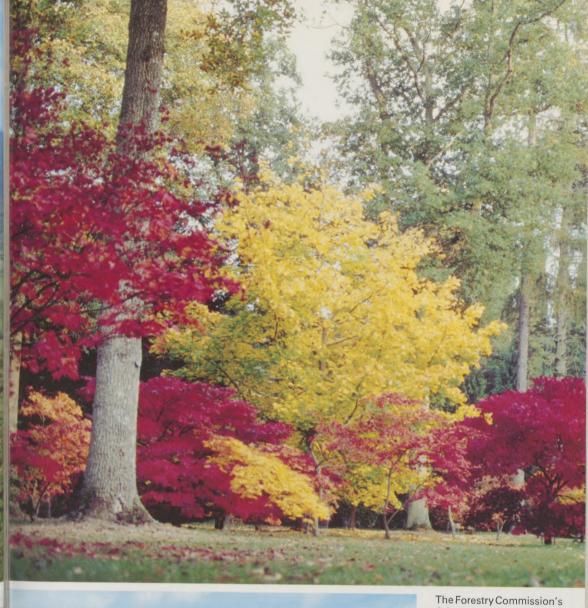
Mrs Thatcher became Britain's first woman Prime Minister after the 1979 spring general election.

Forests

Lough Navar Forest, County Fermanagh; the forestry authority in Northern Ireland is the Department of Agriculture.





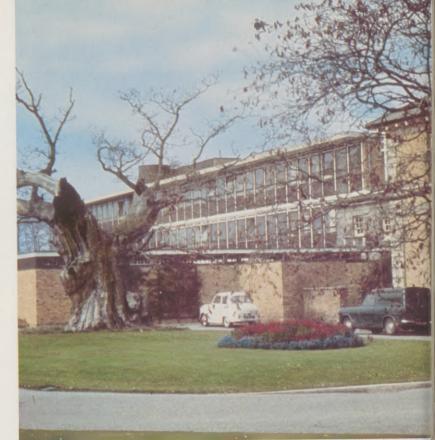




The Forestry Commission's Arboretum, Tetbury, near Gloucester, England (above); Queen Elizabeth Forest Park, Central Region, Scotland (left); Beddgelert Forest in Snowdonia, Gwynedd, Wales (far left).

Forestry Research

The Forestry Commission's two research stations at Alice Holt Lodge, near Farnham, Surrey (right) and Roslin, near Edinburgh, Scotland (below).





social affairs committee under the chairmanship of the Home Secretary; and a legislation committee under the chairmanship of the Lord Chancellor. Subcommittees of the standing committees may be established. The membership and terms of reference of all Cabinet committees is confidential.

Ministers not in the Cabinet may attend its meetings for discussion of matters affecting their departments; they may also be members of Cabinet committees. The Secretary of the Cabinet and senior officials of the Cabinet Office also attend meetings of the Cabinet and its committees as appropriate.

Ministerial Responsibility The term '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, which was fully accepted by the middle of the nineteenth century, means that the Cabinet is bound to offer unanimous advice to the Queen even when Cabinet Ministers do not hold identical views on a given subject. Consequently it means that the policy of departmental ministers must be consistent with the policy of the Government as a whole. In principle, once the Government's policy on a matter has been decided, each minister is expected to support it, unless he or she chooses to 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 the majority of ministers are members of the House of Commons, they are available to answer questions and to 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 Minister of State or a Parliamentary Secretary.

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. Any decision by a

departmental minister binds the Government as a whole.

The responsibility of ministers for their departments is an effective way of bringing 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. In all other respects they must order their affairs in such a way that there is no conflict between their public duties and their private interests.

GOVERNMENT DEPARTMENTS

Government departments are the main instruments for giving effect to government policy when Parliament has passed the necessary legislation. They may, and frequently do, work with and through local authorities, statutory boards, and government-sponsored organisations¹ operating under various degrees of government control.

¹ The Survey of Fringe Bodies (see Bibliography) lists some of these organisations and boards. They are sometimes referred to as 'quangos' (often taken to stand for 'quasi-autonomous non-governmental organisations', although there is no precise definition of the term). As a result of a review of such organisations being undertaken by the Government with a view to a reduction in their numbers and expense, some have been disbanded.

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 (for example, the Department of Employment) cover England, Wales, and Scotland, but not Northern Ireland. Others, such as the Department of Education and Science and the Department of the Environment, are mainly concerned with affairs in England. There are separate departments for Scotland, Northern Ireland and Wales.

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, the minister in charge of the Civil Service Department is responsible for the Central Office of Information, Her Majesty's Stationery Office, and the Department of the Government Actuary; and Treasury ministers are responsible for the Board of Customs and Excise, the Inland Revenue, the Department for National Savings and a number of small departments including the Treasury Solicitor's Department, the Royal Mint, and the National Debt Office. Generally, departments receive their funds directly out of money provided by Parliament and are staffed by the Civil Service.

Internal Organisation

Departments differ in size and in the volume, type and complexity of their work. Since each department makes its own arrangements for discharging its duties, there are variations in internal organisation. Most departments, however, have certain features in common: for instance, the minister of a major department is likely to have at the head of his or her officials a permanent secretary, sometimes assisted by one or more second permanent secretaries, and also one or more deputy secretaries, and a varying number of under secretaries and assistant secretaries. Usually major departments also have a principal finance officer and a principal personnel and organisation officer. Many departments also have their own legal advisers or solicitors, economists and statisticians and their own information divisions. The Government Statistical Service, which includes the Central Statistical Office (CSO), the Business Statistics Office (BSO), the Office of Population Censuses and Surveys and the statistics divisions of the major departments, provides a service of statistical information and advice. Each department compiles statistics relating to its own policy area and publishes them, usually through its own publications. Information about individual industries is published by the BSO in Business Monitors.

Some departments maintain a regional organisation, and some that have direct contact with the public throughout the country also have local offices.

Advisory Bodies

Many government departments are assisted by advisory councils or committees (several hundred in all) which undertake research and collect information, mainly to enable ministers to ascertain informed opinion before coming to a decision involving a legislative or executive act. In some cases there is a statutory obligation on a minister to consult a standing committee, but usually advisory bodies are appointed at the discretion of the minister concerned because he or she feels the need for their advice.

The membership of the advisory councils and committees varies according to the nature of the work involved, and may include civil servants and representatives of varying interests and professions—for instance, industrialists, trade unionists, university and industrial scientists, educationists, lawyers and local government councillors and officers.

In addition to these standing advisory bodies, there are *ad hoc* committees which the Government frequently sets up to examine and make recommendations on specific matters. For certain important inquiries Royal Commissions, whose members are selected on the grounds of their wide experience and diverse knowledge, may be appointed (by royal warrant). Royal Commissions examine written and oral evidence from government departments and interested organisations and individuals, and on this evidence submit recommendations. The Government may accept the recommendations in whole or in part, or it may decide to take no further action or to delay action. Inquiries may also be undertaken by departmental committees, appointed by the head of the appropriate department.

Distribution of Functions

The following pages provide an outline of the principal functions of the main government departments. They are arranged in alphabetical order, except for the Cabinet Office, the Civil Service Department, and the Treasury (which, in view of their central positions, are placed first) and the Scottish and Northern Ireland departments (which are grouped at the end of the section). Further information on the work of departments is given in later chapters under the relevant subject headings.

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 Policy Review Staff, the Central Statistical Office and the Historical Section.

The Cabinet Secretariat serves ministers collectively in the conduct of Cabinet business. It operates as an instrument in the co-ordination of policy at the highest level. Functions of the office include circulating the memoranda and other documents required for Cabinet or Cabinet committee business, preparing agenda for meetings of the Cabinet and its committees, recording their discussions and circulating the minutes, keeping in touch with the progress of action on decisions, and safeguarding the security of documents.

The Central Policy Review Staff advises ministers collectively on major issues

of policy.

The Central Statistical Office is concerned with the preparation and interpretation of the statistics necessary to support economic and social policies and management. It is directly responsible for the central economic aggregates such as the national accounts, balance of payments, financial statistics and measures of output and it prepares a wide range of statistical publications. It co-ordinates the statistical work of other departments and agencies and its director is head of the Government Statistical Service.

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.

The Civil Service Department

The Civil Service Department is responsible for the management of the Civil Service and is under the control of the Prime Minister as Minister for the Civil Service. Responsibility for day-to-day work is delegated to a senior minister, the Lord President of the Council, who is assisted by a minister of State. The Department's Permanent Secretary, its most senior civil servant, is also the official head of the Home Civil Service.

The Department is responsible for personnel management in the Civil Service, which includes policy and central arrangements for recruitment, training (including the Civil Service College), promotion, general career management, catering, welfare and retirement. It is also responsible for controlling expenditure on Civil

Service manpower and related administrative expenses, for pay, pensions, and conditions of service in the Civil Service, and for the co-ordination of pay and pension policies in the public sector as a whole. Further responsibilities include advising the Prime Minister on the allocation of functions and responsibilities between ministers, making recommendations to the Prime Minister on senior appointments and advising on public appointments made by ministers generally. The Department also advises other departments on the development and application of new systems and techniques in management and administration; the provision of central management services covering subjects and techniques such as organisation and methods, operational research and management accounting; and central planning, procurement and co-ordination of government computing.

The Civil Service Commission The Civil Service Commission, which is responsible for recruitment to the Civil Service, forms part of the Civil Service Department. In matters concerned with recruitment policy, the commissioners are responsible to ministers in the normal way, but in the selection of individuals for appointment they act under Order in Council and are completely independent of ministers.

Parliamentary Counsel Office

The Office of the Parliamentary Counsel is responsible for the drafting of all Government Bills, except Bills or provisions of Bills extending exclusively to Scotland, which are handled by the Lord Advocate's Department. The Office advises departments on questions of parliamentary procedure; and attends sittings (and committees) of both Houses as required. In addition the Parliamentary Counsel draft subordinate legislation when specially instructed, and advise the Government on legal, parliamentary and constitutional questions falling within their special experience.

The Treasury

Nominally the heads of the Treasury are the Lords Commissioners: the First Lord of the Treasury (always the Prime Minister), the Chancellor of the Exchequer and five junior Lords. In practice, the Lords Commissioners never meet as a board and their responsibilities are carried by the Chancellor of the Exchequer assisted by the Chief Secretary to the Treasury, the Financial Secretary and two Ministers of State. The Parliamentary Secretary to the Treasury is the Chief Government Whip in the House of Commons.

The Treasury is the government department primarily responsible for the development of Britain's overall economic strategy. Its Public Services Sector is responsible for controlling aggregate public expenditure and for most of the individual public expenditure programmes; the Domestic Economy Sector is concerned with fiscal, monetary and counter-inflation policies, and with the Treasury's contribution to industrial policies, including control of public expenditure on industry and agriculture; the Overseas Finance Sector is responsible for balance of payments policies, the management of Britain's foreign currency reserves, international monetary questions, financial relations with other countries and the aid programme; and the Chief Economic Adviser's Sector is responsible for the preparation of short-term and medium-term economic forecasts and for specialist advice on broad economic policies.

Agriculture, Fisheries and Food

The Ministry of The Ministry of Agriculture, Fisheries and Food is responsible for administering government policy for the agriculture, horticulture and fishing industries in England, and for matters relating to the food and drink manufacturing and distribution industries in Britain generally. Directed by the Minister of Agriculture, Fisheries and Food (who is assisted by two Ministers of State and a Parliamentary Secretary) its functions include the administration, in co-operation with

the Intervention Board for Agricultural Produce, of agricultural support, and in particular the Common Agricultural Policy of the European Community. The Ministry also administers schemes such as those designed for the control and eradication of animal and plant diseases and grants to encourage capital investment in the agricultural and horticultural industry including those for the improvement and drainage of agricultural land; and it exercises responsibilities relating to applied research and development. In addition it is concerned with the safety and quality of food including standards of composition, labelling and advertising, food additives and contaminants; and it has certain responsibilities for ensuring public health standards in the production and handling of basic foods in cargoes, stores and slaughterhouses. Where appropriate these measures and those of the Community are being harmonised.

The Ministry's responsibilities extend to Scotland and Wales regarding the operational control of certain diseases of animals. It also acts on behalf of the Secretary of State for Wales in certain matters relating to, for instance, fisheries, the provision of agricultural advice and the safety and quality of food.

The Ministry maintains relations with other Commonwealth and foreign countries and participates in certain of the activities of a number of international organisations concerned with agriculture, fisheries and food, and trade in food products, such as the Food and Agriculture Organisation of the United Nations, and the Organisation for Economic Co-operation and Development and the General Agreement on Tariffs and Trade.

The Intervention Board for Agricultural Produce An executive department subject to the direction and control of ministers responsible for agriculture, the Intervention Board for Agricultural Produce is responsible for the implementation in the United Kingdom of the market support arrangements and certain other aspects of the European Community's Common Agricultural Policy provided for under the guarantee section of the European Agricultural Guidance and Guarantee Fund. In consultation with the Overseas Development Administration, the Board is responsible for mobilising cereals for developing countries under the Food Aid Convention 1971, and for administering occasional Community donations of other commodities to developing countries and areas of national disasters.

Office of Arts and Libraries

The Office of Arts and Libraries is the responsibility of the Chancellor of the Duchy of Lancaster and deals with policy and financial support for the arts and for libraries and museums.

The Board of Customs and Excise

The primary work of the Board of Customs and Excise is to collect and administer the customs and excise duties, including value added tax, imposed from time to time in the annual Finance Acts or by other legislation, and to advise the Chancellor of the Exchequer on any matters connected with them. The Board is also responsible for preventing and detecting evasion of the revenue laws.

The Board undertakes, for other departments, a wide range of non-revenue agency work, for instance, the enforcement of prohibitions and restrictions on the import and export of certain classes of goods, exchange currency control, and the compilation of United Kingdom overseas trade statistics from customs import and export documents. Parliamentary responsibility for the Board's work is exercised by Treasury ministers.

The Ministry of Defence

The Ministry of Defence is the government department responsible for defence policy and for the control and administration of the three armed services—

Navy, Army and Air Force (including the procurement of defence equipment). The Secretary of State for Defence is in charge of the department, assisted by a Minister of State. Three Parliamentary Under Secretaries of State are responsible for the three armed services.

The Department of Education and Science

The Department of Education and Science is responsible under a Secretary of State, assisted by a Minister of State and two Parliamentary Under Secretaries of State, for the general promotion of education in England; for the Government's relations with universities in Great Britain; and for fostering the progress of civil science both in Britain and internationally.

Among the matters relating to the development of school and post-school education for which the Department has responsibility are the broad allocation of resources for education, the capital programmes for the building of new schools and other institutions, the supply, training and superannuation of teachers, and the basic standards of education. The Department works in cooperation with local education authorities whose duty it is to provide and run the schools and colleges in their areas. Its relations with the universities are conducted through the University Grants Committee. Activities concerning civil science are discharged through five research councils: the Medical Research Council, the Agricultural Research Council, the Natural Environment Research Council, the Social Science Research Council and the Science Research Council. On questions of scientific policy an advisory board for the research councils advises the Secretary of State.

The Department of Employment

The Department of Employment has responsibility for manpower policies in Britain, either directly or through statutory agencies, and for the formulation of labour legislation. It is also responsible for monitoring labour market trends, including pay, and for producing statistics on them and on retail prices (from which the rate of inflation is calculated). The Department is responsible for the payment of unemployment benefit through its local offices; for the issue of work permits to workers from overseas; and for the Race Relations Employment Advisory Service. The Secretary of State for Employment is assisted by a Minister of State and two Parliamentary Under Secretaries of State.

The Department of Energy

The Department of Energy is concerned with the development of government policies for the supply and use of all forms of energy. It discharges functions connected with the nationalised coal and gas industries in Great Britain and the electricity industry in England and Wales; is responsible for the United Kingdom Atomic Energy Authority; and is the sponsoring department for the nuclear power and oil industries including the British National Oil Corporation. It is also responsible for the policy for the development of offshore oil and gas resources in the British sector of the continental shelf; and it sponsors, through the Offshore Supplies Office in Glasgow, the suppliers of equipment to the offshore operators. The Department also represents Britain in international discussions on energy policy, including relations and co-operation with oilproducing countries. It is the co-ordinating and sponsoring body for energy conservation policy, in addition to implementing measures not falling directly to any other department. The Department also encourages the development of new sources of energy, being assisted by the Energy Technology Support Unit at Harwell, Oxfordshire. The Secretary of State for Energy is assisted by a Minister of State and two Parliamentary Under Secretaries of State.

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The Department of the Environment

The Department of the Environment is responsible in England for a wide range of functions relating to the physical environment in which people live and work.

The Department is concerned primarily with the strategic issues of policy and priorities, including public expenditure, which determine the operations of the Department as a whole. It is also responsible for urban affairs and inner city renewal; new towns; local government; regional affairs; the finance and policy of the housing programme; the construction industries; planning, development control and land; special responsibilities for sport and recreation; the control of pollution; water and sewerage; minerals; countryside affairs; and the Property Services Agency (which provides nearly all government common services relating to land, property, building and furnishings).

The Department is also concerned with the conservation of historic towns and buildings and ancient monuments, and research into planning matters.

building and construction, environmental pollution and resources.

The Secretary of State for the Environment is assisted by two Ministers of State (the Minister for Housing and Construction and the Minister for Local Government and Environmental Affairs) and four Parliamentary Under Secretaries of State, one of whom has special responsibility for sport and recreation.

Export Credits Guarantee Department The Export Credits Guarantee Department, which is a separate government department within the responsibility of the Secretary of State for Trade, offers two main facilities to British exporters; insurance against the risk of not being paid for goods and services; and access to special fixed interest rates for export finance. The Department also provides support for 'buyer credits' (loans made direct to overseas buyers for capital goods contracts enabling the supplier to be paid on cash terms); insurance against the political risks of new overseas investment for up to 15 years; partial protection for large capital goods contracts against an unexpectedly high rise in costs; and support for the issue of performance bonds.

The Foreign and Commonwealth Office

Under the direction of the Secretary of State for Foreign and Commonwealth Affairs the Foreign and Commonwealth Office provides, mainly through diplomatic missions, the means of communication between the British Government and other governments and international governmental organisations for the discussion and negotiation of all matters, including economic issues, falling within the field of international relations. In particular the Department is responsible for alerting the British Government to the implications of developments overseas; for protecting British interests overseas, including commercial interests; for protecting British citizens abroad; and for explaining British policies to, and wherever possible cultivating friendly relations with, governments and peoples overseas. The Department is also responsible for the discharge of British responsibilities in the associated States (mainly for defence and external affairs) and dependent territories. In the dependent territories, each of which has its own internal administration, the British Government is finally responsible for good government and for the relations between these territories and other countries.

The Secretary of State is assisted by the Lord Privy Seal and four Ministers of State (one of whom has responsibility for overseas development—see below) and a Parliamentary Under Secretary of State.

The Overseas Development Administration Overseas development functions are the responsibility of the Minister for Overseas Development, a Minister of State within the Foreign and Commonwealth Office. The Overseas Development Administration is responsible for Britain's

policy of financial aid and technical co-operation in developing countries. It is concerned with the aid programme as a whole and its detailed composition. The provision of financial aid includes both grants and loans (the latter mostly interest-free) and support for multilateral aid agencies, such as the IBRD (World Bank); technical co-operation comprises the supply of British experts and equipment, the training of overseas personnel, and the support of research and advisory services.

The Department of Health and Social Security The Department of Health and Social Security headed by the Secretary of State for Social Services is responsible in England for the administration of the National Health Service; the social services provided by local authorities for the elderly and handicapped, socially deprived families, and children in care; and for certain aspects of public health, including hygiene. Throughout Great Britain it is responsible for the collection of social security contributions and the payment of benefits. The Department is concerned in making reciprocal health and social security arrangements with other countries and in the administration of European Community social security regulations for immigrant workers. It also represents the United Kingdom in the World Health Organisation.

Through its Supplementary Benefits Commission the Department is responsible for determining awards of non-contributory benefits and Family Income Supplement, for reception centres, and for assessing the means of people applying for legal aid. The Department also has responsibilities in connection with pensions and welfare services (including in some cases the provision of medical and surgical treatment) for war pensioners in the United Kingdom, the Channel Islands and the Isle of Man, and, through its various agencies, for United Kingdom war pensioners living in other countries.

The Secretary of State for Social Services is assisted by two Ministers of State (the Minister for Health and the Minister for Social Security, who also has special responsibility for the disabled) and two Parliamentary Under Secretaries of State.

The Home Office

The Home Office deals with those internal affairs in England and Wales not assigned to other government departments. The Secretary of State is the means of communication between the Crown and the public, and between the United Kingdom Government and the Governments of the Channel Islands and the Isle of Man. The minister exercises certain prerogative powers of the Crown, of which the most important are the prerogative of mercy and the maintenance of the Queen's Peace. The Home Office is also concerned with: the administration of justice; criminal law; the treatment of offenders; probation; the prison service; public morals and certain public safety matters; the police, fire and emergency services; immigration and nationality; community relations; co-ordination of government action in relation to voluntary social services; and legislation on sex discrimination and race discrimination policy. Broad questions of national broadcasting policy are also Home Office matters.

Other responsibilities include: addresses and petitions to the Queen and preparation of presentations to Parliament; preparation of patents of nobility for peers, and formal proceedings for the granting of honours; requests for the extradition of criminals; scrutiny of local authority by-laws; grant of licences for scientific experiments on animals; exhumation and removal of bodies; firearms; dangerous drugs; general policy on liquor licensing laws; gaming and lotteries; charitable collections; and theatre and cinema licensing. The Secretary of State is assisted by two Ministers of State and a Parliamentary Under Secretary of State.

The Department of Industry

The Department of Industry, under a Secretary of State, is responsible for general industrial policy and for industrial aspects of regional policy including financial assistance to industry under the Industry Act. Some regional industrial policy functions in Scotland and Wales are exercised by the Scottish and Welsh Offices. The Department sponsors individual manufacturing industries, and is responsible for four nationalised industries: the British Steel Corporation, the Post Office, British Aerospace and British Shipbuilders. It is also responsible for industrial research and development, including civil aerospace research and the supervision of industrial research establishments and for the provision of technical services to industry. The Design Council and the National Research Development Corporation come within its sphere.

The Department's regional offices also serve the Departments of Trade, and

Energy.

The Secretary of State is assisted by two Ministers of State and two Parliamentary Under Secretaries of State.

The Central Office of Information

The Central Office of Information (COI), a common service department, produces information and publicity material, and supplies publicity services required by other government departments (which are responsible for the policies expressed). In the United Kingdom, it conducts press, television, radio and poster advertising; produces booklets, leaflets, films, radio and television material, exhibitions, photographs and other visual material; and distributes departmental press notices. For the Foreign and Commonwealth Office it supplies British information posts overseas with press, radio and television material, publications (including magazines), reference services (including this official handbook), films, exhibitions, photographs, and display and readingroom material. The COI provides exhibition services (except for trade and cultural exhibitions); and organises visits (other than those sponsored by the British Council and the British Overseas Trade Board) for people officially invited to Britain. It also provides services for London-based correspondents of the overseas news media and training facilities for information officers of overseas governments. There are nine regional information offices in England providing services for the home departments and assisting the overseas services by supplying material and by arranging visits for overseas visitors; similar services are provided on a mutually agreed basis by the information staffs of the Scottish, Welsh and Northern Ireland Offices.

The Board of Inland Revenue

The Board of Inland Revenue administers the laws relating to income tax, corporation tax, capital gains tax, stamp duty, capital transfer tax, petroleum revenue tax, development land tax and certain other direct taxes, and advises the Chancellor of the Exchequer on any matters connected with them. It is also responsible for the valuation of land and buildings for such purposes as compensation for compulsory purchase and, in England and Wales, local rates (a form of local taxation).

The Law Officers' Department

The Law Officers of the Crown for England and Wales (the Attorney General and the Solicitor General) appear on behalf of the Crown in important civil and criminal proceedings and before international tribunals such as the International Court of Justice at The Hague and the European Commission and Court of Human Rights at Strasbourg. The Attorney General is the senior legal adviser to the Government and has the ultimate responsibility for the enforcement of the criminal law. The Attorney General has to consent before proceedings for a number of criminal offences can be commenced and superintends

the Director of Public Prosecutions. Legal proceedings for the enforcement of public rights and on behalf of the interests of charity are conducted in the name of the Attorney General, who also directs the work of the Queen's Proctor, an officer with duties connected with the operation of the divorce laws.

The Attorney General is also spokesman for the Lord Chancellor in the House of Commons on matters affecting the administration of justice. The Solicitor General is subject to the authority of the Attorney General, with the same rights and duties. The Law Officers, who are leading barristers, are always members of the House of Commons.

The Lord Chancellor's Office

The Chancellorship is a legislative, judicial and executive office held by an eminent ex-member of the judiciary or of the Bar and carrying Cabinet rank.

In addition to functions as Speaker of the House of Lords and Custodian of the Great Seal, the Lord Chancellor may sit judicially as a member of the Appellate Committee of the House of Lords or of the Judicial Committee of the Privy Council.

The Lord Chancellor is also the minister primarily responsible for the administration of the courts and of the law. The Home Secretary has important responsibilities in respect of the criminal law but the Lord Chancellor appoints magistrates and recommends to the Crown most other appointments to the judiciary in England, Wales and Northern Ireland. Responsibility for the courts and for their administrative staff is exercised through six regional (or circuit) offices and their sub-offices.

The Lord Chancellor is responsible for court procedure and for law reform, including appointing the members of the Law Commission, and for presenting the Commission's reports to Parliament.

The Lord Chancellor appoints the chairmen of certain administrative tribunals in England and Wales, and (with the Secretary of State for Scotland) the members of the Council on Tribunals; and is responsible for the administration of the Judge Advocate General's Department, the Department of the Official Solicitor² and the Public Record Office (which preserves, and provides access to, the national archives).

Ordnance Survey

The Ordnance Survey is responsible for the surveying and mapping of Great Britain (Northern Ireland has its own Ordnance Survey). This includes geodetic surveys and associated scientific work, topographic surveys and the production of maps at appropriate scales from these surveys. The Department also undertakes a considerable amount of agency work for other departments, particularly the Ministry of Defence, and for the Institute of Geological Sciences and the Land Registry. Parliamentary responsibility for the Ordnance Survey is exercised by ministers of the Department of the Environment.

The Paymaster General's Office

The Paymaster General's Office acts generally as a banker for government departments other than the Boards of Inland Revenue and Customs and Excise, for which separate arrangements exist. Money granted by Parliament is transferred (in such sums as may be required from day to day) from the

¹ The Judge Advocate General's Department advises the Secretary of State for Defence and the Defence Council on legal matters arising out of the administration of military law, and reviews the proceedings of army and air force courts martial.

² The Official Solicitor is concerned with the interests of minors and people with a mental disability involved in proceedings in the High Court, who would otherwise not be represented. Additional roles are the protection of the interests of people committed to prison for contempt of court, and acting as Receiver for people with a mental disability, and as Judicial Trustee in complex and disputed trusts.

Exchequer account to the account of the Paymaster General at the Bank of England. Most departmental payments are made by means of payable orders drawn on the Paymaster General's Office; their recipients obtain payments through the commercial banks, whose accounts at the Bank of England are in turn reimbursed by the Paymaster General's Office. The Department is also responsible for the regular payment of many public service pensions.

The Office of Population Censuses and Surveys The Office of Population Censuses and Surveys (OPCS) is the office of the Registrar General for England and Wales. The Office is responsible for administering the Marriage Acts and local registration of births, marriages and deaths; estimating and projecting national, regional and local populations and the movement of people within Britain and between Britain and overseas; statistics of diseases, injuries and deaths, and of other aspects of health service information; taking the Census of Population and processing, analysing and reporting the resulting statistics; and conducting surveys on a wide range of subjects for other government departments.

The
Department of
the Procurator
General and
Treasury
Solicitor

The Treasury Solicitor provides a common legal service for a large number of government departments in England and Wales. The duties of the Department include instructing Parliamentary Counsel on Bills and drafting subordinate legislation, representing other departments in court, and giving general advice on the interpretation and application of the law. The Department undertakes a considerable amount of conveyancing connected with the transfer of property, administers the estates of persons dying without known relatives and intestate, and deals with the outstanding property and rights of dissolved companies. The Statutory Publications Office is staffed and controlled by the Treasury Solicitor, who reports annually on its work to the Statute Law Committee (a body appointed by the Lord Chancellor from among the judiciary and legal profession in Great Britain).

Some government departments are wholly dependent on the Treasury Solicitor for their legal work; some have their own legal staffs for a proportion of the work and draw on the Treasury Solicitor for special advice and, often, for litigation and conveyancing; others, whose administrative work is based on or deals with a code of specialised law or involves a great deal of legal work, have their own independent legal sections.

The Treasury Solicitor is also the Queen's Proctor (an officer who has certain duties in connection with the divorce laws).

Her Majesty's Stationery Office Her Majesty's Stationery Office (HMSO) is the publisher for Parliament and the Government. The Controller is the Queen's Printer of Acts of Parliament and is responsible for the copyright of all British government documents. Official publications are sold by government bookshops in London, Edinburgh, Cardiff, Belfast, Manchester, Bristol and Birmingham, and through agents and booksellers overseas. HMSO is the United Kingdom agent for publications of the European Community and of other principal international organisations.

HMSO provides a wide range of printing, duplicating, photocopying, and micro-copying facilities for Parliament and the Government in its eight printing works and other establishments, and through commercial contractors. It operates five binderies, two of which are involved in the repair of manuscripts from national archives. HMSO is the central purchasing organisation providing the home and overseas public service with paper, printing, binding, books, office supplies and office machinery, and supporting services, such as addressing, and distribution and maintenance of office machinery.

The Department of Trade

The Department of Trade is responsible, under a Secretary of State, for commercial policy and relations with overseas countries. It promotes British commercial interests overseas, negotiates trade and commercial matters, and administers British protective tariffs. It sponsors the work of the British Overseas Trade Board in export services and government support for overseas trade fairs and provides an information service to industry largely through the eight regional offices. In May 1979 it became responsible for consumer affairs and competition policy when the work of the former Department of Prices and Consumer Protection was merged with that of the Department of Trade. It is responsible for companies legislation, supervision of the insurance industry, the insolvency service and for patent, trade mark and copyright matters. Other responsibilities include civil aviation, marine and shipping policy, tourism, the hotel and travel industries, the newspaper, printing, publishing and film industries, and the distributive and service trades. The Secretary of State is assisted by two Ministers of State (one of whom is Minister for Consumer Affairs) and two Parliamentary Under Secretaries of State.

The Department of Transport

The Department of Transport, headed by a Minister who is assisted by a Parliamentary Secretary, is responsible in England for the main transport industries, including railways, buses, freight and ports. It is also responsible for the planning and construction of motorways and trunk roads, although decisions arising from independent inspectors' reports on public inquiries into roads are shared with the Department of the Environment. The Department is further responsible for local transport, road and vehicle safety, and vehicle and driver licensing.

The Welsh Office

The Secretary of State for Wales, a Cabinet minister, has full responsibility in Wales for ministerial functions relating to health and personal social services, housing, local government, education (except universities), town and country planning, new towns, water and sewerage, roads, agriculture, forestry, tourism, national parks, ancient monuments and historic buildings, the careers service and the activities in Wales of the Manpower Services Commission. The Secretary of State has certain responsibilities relating to the National Library and the National Museum; the Wales Tourist Board and the Sports Council for Wales, and shared responsibility for the administration of urban grants to areas of acute social deprivation. The Secretary of State, who is assisted by two Parliamentary Under Secretaries of State, has direct ministerial responsibility in Wales for selective financial assistance to industry, as well as a general responsibility for economic development. The Welsh Development Agency and the Development Board for Rural Wales, which are responsible to the Secretary of State, also have important industrial, environmental and (in the case of the Board) social functions.

The Welsh Office maintains close and continuous working relationships with the government departments mainly concerned with economic and industrial affairs. The main Welsh Office is in Cardiff, with branches throughout Wales and a small ministerial office in London.

SCOTLAND

Scotland has its own system of law and a wide measure of administrative autonomy. The Secretary of State for Scotland, a Cabinet minister, has responsibility in Scotland (with some exceptions) both for the formulation of policy and for its execution in such matters as 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.

The Secretary of State also has a major and expanding role in the planning and development of the Scottish economy, and important functions related to industrial development, with responsibility for selective financial assistance to industry, for the Scottish Development Agency, and for the activities of the Manpower Services Commission and the careers service. Moreover, the Secretary of State plays a full part in the Government's determination of energy policy, in particular in relation to responsibility for the electricity supply industry in Scotland.

The Secretary of State is responsible for legal services in Scotland, and other important functions are exercised by the two Scottish Law Officers: the Lord Advocate and the Solicitor General for Scotland. On many domestic matters, in order to reflect distinctive Scottish features and the different conditions and needs of the country and its people, there is separate legislation relating wholly to Scotland, or else clauses of special application to Scotland only are inserted in Acts which otherwise apply to the United Kingdom generally. The Secretary of State is also responsible for a range of other functions from fire services to sport and tourism.

A Minister of State and three Parliamentary Under Secretaries of State assist the Secretary of State.

The United Kingdom Government's administrative functions arising from these responsibilities are carried out principally by five Scottish departments based in Edinburgh and known as the Scottish Office. A management group including five heads of departments under the chairmanship of the Permanent Under Secretary of State advises the Secretary of State, particularly on questions, such as the allocation of resources and forward planning, with which more than one of the departments are concerned.

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

The Department of Agriculture and Fisheries for Scotland

The Department of Agriculture and Fisheries for Scotland is responsible for the promotion of the agriculture and fishing industries in Scotland. For agriculture this includes participation in European Community negotiations on agricultural policy, the provision of technical and financial help to farmers, the supervision of educational, advisory and research services, the administration of a variety of schemes for the improvement of land, farm stock and crops, the development of crofting and the management of a large area of agricultural land which is in public ownership. Its duties for fisheries include participation in international arrangements for conservation and other aspects of fishing and in the European Community negotiations on fisheries policy, financial support for the fishing industry, assistance for fishery harbours, scientific research and the protection of Scottish fisheries by the Department's fleet of fishery protection vessels.

The Scottish Development Department

The Scottish Development Department is concerned with a number of services affecting the physical development of Scotland, such as town and country planning, housing, roads, water supplies and sewerage, coast protection, flood prevention, building standards and the prevention of river and air pollution (most of which are administered by local authorities). The Department is also responsible for general policy in regard to local government organisation and for ancient monuments and historic buildings; certain transport functions including oversight of the Scottish Transport Group; and assistance for shipping services, ferry services, pier work, and air services in the Highlands and Islands.

The Scottish Economic Planning Department The Scottish Economic Planning Department is responsible for industrial and economic development including the Scottish aspects of regional and industrial policies in relation to both the United Kingdom and the European Community, and the economic aspects of North Sea oil and gas development; selective assistance to industry; oversight of the Scottish Development Agency; manpower policy, including employment and unemployment, training and retraining and the careers service; the Highlands and Islands Development Board and the Scottish Tourist Board; electricity; and new towns. The Department also acts as agent in Scotland for certain of the services of the Departments of Trade and Industry.

The Scottish Education Department The Scottish Education Department is responsible for industrial and public education in Scotland in all its forms (except universities). Through its Social Work Services Group the Department has a responsibility for the guidance of local authorities in their provision and development of social work services. It is also concerned with sport, including the financing of the Scottish Sports Council, and with the development of the arts, and has responsibility for the administration of the National Galleries of Scotland, the Royal Scottish Museum (including the Scottish United Services Museum), the National Museum of Antiquities of Scotland, and the National Library of Scotland.

The Scottish Home and Health Department The Scottish Home and Health Department is responsible for the central administration of functions relating to law and order, including the police service, criminal justice (other than the conduct of prosecutions) and legal aid and the administration of penal institutions. It also has responsibility for the administration of the National Health Service in Scotland, legislation relating to public service superannuation schemes in Scotland and the administration of the teachers' and National Health Service superannuation schemes. The Home and Health Department is the central authority in Scotland for the fire service, for certain home defence and emergency services, and for legislation concerning shops, theatres, cinemas, licensed premises and land tenure matters.

Other Administrative Departments In addition to the main departments, there are a number of other Scottish departments, all of which work in varying degrees under the direction of the Secretary of State. Such departments include the Department of the Registrar-General for Scotland (the General Register Office); the Scottish Record Office; and the Department of the Registers of Scotland. There are also Scottish branches of the Great Britain and United Kingdom departments under the direction of controllers, who are responsible for ensuring that the execution in Scotland of the policy and procedure of their departments is in accordance with Scottish conditions and needs.

The Scottish Law Officers The Law Officers of the Crown for Scotland (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. The Lord Advocate is also closely concerned with questions of legal policy and administration and is responsible for the institution and direction of all prosecutions on indictment in Scotland, and the control of summary prosecutions in the Sheriff and District Courts, which are conducted by officials of the Procurator Fiscal Service. In some of this work the Lord Advocate is assisted by the Lord Advocate's Department and the Scottish Courts Administration. The members of the Lord Advocate's Department also act as legal advisers on Scottish questions to certain government departments

which have no Scottish legal adviser of their own. The work relevant to prosecutions is centred in the Crown Office in Edinburgh.

The Parliamentary Draftsmen for Scotland, incorporated in the Lord Advocate's Department, are responsible to the minister concerned and to the Law Officers for the drafting of government Bills affecting the law of Scotland.

The Scottish Courts Administration The Scottish Courts Administration has a general responsibility to the Secretary of State for the organisation, administration and staffing of the courts and court offices, and is responsible to the Lord Advocate for certain functions in the field of law, including the programme of the Scottish Law Commission, proposals for law reform and questions involving private international law, internal conventions and associated problems, the jurisdiction and procedure of the Scottish courts, and enforcement of judgments.

NORTHERN IRELAND

The Government of Ireland Act 1920 enacted a constitution which, while preserving the supreme authority of the United Kingdom Parliament and reserving certain matters to that Parliament, provided Northern Ireland with its own legislature and executive to deal with domestic 'transferred' matters. This structure remained in force until 1972 when, following several years of sectarian violence and terrorism in Northern Ireland, the Northern Ireland Government resigned and a period of direct rule was introduced, with executive powers under the control of a Secretary of State for Northern Ireland. In 1973 a new constitution for the Province provided, among other things, for the devolution of powers to a legislative assembly and a 'power-sharing' executive with responsibility for the devolved services (such as agriculture, commerce, education, health and the environment). Responsibility for law and order, electoral matters and business of national importance such as foreign policy, defence and most aspects of taxation remained with the United Kingdom Government and Parliament. These arrangements came into force in January 1974, but following widespread opposition in Northern Ireland the Executive resigned and the Assembly was prorogued in May 1974. In July 1974 the Northern Ireland Act was passed, providing for the election of a Constitutional Convention to consider what arrangements for the government of Northern Ireland would be likely to command most widespread acceptance throughout the community. The Act provided for an interim period (defined as one year from the passing of the Act) during which the United Kingdom Government, through the Secretary of State for Northern Ireland, should continue to be responsible to the United Kingdom Parliament for the devolved services.

The Northern Ireland Assembly was finally dissolved at the end of March 1975, and elections to the Constitutional Convention and its first meeting took place in May of that year. In March 1976, the Convention was dissolved, having failed to reach agreement on the central issue of a system of government which would attract the widespread acceptance of the community. Direct rule as provided for in the Northern Ireland Act has since been extended for further periods of a year and Northern Ireland departments continue to discharge their functions under the direction and control of the Secretary of State for Northern Ireland. The Government's aim is to restore peace and security to the Province and to promote social and economic welfare. It is also seeking an acceptable way of restoring to the people of Northern Ireland more control over their own affairs.

The Northern Ireland Office

The Northern Ireland Office is the department of the Secretary of State for Northern Ireland who, assisted by two Ministers of State and three Parliamentary Under Secretaries of State, has overall responsibility, and is answerable to Parliament, for the government of Northern Ireland. Through the Northern Ireland Office the Secretary of State has responsibility for constitutional developments, law and order and security, and electoral matters.

Northern Ireland Departments

The Northern Ireland departments are subject to the direction and control of the Secretary of State. Their principal functions are listed below.

Department of Agriculture

The Department of Agriculture is responsible for the development of Northern Ireland's agricultural, forestry and fishing industries. Its functions also include the collection of agricultural census data, the compilation of statistics, the provision of extensive advisory services to farmers, and the promotion of agricultural research, education and training. The Department acts as agent of the Ministry of Agriculture, Fisheries and Food in agricultural support and the implementation of the European Community's Common Agricultural Policy.

Department of the Civil Service

The Department of the Civil Service is responsible for the general management and control of the Northern Ireland Civil Service.

Department of Commerce

The Department of Commerce is concerned with the development of Northern Ireland's industry and commerce, and with the administration of schemes of assistance to industry. The Department also has responsibilities in connection with electricity and other fuel undertakings; harbours (other than fishery harbours); the tourist trade; the regulation and inspection of mines and quarries; mineral development; consumer protection; the registration of companies, societies, credit unions and insurance and unit trusts; and the administration of an industrial science department.

Department of Education

The Department of Education is responsible for central policy, co-ordination and financial control of the education (apart from universities), youth and library services and for the oversight of the five education and library boards which are responsible for the local administration of these services; for teacher training; and museums. It also makes awards for teacher training and post-graduate studies; formulates and sponsors policies for the improvement of community relations and community services; and distributes grants for the arts and various recreational and community facilities.

Department of the Environment

The Department of the Environment is responsible for housing, planning, comprehensive development, the construction and maintenance of roads and bridges, water supply and sewerage services, local government, the Development Officer service, transport and traffic matters (including road safety), pollution control, amenity lands (country parks, nature reserves and areas of natural beauty), environmental public health, historic buildings and ancient monuments, street lighting and the fire service.

Department of Finance

The Department of Finance's responsibilities include the control of the expenditure of the Northern Ireland departments, liaison with the United Kingdom Treasury and the Northern Ireland Office on financial matters, and economic and social planning and research.

The Department has also responsibility for: rating policy and the collection of rates; borrowing; loan advances; charities and charitable funds; the provision and maintenance of public buildings; building regulations and liaison with the construction industry; property valuation; Ordnance Survey; public records;

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the registration of births, marriages and deaths; the registration of title of land; miscellaneous licensing; the registration of clubs; and Ulster Savings.

Department of Health and Social Services

Manpower

Services

Department of

The Department of Health and Social Services is responsible for all aspects of health and personal social services and the administration of the social security schemes.

The Department of Manpower Services has responsibility for the administration of government policy in relation to the employment and training of labour. It operates employment service and careers offices; administers a comprehensive training programme; operates grant schemes to encourage training and employment; compiles statistics on employment and unemployment and undertakes research into employment matters. It provides a factory inspectorate and deals with industrial relations and the rehabilitation and employment of the disabled.

It is also responsible for sponsorship of the direct labour organisation of Enterprise Ulster and has functions in relation to the Industry Training Boards, Northern Ireland Training Executive, Fair Employment Agency, the Equal Opportunities Commission, the Labour Relations Agency and the Health and Safety Agency.

THE CIVIL SERVICE

A civil servant is a servant of the crown employed in a civil capacity, other than the holder of a political or judicial office and other than an office-holder under the Crown whose terms and conditions of service are separately provided for. Including part-time staff (two part-time officers being reckoned as equivalent to one full-time), there are about 733,000 civil servants (nearly 40 per cent of them women), roughly 350,000 of whom are 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. About 249,000 are employed in the Ministry of Defence, including the Royal Ordnance factories and Royal Dockyards. The rest are about equally 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 Mint.

Three-quarters of civil servants work outside London. As part of its policy of reducing the claims of the public sector on the country's resources the Government has declared its intention to make cuts in Civil Service manpower.

The total number includes about 167,000 'industrial' civil servants, mainly manual workers in government industrial establishments, whose pay and conditions of service are largely separately administered from those of 'non-industrial' civil servants.

Stability of administration is ensured by the political neutrality of the Service. Although civil servants work under the authority and direction of the ministers of the department to which they are appointed, legally they are servants of the Crown. A change of minister, whether due to ministerial changes within a government or the advent of a government of a different political complexion, does not involve a change of staff.

Ministers sometimes personally appoint special advisers from outside the Civil Service.

The structure of the Home Civil Service is being redesigned to provide for a more flexible deployment of staff so that talent can be used to the best advantage

Structure

and the highest levels of the Civil Service seen to be open to people of outstanding ability, whatever their specialist background or original method of entry to the service. These structural changes involve the abolition of classes, and are being allied with personnel management policies designed to ensure that, although work requiring specialist skill is always done by appropriately qualified individuals, people with the necessary aptitudes are given opportunities to gain suitably wide experience to fit them for higher posts.

At the top levels of the Civil Service, where staff are predominantly concerned with higher management and policy, there is an open and unified structure, with three grades—permanent secretary, deputy secretary and under secretary—available for all types of posts. Posts at these levels are filled by the people most suitable for them without restrictions over academic background or over previous

service in a specialist or administrative stream.

At other levels the structure is being based on a system of occupational groups, which are the basic groupings of staff for the purposes of pay, recruitment and personnel management, and categories which consist of one or more

occupational groups having a common pay and grading pattern.

Categories consist of the General Category (which covers 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, Legal, Police, Secretarial, Data Processing, Research Officer and Social Security Categories. Together these ten categories account for over 70 per cent of the non-industrial staff.

The Diplomatic Service The Diplomatic Service, a separate service of the Crown, provides the staff for service in the Foreign and Commonwealth Office and at United Kingdom diplomatic missions and consular posts in foreign and in independent Commonwealth countries. Its functions include advising on policy, negotiating with overseas governments and conducting business in international organisations; promoting British exports and the advancement of British trade; administering British aid, presenting British 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. The Service also has secretarial, communications and security officer branches. Members of the Home Civil Service and the armed forces, and individuals from the private sector, may serve in the Foreign and Commonwealth Office and at overseas posts on loan or attachment. It is intended to build a closer working relationship between the Diplomatic Service and the Home

Civil Service.

The Northern Ireland Civil Service Northern Ireland has its own Civil Service which, subject to regional differences, is modelled on its counterpart in Great Britain, recruitment being effected through its own Civil Service Commission. Interchange of staff between the two Civil Services occurs to a minor extent only, and is a matter for departmental agreement in individual cases.

Public Services of Overseas Dependent Territories Britain's dependent territories fill vacancies in their public services by the appointment of suitably qualified local candidates wherever possible; but when vacancies cannot be filled by this means generally the Foreign and Commonwealth Office, the Overseas Development Administration and the Crown Agents

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for Oversea Governments and Administrations are asked to recruit other candidates, principally from the United Kingdom. Hong Kong has its own Government office in London with responsibility for recruiting to the Hong Kong public service.

Recruitment and Training

Recruitment to the Home Civil Service and the Diplomatic Service is the responsibility of the Civil Service Commission which, working in conjunction with departments, ensures that staff are selected on the basis of fair and open competition. The selection of junior staff such as those engaged in clerical and manual work, is undertaken almost entirely by departments. The Commission, however, always issues the 'certificate of qualification' necessary for permanent appointment. The appointment of a successful candidate is made by the department concerned.

For the Administration Group, which forms the central part of the Home Civil Service, entry is at three levels relating broadly to the academic achievements of: university honours graduates; 18-year-old school-leavers; and 16-year-old school-leavers. The selection procedure for the highest of these levels (the Administration Trainee entry) comprises qualifying tests, followed by a series of tests and interviews at the Civil Service Selection Board and an interview by the Final Selection Board. The next level (the Executive Officer entry) selection from among those possessing the necessary academic qualifications is in two stages, a set of qualifying tests followed by an interview. For the clerical entrants 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.

In all except the smallest government departments, there are full-time training officers and instructors whose task is to help identify the training needs of the staff and to organise courses, both general and technical, to provide for their varying requirements. A substantial number of management courses is run within the Civil Service both by departments and by the Civil Service College. Use is also made of external management courses in business schools, the Administrative Staff College at Henley, and other centres.

In order that they may continue their education, arrangements are made for the release of civil servants under the age of 18 to attend appropriate courses usually on one day a week ('day release' schemes). Adult staff are assisted financially 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 in mid-career to obtain fellowships or otherwise to go on sabbatical leave to undertake research in areas of interest to themselves or their departments.

Promotion and Conditions of Service

A period of probation (varying according to grade, with extensions in certain instances) is the rule for all new entrants to the Civil Service.

Promotions are made partly through centrally conducted examinations and partly by the departments themselves. Promotions or appointments to deputy secretary-level posts and above 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.

Normally promotion is from grade to grade, but arrangements exist for accelerated promotion for staff who have shown exceptional promise.

Civil servants are encouraged to join the trade union which represents the grade or specialism to which they belong. The National Whitley Council

structure consisting of senior officials and representatives of the unions, exists to discuss all matters affecting conditions of service of staff and to provide a forum for consultation. Whitley committees exist in all government departments. Negotiations about pay are conducted directly with the individual unions or with the National Staff Side representing all the unions.

Political and Private Activities

Civil servants are required to serve loyally the Government of the day, regardless of its political composition. In order therefore to maintain the reputation of the Civil Service for political impartiality, some restrictions are placed on civil servants' freedom to participate in political activities. Statutory restrictions prevent any civil servant from being a Member of Parliament, and (with certain exceptions corresponding to the 'politically free' group shown below) from being adopted as parliamentary candidate.

Civil Service rules place staff in one of three groups for the purpose of political activities: (1) the 'politically free' group, consisting of industrial and non-office grades, who are free to engage in any political activity including standing for Parliament (although they would have to resign from the Service if elected); (2) the 'politically restricted' group, consisting of all staff above Executive Officer level, together with those Executive Officers and certain related grades such as Information Officers, who are debarred from national political activities but may apply for permission to take part in local political activities; and (3) the 'intermediate' group, comprising all other staff—mainly members of the clerical and typing grades—who may apply for permission to take part in national or local political activity apart from adoption as a parliamentary candidate.

Where permission is required, it 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. Permission is granted subject to a code of discretion requiring moderation and the avoidance of embarrassment to ministers. An independent committee of enquiry, set up by the Government to review the Civil Service rules governing political activities, has reported in favour of retaining the general framework of these rules in order to maintain the principle of Civil Service political impartiality, and recommended some changes which would transfer a substantial number of staff from the 'restricted' to the 'intermediate' group, establish standard criteria against which applications for permission could be judged, and provide an appeal body for staff who are refused permission. These recommendations are the subject of consultations.

All civil servants have the right to register their private political opinions by voting, for instance, at general or local authority elections. They may also engage in such private activities as they wish, provided that these do not in any way conflict with their official duties, nor with the provisions of the Official Secrets Acts 1911 and 1920, and the Prevention of Corruption Act 1926. However, since civil servants must not use their official position to further their private interests, they are subject to certain restrictions in commerce and business: for instance they may not hold private interests in public contracts and they may not use official information in writing, broadcasting or lecturing without the approval of their 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 the nature of which is vital to the security of the State. For this reason certain posts are not open to anyone who is known to be a member of a Communist or Fascist organisation, or associated with such an organisation in a way as to raise

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legitimate doubts about his or her reliability, or to anyone whose reliability may be in doubt for any other reason.

Each government department is responsible for maintaining its own internal security, advised as necessary by the Security Service. In addition, the Security Commission, if requested to do so by the Prime Minister after consultation with the Leader of the Opposition, may investigate any report on breaches of security in the public service and advise whether any change in security procedure is necessary or desirable.

LOCAL GOVERNMENT

A wide range of public services is provided by local authorities throughout the United Kingdom, democratically elected in the areas for which they are responsible.

The specific powers and duties of local authorities are conferred on them by Act of Parliament, or by measures made under the authority of an Act. 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, government ministers have powers, defined in the relevant Acts, 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.

Government policy is to ensure that central government controls over local authorities are kept to the minimum necessary; existing controls, the authorities' statutory duties and government control over their capital expenditure are under review.

In addition to their statutory powers, ministers concerned with local government give assistance to local authorities by the general issue of advisory circulars and by giving advice in individual cases.

The main links between local authorities and the central Government are: in England, the Department of the Environment; in Scotland, the Scottish Development Department; in Wales, the Welsh Office; and in Northern Ireland, the Department of the Environment for Northern Ireland.

Principal
Types of Local
Authority

The main pattern of local government organisation in England and Wales (outside Greater London) is a division of the country into 53 large county authorities, within which there are 369 smaller district authorities. Both types of authority have independent, locally elected councils, and have separate functions to perform. County authorities normally provide the large-scale local government services, while the districts are responsible for the more local ones (see pp 61-2). However, in six of the English counties, which are in heavily populated areas and known as 'metropolitan' counties, responsibility for some large-scale services rests with the district authorities. In England populations in the non-metropolitan counties range from 286,000 to about 1.5 million (the Isle of Wight with a population of about 114,000 is an exception), and in the metropolitan counties from 1.2 to 2.7 million. District authorities within metropolitan counties have populations of between 166,000 and 1.1 million; other districts' populations average between 75,000 and 100,000 although many fall outside this range. The local government system in Wales closely resembles that in non-metropolitan areas of England. Populations in the counties range from 104,000 to 543,000 and the districts have populations of between 19,600 and 279,000. English parish councils or meetings in villages and

small towns serve as focuses for local opinion as bodies with limited powers of

local interest. In Wales community councils have similar functions.

Greater London—an administrative area of about 1,580 sq km (610 sq miles)

and a population of some 7 million—is administrated by the Greater London Council, the councils of 32 London boroughs (with populations ranging from 136,000 to 330,000) and the Corporation of the City of London (the historic centre which has a resident population of nearly 8,000).

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 made for local community councils to be formed. These councils have no statutory functions and are not local authorities.

The pattern of local authorities, and of their electoral arrangements, is kept

up to date by Boundary Commissions for England, Wales and Scotland.

In Northern Ireland there are 26 district councils which are responsible for local environmental and certain other services. Statutory bodies and local offices, responsible to central departments, administer major services such as roads, water, education, health, and housing. Populations of the districts range from 13,000 to over 354,000.

Constitution and Election of Councils

Local authority councils consist of a number of elected unpaid councillors presided over by a chairman. They can claim a flat-rate attendance allowance on the performance of council business; they are also entitled to travelling and subsistence allowances. Parish and community councillors cannot claim 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 (except in Northern Ireland where they are granted 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 Scottish regions and islands areas the chairman is called the convener and the chairman of the district councils of each of the four cities is called the Lord Provost. No general title is laid down for the chairmen of the other district councils, but some are known as conveners, while others continue to use the old burghal title of 'provost'.

The term of office of a councillor elected to any form of local government is usually four years. In England and Wales county council elections took place in 1977 and will be held every fourth year thereafter. Metropolitan district elections are held for a third of the seats in each year when there is no county council election. Non-metropolitan district councils may adopt the same procedure or opt for whole council elections; the latter took place in 1979 and will be held again every following fourth year. In London elections to the Greater London Council were held in 1977 and elections to the London borough councils in 1978; elections will be held every fourth year. In Scotland elections for the regions and islands areas took place in 1978, and will be held again in 1982. Elections for the districts were held in 1977, and will be held again in 1980. Elections for the district councils in Northern Ireland took place in 1977 and will be held every fourth year thereafter.

Any person (including a member of the House of Lords) is entitled to vote at a local government election in Great Britain provided that he or she is 18 years of age or over, is a British subject 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. A person qualifies for registration as a

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local government elector if, on the qualifying date for the register (compiled annually), he or she is resident in the council area. In Northern Ireland there

are slightly different residence requirements.

A candidate for election as councillor—man or woman—normally stands as a representative of one of the national political parties, as a member of an association representing some local interest, or as an independent. Candidates must be British subjects or citizens of the Irish Republic and aged 21 or over. In addition they must be registered as a local government elector in the area of the local authority to which they seek election; or have resided 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. Candidates are also subject to a number of statutory disqualifications designed to ensure that unsuitable people do not offer themselves for election.

Local authority areas are generally divided into electoral areas for local council elections. Administrative counties in England and Wales are divided into electoral divisions returning one or more councillors. Districts in England, Wales and Northern Ireland are divided into electoral 'wards'. In Scotland in the regions and islands areas the electoral 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 ward of a parish (or, in some cases, a combination of parishes) forms an electoral area which returns one or more members. For elections to the Greater London Council, Greater London is divided into

electoral divisions, each returning one councillor.

Voting takes place at polling stations arranged by the returning officer concerned, and under the supervision of a presiding officer appointed for the purpose. The procedure for local government voting in Great Britain is similar to that for parliamentary elections, although facilities for postal voting are more restricted. In Great Britain each elector has one vote for each seat contested in the electoral area: he or she need not record every vote, but must not give more than one vote for each candidate. In Northern Ireland local government elections are held on the basis of proportional representation and for this purpose electoral wards are grouped into district electoral areas. Facilities for postal voting are available.

Functions and Services

The functions of local authorities are far reaching. Some are framed primarily

as duties on an authority, others are 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. Within the metropolitan areas district councils are responsible for functions needing substantial resources because they have populations large enough to give such support. District councils as a whole administer functions of more local significance. In London the division of functions is slightly different.

In England county councils are generally responsible for such matters as strategic planning, transportation planning, highways, traffic regulation, consumer protection, refuse disposal, police and the fire service. Education, libraries and the personal social services are mostly 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 operate some functions—such as the provision of museums, art galleries and parks—are available at both levels; arrangements depend on local agreement.

In Greater London the London boroughs and the Corporation of the City of London are responsible for the same range of functions as district councils in metropolitan areas (with the addition of consumer protection). The Greater London Council (GLC) deals only with those services which by their nature require unified administration and control over the whole area. In the inner London area education is administered by the Inner London Education Authority, an autonomous committee of the GLC. Responsibility for highways in London is divided according to the type of road: the main strategic road network is a matter for the GLC, while the London boroughs look after the other roads. The boroughs have prime responsibility for the provision of housing. The GLC, which has maintained a substantial stock of housing, proposes to relinquish its role as a primary housing authority (by transferring its housing stock to the boroughs and surrounding districts and by offering tenants the chance to buy their own homes) and to concentrate on its role as a strategic authority, focusing attention on areas of particular housing need. The police force in the London area (see p 101) is directly responsible to the Home Secretary.

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. The main differences are that Welsh district councils are responsible for refuse disposal; they may, subject to the consent of the county council, provide on-street as well as off-street car parking facilities; and they may, exceptionally, exercise library and consumer protection functions.

Local authorities in England and Wales may arrange for most of their functions to be carried out on their behalf by another local authority. The exceptions to this general rule are 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, including some at both levels. Orkney, Shetland and the Western Isles, because of their isolation, have single, virtually all-purpose authorities.

In Northern Ireland, local environmental and certain other services are administered by the district councils, but responsibility for planning, roads, water supply and sewerage services is exercised in each district by a local office of the Department of the Environment for Northern Ireland working closely with the district council and its staff. 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
Organisation
of Local
Authorities

Local authorities are free to a very considerable extent to make their own internal arrangements and to choose the means and methods by which they discharge their responsibilities. Most councils use the committee system, whereby questions of policy and principle are decided in full council, and committees are appointed to administer the various services. Parish and community councils in England and Wales are often able to do their work efficiently in full session although they appoint committees from time to time as necessary. Some councils have established policy advisory or co-ordinating committees with powers to originate policy, subject to the approval of the full council. The powers and

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duties of local authority committees (which may be advisory or executive) are usually laid down in the appointing council's standing orders.

A council is free to delegate all its powers to committees, except its powers in connection with raising loans, levying rates (see p 64), or making financial demands on other authorities liable to contribute, which are legally reserved to the council as a whole.

Local authorities can make arrangements among themselves for the discharge of their functions. These include co-operation through joint committees, joint teams and the loan of staff. One authority may discharge functions for another, and may also supply others with a range of goods and services.

The public and the press are admitted to all meetings of a council (and of committees) but may be excluded while a particular item is considered if the council (or committee) resolves that publicity for that matter would be prejudicial to the public interest.

Officers and Employees

The execution of council policy rests with salaried officers and employees, of whom there may be tens of thousands in the larger authorities. Some 2.8 million people are employed by local authorities in Great Britain. These include administrative, professional and technical staff, manual workers and teachers. Although a few appointments, such as chief education and fire officers and the director of social services, must by law be made by all the authorities responsible for the functions concerned, councils are individually responsible within national policy requirements for determining the size and composition of their work forces and the way they should be used. An authority must not, however, employ one of its own councillors. 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, whose duties are mainly of an administrative and managerial kind; subordinate officers employed in an administrative, a professional, clerical or technical capacity; and manual workers who are employed to do the physical work for which the council is responsible. 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 any appointments which they have not made themselves.

Rates of pay and conditions of service for local authority staff are within the jurisdiction of the employing council, although there are recommended scales.

Local Government Finance

Local authority expenditure in the United Kingdom (on both current and capital accounts) was nearly £21,000 million in 1978. A clear distinction is made between capital and current expenditure. Capital expenditure (just under a quarter of the total) is financed partly from the current account surplus (about half), from borrowing (two-fifths) and the remainder from grants and other incomes. Housing, the major element, accounted for over half in 1978. Current expenditure by local authorities accounts for just over a quarter of total current account spending by central and local government. The education service represents over a third of this expenditure, followed by the police, personal social services, roads (including lighting), public health and debt interest. Current expenditure is financed mainly from central government grants (about three-fifths) and from local rates paid by occupiers of land and building (about one-third). Each local authority is responsible for its own finance, although in

a few cases several authorities combine to organise a specialist service which it would be uneconomic for each authority to provide on its own. In order to achieve substantial reductions in public expenditure the Government has asked local authorities to reduce their spending in line with reductions being made in its own expenditure.

Government Grants Government 'rate support grants' to local authorities are paid in aid of revenues generally. Grants are also paid towards the cost of specific services—either towards current expenditure, such as on the police, or towards capital expenditure, such as on the acquisition and clearance of derelict land. (In Wales, approved schemes for the acquisition and clearance of derelict land are financed by the Welsh Development Agency.) Annual subsidies are paid for local authority housing.

Rate support grants are distributed among authorities in three parts: the 'needs' element which is designed to give most help to authorities whose spending needs are greatest; the 'resources' element, which is 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. The formula for distributing the 'needs' element is subject to annual variations. Grants are also made towards the cost of rate rebates for people with low incomes.

In Northern Ireland the district councils receive specific grants plus a general grant used to supplement the resources of those councils whose rateable value

resources are below the standard level.

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 his 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. In England and Wales rateable values are assessed periodically by the Board of Inland Revenue (see p 47). The last general revaluation of all property was in 1973. Disputes about rating assessments are heard by local valuation courts, and on appeal by the Lands Tribunal. Public undertakings have their rates separately determined. Crown property is not rateable but payments are made, based on values assessed by the Treasury Valuer, in lieu of rates.

In Scotland valuation is carried out by assessors appointed by the regional and islands councils. The last general revaluation was in 1978. Appeals are heard by the valuation appeal committees of each valuation area and thereafter

by the Lands Valuation Appeal Court of the Court of Session.

In Northern Ireland valuations are carried out by the Valuation Officer of the Department of Finance. There is a right of appeal. The present valuations

came into force in 1976.

Responsibility for levying and collecting rates in England and Wales lies with the district councils and London borough councils. Each county council (and the Greater London Council) determines what rate will be required to meet its estimated expenditure, and district councils (and London borough councils) include this element in the rate they levy. Householders benefit from domestic rate relief and those with lower incomes may also qualify for rate rebates; both reliefs are financed by government grants. Rates may be paid by instalments, normally in ten one-monthly payments. Rating relief is available

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in certain circumstances on premises adapted for the use of the disabled. Agricultural land and buildings (apart from living accommodation) and places of religious worship are exempted from rate payments. Charities pay half the full rate on premises they occupy 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. Rates may be levied on empty properties at any percentage up to the full amount and in the case of empty commercial property a rating surcharge may be payable.

In Scotland every authority determines a rate for its own services, but the collection of rates and the administration of rating is the responsibility of regional and island councils. Industrial (including freight transport) premises in Scotland are rated at a half of net annual value and the right to pay rates in instalments extends to all ratepayers. There is empty property rating in Scotland

but no empty property surcharge.

In Northern Ireland there are two rates: one set by the district councils and one set by the Department of Finance. Both are collected by the Department and the appropriate part paid over to the respective councils. Industrial (including freight transport) premises are rated at a quarter of net annual value and the degree of charitable exemption is decided by the Valuation Office. Empty properties are not rated.

Loans

Loans may be raised by local authorities to finance capital expenditure under general powers conferred by national legislation. For items of expenditure in key sectors (such as education, housing and roads) local authorities in England and Wales must seek approval from the government department concerned before raising loans. For other capital expenditure, each authority receives an annual loan authorisation within which it determines what sums to borrow and what projects to undertake. The GLC applies annually for parliamentary sanction to raise the money it needs for capital expenditure while the City of London has ancient charter powers to cover its borrowings. In Northern Ireland long-term borrowing by district councils is subject to approval by the Department of the Environment for Northern Ireland. In Scotland departmental approval is given to capital expenditure, not to loans.

Local authorities may raise long-term loans by means of private mortgages, issuing stock upon the Stock Exchange and bonds which may or may not be quoted on the Stock Exchange. Local authorities also have right of access to the Public Works Loan Board, financed by the Exchequer, or, in Northern Ireland, to the Government Loans Fund, for long-term borrowing to finance a proportion of their reckonable capital payments, and may borrow temporarily for a limited

proportion of their current outstanding loan debt.

Control of Finance

Internal control of finance is normally exercised on behalf of the council concerned by a finance committee, whose function it is to keep the financial policy of the council under constant review. (There is no statutory requirement for local authorities to appoint a finance committee, but they have to make proper arrangements for the administration of their financial affairs.) Local authorities must have their accounts audited. Those in England and Wales can choose between the district auditor (appointed by the Secretary of State for the Environment) and an approved private auditor (or partly both). In Scotland the auditing of accounts is the responsibility of the independent Commission for Local Authority Accounts in Scotland appointed by the Secretary of State for Scotland, and in Northern Ireland it is carried out by independent local government auditors appointed by the Department of the Environment.

Local Government Complaints System

A complaints system for local government in England and Wales involves independent statutory Commissions for Local Administration (one each for England and Wales) comprising a number of local commissioners, each responsible in a particular area of the country for investigating citizens' complaints of maladministration by local authorities. In Scotland there is a single Commissioner for Local Administration. The commissioners help local authority councillors to protect the interests of constituents.

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.

THE FIRE SERVICES

The fire services in Great Britain are organised on a local basis, subject to a measure of central control. The cost is borne by local authorities, aided by central government through the rate support grant (see p 64). Every part of the country is covered by a public fire brigade. Northern Ireland has its own service responsible to the Northern Ireland Department of the Environment.

Fire Authorities Each of 68 fire authorities in the United Kingdom must by law make provision for fire-fighting purposes, and in particular maintain a brigade of sufficient strength to meet efficiently all normal requirements (in some parts of Scotland, authorities are combined to provide fire cover). Other fire-fighting organisations are maintained, for instance, by the Army and Air Force Departments of the Ministry of Defence; by the Department of Industry at certain establishments; and by some large industrial and commercial concerns.

Central Control The Home Secretary and the Secretary of State for Scotland have central responsibility for the fire service in England and Wales and in Scotland respectively. Central control is directed mainly towards ensuring the operational efficiency of brigades. Ministers have statutory powers to make regulations on such matters as appointments and promotions, standards of training and equipment, pensions, and disciplinary matters. Their approval is also required for reductions in the operational establishments of fire brigades. Each minister is advised by a Central Fire Brigades Advisory Council, consisting of officers of the respective home departments, representatives of the local authority associations, and of the associations representing members of fire brigades, and other persons with special qualifications, appointed by the minister concerned. Inspectorates of fire services advise the ministers on operational and technical matters.

Personnel and Equipment

Most fire brigade establishments include part-time retained personnel to augment and support the full-time strength in return for a retaining fee and call-out and attendance fee. Volunteer members (who receive no remuneration) undertake to attend a fire if called upon. Fire authorities also employ people for duties in controls communications and mobilising and staff duties. In the United Kingdom there are about 32,000 full-time and 15,000 part-time operational members of fire brigades.

Every fire authority must buy such appliances and equipment as may be necessary to meet efficiently all normal fire-fighting requirements in its area. Certain items of equipment are standardised so that there is complete interchangeability when a fire is attended by personnel and appliances from more than one area. The principal types of fire-fighting appliances are bought by fire authorities to requirement specifications approved by the Home Office and

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the Scottish Home and Health Department on the advice of the respective Central Fire Brigades Advisory Councils. These specifications ensure that minimum standards are maintained, and allow sufficient freedom of design to meet special circumstances and encourage further developments.

Operational Methods

Each fire authority must appoint a Chief Fire Officer (Firemaster in Scotland) for its fire brigade. The appointment must be approved by the Home Secretary or by the Secretary of State for Scotland.

Central control is exercised by the Chief Fire Officer from brigade headquarters. Divisional officers in charge of the geographical divisions into which most brigade areas are divided are responsible for mobilising forces to deal with outbreaks of fire in their divisions. Constant communication is maintained between divisional and brigade headquarters and, if at any time an outbreak of fire should grow beyond the capabilities of a division, help is sent from one or more neighbouring divisions, or even from the area of another fire authority. Under arrangements for mutual help made by all fire authorities, the nearest available force is sent to a fire, regardless of area boundaries.

Fire Prevention Fire authorities are concerned with fire prevention measures relating to most buildings to which the public have resort or in which they are employed. The authorities are also under a statutory duty to give advice on fire prevention, restricting the spread of fires, and means of escape in case of fire. Courses in fire prevention are held at the Fire Service Technical College for fire brigade officers.

Fire precautions are not normally required by law in private dwellings, so that, in addition to enforcement duties, brigades are also involved in educational and publicity activities to promote fire safety in the home.

Central government is advised on all these fire prevention matters by the Joint Fire Prevention Committee of the Central Fire Brigades Advisory Councils, representing the service and central and local authorities.

Research

A comprehensive programme of research into fire brigade operations, organisation, fire-fighting appliances and equipment is conducted by the Home Office with the help of the fire service 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 Advisory 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 main organisation undertaking the study and investigation of the technical aspects of fire.

Special Services

Fire authorities have discretion to employ their brigades and equipment for purposes other than fire-fighting, and they are used in a variety of emergencies (such as rail, road and aircraft accidents, collapse of buildings, flooding of premises, leakage of noxious gas or liquids and the rescue of people or animals from dangerous situations) for which no charges are made. Brigades are also used, by prior arrangement, for such purposes as emptying swimming pools and filling water tanks.

3 Overseas Relations

Britain has varied and world-wide overseas relations. It has diplomatic relations with some 150 countries, and with about 20 of these has special treaty relations providing for common security arrangements, principally through the North Atlantic Treaty Organisation (NATO). Commercial matters form a major component of relations with other countries, and Britain is a world financial centre. It has considerable overseas investments and extensive trade relations, reflecting its dependence on imports for nearly half its food and more than half its raw material requirements and the relatively high proportion of its gross national product accounted for by exports (over a third); for details of trade and payments, see Chapter 19. British development assistance is provided to over

Since 1945 Britain has placed itself in a number of common decision-making structures or consultative processes with other nations with a view to achieving common solutions to shared problems—a recognition that, in an increasingly inter-dependent world, the attainment of overseas objectives and the ability to exert influence in support of them can best be provided for through international co-operation on a regional or global basis. As a result, Britain is now 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, with eight other Western European nations, Britain is a member of the European Community whose policies it helps to determine, and is increasingly co-ordinating its overseas policies through the Community's political co-operation mechanism (see p 72). As a member of the Commonwealth, Britain is a part of a representative cross-section of the international community, which has evolved from the former British Empire (since 1945 Britain has progressively, and largely peacefully, dismantled its Empire and prepared over 35 countries for independence) and whose 42 members share a common language, common technical standards, similar systems of law and close professional, academic, and commercial links.

Britain has strong ties, also, with the United States, including a common

language and many common 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 responsibilities of most government departments have a significant overseas dimension, but overall conduct of Britain's overseas relations is the responsibility of the Secretary of State for Foreign and Commonwealth Affairs acting through the Foreign and Commonwealth Office (see p 45) and Britain's missions overseas. The latter comprise embassies and high commissions in more than 130 countries, together with subordinate consulates general and consulates, and

missions at eight multilateral organisations. These posts, like the Foreign and Commonwealth Office, are staffed by members of the Diplomatic Service (see p 56), together with locally engaged staff. Other government departments which have a primary concern with overseas relations include the Ministry of Defence (see p 43), the Department of Trade (see p 50) and the Overseas Development Administration which is part of the Foreign and Commonwealth Office (see p 45), but the involvement of most departments has increased considerably in recent years with the growing dependence of domestic economic policy on international economic 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 between them is a matter of constant adjustment, and in many cases 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.

A number of other official and unofficial bodies are also involved in the administration of overseas relations. These include the British Overseas Trade Board (see p 367) and the Export Credits Guarantee Department (see p 367) which provide export services for British industry; the Crown Agents for Oversea Governments and Administrations (see p 355) which helps to arrange purchases from British aid funds and appointments under technical co-operation programmes (see pp 86–7); and the British Council (see below), the Inter-University Council for Higher Education Overseas and the Technical Education and Training Organisation for Overseas Countries which, between them, are responsible for administering the bulk of Britain's educational assistance programme (see pp 86–7).

The British Council

The purposes of the British Council, founded in 1934, are defined in its Royal Charter as the promotion of a wider knowledge of Britain and the English language abroad and the development of closer cultural relations between Britain and other countries. (For an outline of Britain's international scientific relations see pp 387-9.) 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 technical co-operation training programme; fostering personal contacts overseas and in Britain 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. 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.

Over 80 per cent of the Council's budget, estimated at £101.2 million for 1979-80, is provided by the Foreign and Commonwealth Office (including funds from the Overseas Development Administration) and on its behalf the Council is responsible for the implementation of more than 30 cultural agreements between Britain and 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. Increasingly, the Council is undertaking education projects paid for by overseas clients and is providing English classes abroad; these activities are expected to provide about 17 per cent (some £18 million) of its income in 1979–80.

MEMBERSHIP OF THE EUROPEAN COMMUNITY

Britain, together with the Irish Republic and Denmark, joined the original six countries—Belgium, France, the Federal Republic of Germany, Italy, Luxembourg and the Netherlands—in the European Community on I January 1973. In a national referendum in 1975, British membership of the Community was endorsed, after renegotiation of the terms of membership. Britain plays a full and positive part in all Community activities seeking actively with its partners to develop the Community in the interests of all its members.

The European Community consists of three communities set up by separate treaties—the European Coal and Steel Community, the European Economic Community and the European Atomic Energy Community.

The European Coal and Steel Community

The European Coal and Steel Community (ECSC), set up in 1952, established a common market for coal and steel and formed the model for the 'community' approach to economic integration. It is designed to ensure an orderly supply of coal and steel to member countries, to promote the rational expansion and modernisation of production and to provide better conditions of employment and living for the employees in the industries. The ECSC is financed mainly by a levy on production and provides funds for capital investment, research and other programmes as well as loans to help create new jobs where coal seams are being exhausted or where restructuring of the steel industry is taking place. Grants are also made to assist redundant coal and steel workers until they find new employment, or while they are undergoing retraining.

The European Economic Community

The European Economic Community (EEC) was created by the Treaty of Rome signed by the six countries in 1957. It aims to promote a continuous and balanced economic expansion by establishing a common market and progressively approximating the member states' economic policies. The preamble to the Treaty includes among the basic objectives of the EEC the laying of the foundations of an ever closer union among the peoples of Europe, the improvement of their living and working conditions, the progressive abolition of restrictions on trade, and the development of the prosperity of overseas countries. The initial steps towards the attainment of these objectives have been the abolition of internal tariffs and other barriers to trade and the establishment of a common customs tariff, the development of a common policy for agriculture, and the introduction of measures to establish the free movement of labour, capital and services. At the same time, provision has been made for the overseas countries which have special links with the member countries to have preferential treatment in aid and the development of trade. This principle is embodied in the Lomé Convention (see pp 73-4).

The European Atomic Energy Community The European Atomic Energy Community (Euratom) was set up by a second treaty signed in Rome in 1957, which provided for the co-ordinated development of members' atomic energy industries and of their other peaceful nuclear activities. Euratom has worked to develop a co-ordinated research programme (for power production, industrial and medical purposes) to ensure the dissemination of technical information, to facilitate the co-ordination of investment

in the nuclear field, to ensure an adequate supply of nuclear ores and fuels, and to develop wider commercial outlets. Since 1959, there has been a common market for all nuclear materials, while the Community has established common nuclear legislation and a common control system for nuclear materials to prevent their diversion to purposes other than those declared.

Britain's Accession

The Treaty of Accession was signed by the applicant countries and the original member states in January 1972. Britain thereby became a party to the two treaties of Rome establishing the EEC and Euratom, adjusted as necessary to take account of enlargement. Accession to the ECSC was effected by a decision of the Council of Ministers. The European Communities Act 1972 made the legislative changes necessary for Britain to comply with the obligations entailed by membership of the Community and to exercise the rights of membership.

In 1977, following a transitional period during which tariffs on trade in industrial products between Britain and the original six members were progressively reduced, the internal tariffs were abolished and the phased introduction of the common customs tariff on British imports from countries neither members of the Community, nor having any special arrangements with it, was completed. Britain had also adopted, progressively, the Community system of agricultural support under the Common Agricultural Policy (CAP). The Treaty of Accession provided for a slightly longer period of adjustment (due to end in December 1979) with regard to payments to the Community budget (see p 74). Other provisions included those relating to participation in the Community's institutions and to its relations with Commonwealth and other countries.

Community Institutions

The separate institutions established by the treaties for each of the three communities were merged in 1967. Each state has one representative on the Council of Ministers; in the other institutions Britain's representation is in line with that of the other large member states (France, the Federal Republic of Germany, and Italy). English is one of the six official languages of the Community.

The Council of Ministers is the final decision-making body for all major community questions and is the only institution established by the treaties whose members, usually the foreign minister or other ministers appropriate to the subject of discussion, directly represent each member country. The presidency of the Council changes at six-monthly intervals. Most Council decisions are taken on the basis of a proposal by the Commission (see below). Some issues may be decided by majority, or qualified majority, with votes weighted according to provisions in the Treaty of Accession. Where member states' vital interests are involved, however, the Council's practice is to proceed only on the basis of unanimity. A Committee of Permanent Representatives (COREPER) assists the Council by preparing its meetings and co-ordinating the work of the Council's other subordinate bodies and working groups.

The Commission is responsible for formulating detailed policy proposals for submission to the Council of Ministers, for promoting the Community interest and attempting to reconcile national viewpoints and for implementing the provisions of the treaties and Community measures. Delegated to it are some limited powers of decision relating mainly to the detailed administration of agriculture. It is composed of 13 commissioners nominated by the member governments; two are from Britain. The President of the Commission, since 1977 a former British Cabinet Minister, is appointed for a two-year renewable term as the Commission's representative and is responsible for its general

administration. Each of the other commissioners is responsible for one or more of the main Community activities. The Commission is pledged to act independently of national or sectional interests and to formulate its proposals and administer policy in the interests of the Community as a whole. Its proposals are made only after extensive consultation with officials of the national governments and with producers, trade unions, employers' associations and many others.

The Court of Justice interprets and adjudicates on the meaning of the treaties and of any measures taken by the Council of Ministers and Commission under them, hears complaints and appeals brought by or against Community institutions, member states or individuals and gives preliminary rulings on questions referred to it by courts in the member states. As a court of final appeal, its procedure in such cases is broadly similar to that of the highest courts in member states; its rulings are binding on member countries, Community institutions and individuals. The Court consists of nine judges, assisted by four advocates-general.

The elected European Parliament is composed of 410 members, 81 elected from Britain, who sit according to party affiliation and not nationality. The first direct elections to the Parliament, which was formerly a nominated body, were held in June 1979, and elections will subsequently be held every five years. The Parliament is consulted on and debates all major policy issues of the Community. Members may question the Council of Ministers and Commission, and have the power on a two-thirds majority to dismiss the Commission. The Parliament also has the power to reject in its entirety the Community's draft annual budget as presented by the Commission and approved by the Council; a formal conciliation procedure has been adopted for use in the event of disagreement between the Parliament and the Council of Ministers on matters with major budgetary or financial implications.

The European Court of Auditors, set up in 1977, carries out a continuous audit of the handling of Community funds by all member states and institutions.

The Economic and Social Committee is a consultative body representing a cross-section of economic interests. Its members—representing employers' organisations, trade unions and other interests—are consulted by the Council of Ministers and Commission during the formulation of policy. Britain is entitled to send 24 members out of a total of 144.

In addition to, and separately from, the institutions operating within the Community framework established by treaty, the member states have set up the European political co-operation machinery for the consideration of important problems of foreign policy. Britain attaches considerable importance to Community co-operation in this area. The Community foreign ministers meet in this framework four times a year. Close contact is maintained with Community institutions when this is appropriate, and decisions are made on the basis of consensus.

The Community's heads of State or of Government meet at least three times a year as the European Council. This Council, formally established in 1974, operates outside the treaty framework and may consider both Community matters and those arising in the context of political co-operation. It discusses issues unresolved in the Council of Ministers as well as the general problems facing the Community, and lays down guidelines and an overall political direction for future work.

The implementation of Community policies is effected by means of regulations, which are legally binding and directly applicable in all member countries; directives, which are binding, as to the result to be achieved, on those member

states to which they are addressed but allow national authorities to decide on the 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.

Community Policies¹

A further enlargement of the Community is planned to take place within the next few years when Greece, Portugal and Spain join the Community. In May 1979 Greece signed a Treaty of Accession; once the Treaty is ratified, Greece will become the tenth member state in January 1981. The negotiations with Portugal and Spain are continuing and it is hoped they will join in 1982 or 1983. Britain strongly supports this enlargement of the Community as a means of strengthening democracy in Europe.

External Relations

The nine member Governments of the Community discuss a wide range of foreign policy issues and, where possible, reach common positions. At the General Assembly of the United Nations their policies are closely co-ordinated, and they have voted together on a large number of issues. They adopted a common strategy at the 1975 Helsinki Conference on Security and Co-operation in Europe (see p 79) and co-sponsored a number of proposals to improve the implementation of the Conference's Final Act at the Belgrade follow-up meeting. They have issued a number of statements on the Middle East, including a declaration in 1977 setting out the Nine's views on the conditions necessary for a comprehensive settlement of the Arab-Israeli conflict. Other issues to which considerable attention has been given include human rights issues throughout the world, and Southern Africa, where the Nine have adopted a code of conduct on employment practices for member states' companies operating in South Africa, and supported efforts to promote internationally acceptable solutions to the problems of Namibia and Rhodesia.

On international trade matters the Community adopted a common negotiating position in the latest round of the General Agreement on Tariffs and Trade (GATT, see p 365) multilateral trade negotiations. Commercial co-operation agreements have been concluded with a large number of countries in the Mediterranean area, the South Asian sub-continent, Latin America and other areas. Dialogues covering trade and other matters have been established with regional groupings of Latin American countries, Arab countries and with the Association of South East Asian Nations.

The Community has also improved progressively its generalised scheme of preferences, which covers manufactures and semi-manufactures exported by developing countries, with the aim in particular of benefiting the poorest developing countries (see p 366).

The first five-year Lomé Convention governing aid, trade and co-operation between the Community and developing countries in Africa, the Caribbean and the Pacific (ACP) came into operation in 1975. It will be succeeded in 1980 by an improved convention which was signed by the Community and 58 ACP countries in Lomé in October 1979. This provides for increased aid and European Investment Bank lending of about £3,345 million, industrial and agricultural co-operation, an extension of the scheme designed to stabilise the commodity export earnings of the ACP countries, assistance for ACP mineral producers whose production and income suffer from temporary disruptions beyond their control, and duty-free access to the Community of ACP countries' exports of all

¹ Some details of Community policies as they affect British domestic affairs will be found in the appropriate chapters.

industrial and most agricultural goods, including improved access for exports such as rum and beef. All British dependent territories (with the exception of Bermuda, Gibraltar and Hong Kong), together with the overseas countries and territories of other Community members, were formally linked with the Community as a whole in 1976 under conditions similar to those in the Lomé Convention.

Britain has played a leading part in urging the Community to adopt a new aid and development policy based on the criterion of need and applicable on a world-wide basis, thereby encompassing those developing countries (many of which are among the world's poorest) not covered by the Lomé Convention or having any other special relationship with the Community. Although it is still small, the aid programme for these non-associated states has grown steadily since 1976 and Britain supports its further expansion.

The Community has contributed to the North-South dialogue (see pp 87–9) and is providing \$385 million (of which Britain's share is \$115 million) to the \$1,000 million special action aid programme agreed upon in 1977 at the Confer-

ence on International Economic Co-operation.

Internal Policies

All member countries contribute to a common budget which provides funds for specific Community policies. The budget is largely financed by an 'own resources' system based on levies on agricultural imports and customs duties supplemented by a proportion, not exceeding 1 per cent, of the proceeds of the value added tax collected on a harmonised basis.

Britain has pointed out that its budgetary contributions are out of balance with its receipts, and that it is one of the largest net contributors to the budget despite its relatively low gross domestic product per head. In particular, it takes the view that the Common Agricultural Policy (see p 283) takes too large a share of the budget in comparison with other sectors such as industrial, regional, social and urban policies. (Expenditure on the Policy accounts for 74 per cent of the total budget, while social policy takes up about 4 per cent, regional development 4 per cent, aid to developing countries 3 per cent, and projects concerned with research, energy, industry and transport 2.5 per cent.) This situation, Britain believes, is detrimental to the fundamental objective of the Community, which is to strengthen the economies of the member states and, by reducing regional differences, to ensure their harmonious development.

The European Monetary System was established in March 1979 with the aim of promoting monetary stability in Europe. Britain is currently reconsidering its decision not to participate in the exchange rate mechanism of the scheme. It has agreed to take part in other aspects of the scheme, such as the development of the new European currency unit and of the European Monetary Fund.

The European Social Fund finances schemes for training and retraining young people, migrant workers, workers in the textile and clothing industries, the handicapped and workers leaving agriculture. The European Regional Development Fund (see p 221) 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 imbalances. Britain has received substantial grants from the two funds, together with other grants and loans from the European Coal and Steel Community, the European Investment Bank (see p 221) and the European Agricultural Guidance and Guarantee Fund.

Other areas of action include industrial policy, where the Community has taken an active role in safeguarding the interests of the steel industry, energy, environment and transport policy.

THE COMMONWEALTH

Britain is a member of the Commonwealth, a voluntary association of 42 independent states with a combined population of some 1,000 million, about a quarter of the world total. Britain participates fully in all activities of the Commonwealth and values it as a means of consulting and co-operating with peoples of widely differing cultures, thereby contributing to the promotion of international understanding and world peace.

Commonwealth members are a representative cross-section of mankind in all stages of political and economic development. Their peoples are drawn from practically all the world's main races and from all continents. As some of its members are very rich and others very poor, the Commonwealth acts as a bridge

between rich and poor nations.

The member states are Australia, the Bahamas, Bangladesh, Barbados, Botswana, Britain, Canada, Cyprus, Dominica, Fiji, The Gambia, Ghana, Grenada, Guyana, India, Jamaica, Kenya, Kiribati, Lesotho, Malawi, Malaysia, Malta, Mauritius, Nauru, New Zealand, Nigeria, Papua New Guinea, Saint Lucia, Saint Vincent and the Grenadines, Seychelles, Sierra Leone, Singapore, Solomon Islands, Sri Lanka, Swaziland, Tanzania, Tonga, Trinidad and Tobago, Tuvalu, Uganda, Western Samoa and Zambia. Nauru, Saint Vincent and the Grenadines, and Tuvalu are special members which are entitled to take part in all functional Commonwealth meetings and activities but not meetings of heads of Government. The Queen is recognised as head of the Commonwealth (see p 20): she is also head of State in 15 countries, the remainder having their own monarchs or presidents.

The origin of the Commonwealth lies in the gradual granting of self-government 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. During the last half of the nineteenth century and the first quarter of the twentieth, restrictions on the independence of the Dominions were gradually relaxed and their fully-independent status in relation to Britain was legally formulated in the Statute of Westminster of 1931.

The main expansion in Commonwealth membership took place after the second world war following Britain's decision to guide its dependent territories towards self-government and independence. This process began in 1947 with the independence of India and Pakistan, and in 1957 Ghana became the first British African territory to become independent. By the end of the 1960s the British dependencies in Africa had all gained their independence as had many territories in the Caribbean and in Asia. The most recent Commonwealth members (1979) are Saint Lucia and Saint Vincent and the Grenadines in the Caribbean and Kiribati in the Pacific.

Consultation

As a member of the Commonwealth, Britain participates in a system of mutual consultation and co-operation. The Commonwealth does not formulate central policies on, say, economic or foreign affairs. Nevertheless the extent of the consultation and co-operation, which is considerable, is not only of benefit to member countries but also 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, and discussions at international conferences and the United Nations. Trade and cultural exhibitions and conferences of professional

¹ South Africa ceased to be a member of the Commonwealth in 1961.

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 Lusaka in 1979. Proceedings are normally in private thereby facilitating a frank, free and informal exchange of views. On international affairs no formal decisions are taken and no attempt is made to formulate specifically Commonwealth policies, although, on occasion, common views on certain matters of major international concern are formulated and reflected in the communiqués issued at the end of the meetings.

One of the most important Commonwealth activities is consultation and co-operation in economic affairs. Finance ministers meet annually to discuss world economic problems, these meetings being held on the eve of those of the International Monetary Fund and the World Bank. In recent years ministers have paid particular attention to the problems of development and the establishment of a fairer international economic order. Other ministerial meetings include the regular Commonwealth Education and Commonwealth Medical Conferences.

The Commonwealth Secretariat

The Commonwealth Secretariat provides the central organisation for consultation and co-operation among member states. Established in London in 1965, headed by a Secretary-General appointed by the heads of Government, and financed by member governments, the Secretariat is responsible to Commonwealth Governments collectively.

As the main agency for multilateral communication between Governments, 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, its main areas of operation being international affairs, economic affairs, education, information, legal matters, medical and scientific affairs, vouth activities, and applied studies in government. It also administers the Commonwealth Fund for Technical Co-operation (see below).

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.

Fund for **Technical** Co-operation

Commonwealth Britain plays an active part in the work of the Commonwealth Fund for Technical Co-operation established within the Commonwealth Secretariat to provide technical co-operation for economic and social development in Commonwealth developing countries. The Fund is financed by contributions from both developed and developing states, Britain contributing about a third of its expenditure (Canada is the other major contributor). In 1978-79 the Fund's resources amounted to some f.12 million.

> The Fund provides experts to undertake advisory assignments or fill specific posts and uses consultancy firms to make studies for governments. Its education and training programme is of particular help in raising levels of technical and vocational skill, 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 and a small technical assistance group to give advice in key areas.

Other **Technical** Co-operation Expenditure by Britain on technical co-operation with Commonwealth developing countries in 1978 was £75 million, the greater part being spent on financing staff for service for Commonwealth Governments (£50 million) and in financing training places in Britain for people from Commonwealth countries (£13 mil-

lion); volunteers are also sent from Britain to serve overseas. Other technical help includes the sending of consultants to carry out feasibility surveys, the supply of training and research equipment, and making available the advisory

services of British scientific and technical institutions (see also p 87).

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, and provides 650 awards annually out of a total of over 1,000 within the scheme. Under the Aid for the Commonwealth Teaching of Science Scheme, Britain sends out experts to serve in curriculum development units, institutes of education and the inspectorates of ministries of education.

Other British financial aid to Commonwealth countries includes investment finance from the Commonwealth Development Corporation (see p 86).

Other **Organisations**

A large number of organisations are concerned with the Commonwealth. The Commonwealth Institute, financed largely by the British Government, promotes knowledge about the Commonwealth through films, library services, lecture tours by members of the staff and study conferences for students; its headquarters in London has a permanent exhibition open to the public depicting the life of member states, each country financing its own stand. The Commonwealth Foundation, financed by member Governments, administers a fund for increasing co-operation between professional organisations; it has assisted in the creation of 18 Commonwealth-wide professional associations, helped in the creation and growth of many national ones, and has created some ten multi-disciplinary professional centres. The Royal Commonwealth Society, which is over 100 years old, is a centre for the study and discussion of Commonwealth affairs, the library in London having one of the world's largest collections on the Commonwealth. The Society has branches, affiliated organisations and representatives 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, engineers, 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 Commonwealth Broadcasting Association, the Commonwealth Youth Exchange Council, the Commonwealth Games Federation, and the Commonwealth Arts Association.

DEPENDENCIES AND ASSOCIATED STATES

There are 14 remaining British dependent territories1: Belize, Bermuda, British Antarctic Territory, British Indian Ocean Territory, British Virgin Islands, Cayman Islands, Falkland Islands and Dependencies, Gibraltar, Hong Kong, Montserrat, Pitcairn Island, St Helena and Dependencies, Turks and Caicos Islands and the Anglo-French Condominium of New Hebrides. British policy is to give independence to those territories that want it, and not to force it on those which do not.

The population of the dependencies is about 5 million, ranging from Hong

¹ Rho desia, where sovereignty remains vested in Britain, has been under the control of an illegal regime since 1965. Britain is committed to bringing about a peaceful settlement providing for majority rule and following extensive consultations, particularly with other Commonwealth Governments, new British proposals for bringing Rhodesia to legal independence were announced in August 1979. A constitutional conference to consider these opened in London in September 1979.

Kong with well over 4 million people to Pitcairn Island with less than 100. Only three have populations of over or near 100,000 (Belize, Hong Kong and the New Hebrides), few are rich in natural resources, and some are scattered groups of islands. There are no permanent inhabitants in the British Antarctic Territory or British Indian Ocean Territory.

Most dependencies have considerable self-government with their own legislature and civil service. Britain is generally responsible for defence, internal security and foreign affairs, these functions being exercised through a Governor.

Some territories are on the way to independence: the New Hebrides, for example, is expected to progress to independence in 1980. There are particular problems associated with Belize, the Falkland Islands and Gibraltar which are the subject of territorial claims by neighbouring states—Guatemala, Argentina and Spain respectively. In all three cases Britain refuses to accept that British sovereignty is in doubt. In Belize it is British policy, supported by the United Nations, to bring the territory to secure independence as soon as possible. Britain has pointed out that Belize would be independent now had it not been for the Guatemalan claim. Fresh British proposals for a settlement were made to Guatemala in 1978 but were rejected. In the Falkland Islands and Gibraltar, the inhabitants of both territories wish to retain the link with Britain, and the Government is pledged not to support any transfer of sovereignty against their wishes.

Two territories in the Caribbean—St Kitts-Nevis-Anguilla, and Antigua, which have a combined population of some 140,000—are known as Associated States, a status providing for complete control of internal affairs with Britain retaining responsibility for external relations and defence. This arrangement originally covered six territories but four—Dominica, Grenada, Saint Lucia, and Saint Vincent and the Grenadines—have since become independent.

Associated statehood is entirely voluntary and can be terminated at any time by either party. Unlike dependencies, Associated States can proceed to independence without the consent or assistance of the British Government. Legislation to this effect has to be approved by a two-thirds majority in the territory's legislature and by a two-thirds majority in a referendum. Alternatively the British Government can end the associated status through an Order in Council, and this procedure was followed at the request of all those which have become independent. Britain considers it right to take such action at the request of an Associated State provided that it is satisfied that the majority of the people want independence and that the proposed independence constitution makes proper provision for the preservation of fundamental rights and freedoms.

INTERNATIONAL PEACE AND SECURITY

One of Britain's foremost foreign policy concerns is to protect its territorial integrity and political independence, as well as the interests of its remaining dependencies and Associated States and of its allies. The attainment of these objectives is seen as depending on an effective national security policy, in which defence is coupled with strenuous efforts towards removing or alleviating the causes of international tension, and widening and strengthening international arms control and disarmament measures.

British defence policy is described in Chapter 4. It is based on the North Atlantic Treaty Organisation (NATO)¹ which member countries regard as the

¹ NATO's 15 member countries are Belgium, Britain, Canada, Denmark, France, the Federal Republic of Germany, Greece, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Turkey and the United States. Neither France nor Greece participates fully in NATO's integrated military structure.

guarantor of their security, freedom and well-being, and as an important contribution to international peace and stability. All the members share a belief in democracy, human rights, justice and social progress. Britain makes a major contribution to NATO, devoting to it the greatest proportion of its defence effort and concentrating this in areas where it can best support NATO's security objectives.

NATO's twin aims are defence and détente. 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. In recent years NATO has placed increasing emphasis upon complementing its defensive capability with efforts to negotiate arms control and disarmament agreements with a view to maintaining the balance of security at a lower level of risk.

Outside Europe, Britain is committed to joint consultation with Australia, New Zealand, Malaysia and Singapore under the Five Power Defence arrangement. It is also responsible for the security of its overseas dependencies and Associated States (see p 92), and supports the peace-keeping efforts of the United Nations (see p 81).

Détente

Britain seeks genuine improvements in East-West relations based on undiminished security. It takes an active part in arms control and disarmament negotiations (see below), and in the process initiated by the 1975 Helsinki Conference on Security and Co-operation in Europe. It attaches great importance to the full and balanced implementation by all participants of the provisions of the Conference's Final Act for increased stability in Europe and improved co-operation between the 35 European and North American signatory states. (The Final Act is a charter and code of conduct of behaviour for what the participants hope will in time become a more normal and open relationship between both Governments and people in East and West. It includes undertakings about security, human rights, and co-operation in economic, humanitarian and other matters.) Britain participated fully in the 1977–78 Belgrade follow-up meeting at which there was a thorough exchange of views on the implementation of the Final Act. It has since taken part in the various expert-level meetings agreed at Belgrade and is actively involved in preparations for the second follow-up meeting in Madrid in November 1980.

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

between West Berlin and the Federal Republic.

Arms Control and Disarmament

Britain has played a prominent part in all the major multilateral disarmament negotiations, and has become party to all the treaties concluded as their result. (It is a depository government for most of these agreements.) At the United Nations Special Session on Disarmament in 1978, Britain reaffirmed its commitment to work for progress through multilateral, balanced and verifiable arms control and disarmament agreements. It participates in the Committee on Disarmament (as it did in the Committee's predecessor, the Conference of the Committee on Disarmament) and in the arms control and disarmament work of the United Nations.

One of the world's nuclear-weapon states, Britain is committed to negotiating in good faith to halt the nuclear arms race and to move towards nuclear disarmament. It is engaged in negotiations with the Soviet Union and the United

States for a comprehensive nuclear test ban treaty. Such a treaty, in the British view, would curb the development of new types of nuclear weapons. Britain regards the widest possible international adherence to the treaty as an important objective; meanwhile, it adheres to the Partial Test Ban Treaty (which bans nuclear tests in the atmosphere, in outer space and under water), having been, with the Soviet Union and the United States, one of the first three signatories in 1963.

Britain fully supported the United States in its efforts to conclude an agreement with the Soviet Union in the second set of the strategic arms limitation talks (SALT II), and welcomed the conclusion of an agreement in June 1979 which is designed to establish parity in strategic nuclear weapons and enhance stability.

Britain believes it is possible to improve international access to the benefits of the peaceful uses of nuclear energy while minimising the risk of the spread of nuclear weapons technology, and has played a leading part in strengthening the regime of non-proliferation through the International Atomic Energy Agency and other organisations. A party to the 1968 Non-Proliferation Treaty (which is designed to curb the nuclear arms race and to provide an assurance, through international safeguards, that civil nuclear activities of non-nuclear-weapon states will not be diverted to making such weapons), Britain has undertaken not to use nuclear weapons against non-nuclear-weapon states which have internationally binding commitments not to manufacture or acquire nuclear explosive devices (except in the case of an attack on British interests by such a state in association with a nuclear-weapon state). It intends to play a full part in the 1980 review conference of the Treaty.

The establishment of nuclear weapon-free zones in different parts of the world can contribute to non-proliferation and regional security, and Britain supports proposals for such zones wherever possible. It was the first nuclear-weapon state to ratify the protocols to the 1967 Treaty for the Prohibition of Nuclear Weapons in Latin America (the Treaty of Tlatelolco).

As a result of a British initiative, another category of weapons of mass destruction, biological weapons, is the subject of the 1972 Convention on Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxic Weapons and on their Destruction. Britain has also taken an active part in efforts to agree on a ban on chemical weapons, and in 1976 put forward a draft convention on the prohibition of their development, production and stockpiling. Britain believes also that new scientific discoveries should not be used to create totally new weapons of mass destruction. In this context, it feels that the best approach is for the Committee on Disarmament to keep under review the question of the development of such weapons and to consider the desirability of formulating agreements with regard to them as and when they are identified.

On conventional weapons, which are still the main component of most countries' national armouries, Britain has argued for international discussions on ways to halt the world-wide build-up. In particular it believes in the value of regional agreements as a means of facilitating this. In the talks on Mutual and Balanced Force Reductions, 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 to the strengthening of peace and security in Europe. The NATO position is based on the principle that the outcome should be one of approximate parity between NATO and Warsaw Pact forces in central

¹ All NATO countries (except France, Iceland and Portugal) and all Warsaw Pact countries (Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, Romania and the Soviet Union) take part in the talks.

Europe. Britain has also proposed at the United Nations regional 'confidence-building' measures, such as notification of military movements and exchanges of observers, in areas of potential tension and conflict.

At a United Nations conference on 'inhumane' weapons, Britain has proposed a convention regulating the use of landmines and booby-traps, and has supported proposals for bans or restrictions on other weapons deemed likely to cause unnecessary suffering or to be indiscriminate in their effects.

Britain is concerned about the rising scale of global military expenditure, and has made proposals at the United Nations for a multilateral, balanced and verifiable reduction of military budgets. It is also playing a leading part in the United Nations study on the relationship between disarmament and development.

BRITAIN AND THE UNITED NATIONS

Support for the United Nations (UN) and the purposes and principles of its Charter has been a cornerstone of British policy since 1945. In particular, Britain is concerned that the United Nations should be able to act effectively as an agency for crisis anticipation, peace-keeping and peace-making; as a forum for the discussion of major world issues; and as an instrument for development and for providing a wide variety of specialised and technical services. Britain also sees a strong and effective United Nations as the best framework for pursuing and achieving many of its foreign policy objectives—the resolution of disputes, an ordered North-South dialogue, disarmament and arms control, the protection of human rights, the promotion of the rule of law—designed to contribute both to its own wellbeing and security and to the development of a more harmonious international community.

The United Nations has in recent years had a growing role as the central institution for the discussion of 'global' issues. In addition to those of peace and war, these include disarmament, nuclear proliferation, disaster relief, the seabed, action against terrorism, the world environment, energy, development and world resources. While in some cases there are specialised institutions, usually UN agencies, for dealing with these issues, in many others, including most of those referred to above, discussion takes place mainly in the United Nations itself. Britain plays an active and positive role in these debates.

Keeping the Peace

The maintenance of international peace and security, the primary purpose envisaged for the United Nations at the time of its establishment, remains one of the world's greatest problems. Britain supports the view that the United Nations, as the only forum in which the whole international community is represented, has the right and duty to be involved in disputes which threaten peace and stability whether on a regional or world scale. In concert with other members, it has worked to strengthen and make more effective the machinery of the Security Council, the organ with primary responsibility for security matters, for preventing and settling disputes. As a permanent member of the Security Council, Britain has a particular interest in and responsibility for questions of international peace and security, and plays an active role in the Council's work.

Another British concern is that the United Nations should have the capacity to play an effective peace-keeping role. Britain currently supplies the largest national contingent to the UN Peace-Keeping Force in Cyprus, together with logistic support for the entire force, and provides some logistic support for the UN Interim Force in Southern Lebanon. In addition, in 1978 the British Government announced its willingness, subject to national commitments and

exigencies, to make available a limited British force for short-term peace-keeping

purposes.

Britain plays an active role in the work of the Special Committee on Peace-keeping Operations which is working for the establishment and implementation of guidelines for peace-keeping operations, and agreement on practical measures to facilitate such operations.

Human Rights

Britain has supported the UN's Universal Declaration of Human Rights since its adoption by the General Assembly in 1948. While not legally binding, it has inspired many other international instruments designed to secure the observance of its provisions. These include the two international covenants adopted by the General Assembly in 1966 which do impose legal obligations on those who ratify them—the Covenant on Economic, Social and Cultural Rights and the Covenant on Civil and Political Rights. Both came into force in 1976 and were ratified by Britain in the same year. Similarly, Britain has accepted Article 41 of the Covenant on Civil and Political Rights recognising the competence of the UN Human Rights Committee (set up to supervise the Covenant's implementation) to receive and consider state-to-state complaints.

Britain is also a party to a number of more specific conventions aimed at implementing particular rights contained in the Universal Declaration, including those on the elimination of racial discrimination, on the rights of women, the

status of refugees and stateless persons and slavery.

Britain recognises, however, that the adoption of conventions and covenants in itself is insufficient to secure the protection of human rights, and believes it is necessary to develop effective procedures to ensure the implementation of standards which such arrangements contain. Britain also believes that UN member states, through their voluntary acceptance of the Universal Declaration and the International Covenants, have demonstrated that abuses of human rights wherever they occur are the legitimate subject of international concern; and that a consistent policy on the part of a member government in breach of these obligations is a proper matter for discussion at the United Nations.

Overall responsibility within the United Nations for human rights activities lies with the Economic and Social Council. The bodies directly concerned are the Commission on Human Rights, its Sub-Commission on Prevention of Discrimination and Protection of Minorities, and the Commission on the Status of Women. Britain has been represented on all these bodies and has played an active part in their work. (In 1978 Britain, for the first time, was not re-elected to the Commission on Human Rights, but contributed to the work of the 1979 meeting as an observer. It has been re-elected to the Commission for 1980 and 1981.)

Economic and Social Affairs

The 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 it is estimated that some 90 per cent of the organisation's efforts, in terms of resources and personnel, are now employed to this end. Against a background of growing concern for and assistance to meet the problems of development, the main emphasis in this work has become increasingly the provision of operational programmes 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 and assistance for refugees. (The provision of capital assistance has been generally confined to the World Bank group and regional development banks whose operations are generally considered separately from those of the rest of the United Nations system.)

Successive British governments have affirmed their support for the functional and developmental work of the United Nations system, and have continued to increase the amount of funds made available to the system for assisting developing countries. Britain is the seventh largest contributor to the United Nations's regular budget, providing some £9·1 million, 4·5 per cent of the total, in 1978. In addition, it contributed about £3·6 million to the World Health Organisation, £2 million to the International Labour Organisation, £2·9 million to the Food and Agriculture Organisation and £2·4 million to the UN Educational, Scientific and Cultural Organisation. Britain provides a considerably larger proportion of the UN's voluntary funds, donating some £47·8 million in 1978, including £24·15 million for the UN Development Programme, £3·7 million for the UN Relief and Works Agency for Palestinian Refugees, £3·9 million for the UN Children's Fund, £3·4 million for the UN Fund for Population Activities, about £7 million for the UN High Commissioner for Refugees, and £5·2 million to the World Food Programme.

Britain plays an active role in the deliberations of the governing bodies of the various agencies and programmes, especially with a view to encouraging, in line with the objectives of its own aid policy, the deployment of resources towards the poorest countries and the poorest communities in the developing world (see p 84). It also seeks to ensure that the institutions make the most efficient use of the development resources placed at their disposal, and to promote improvements in the co-ordination, control and effectiveness of the system, especially in order to avoid unnecessary duplication and overlapping of

responsibilities.

The United Nations is central to the North-South dialogue (see p 87), not only through the involvement of its agencies in development and other international economic problems, but also as the forum within which the overall dialogue is reviewed. Britain supported the establishment by the General Assembly in 1978 of a Committee of the Whole to monitor developments in the dialogue. The preparation of a new international development strategy for the 1980s and possibly beyond will be the subject of a special session of the General Assembly in 1980. Britain is participating fully in this process, and believes that the new strategy should reflect the interdependent nature of the world economy.

OTHER INTERNATIONAL ORGANISATIONS

Britain is an active member of a number of other international organisations, including those concerned with the management of the world economy and which, therefore, have an important role to play in the North-South dialogue (see p 87). It is a founder member of the International Monetary Fund, established in 1944 (along with the World Bank—see p 87) as the principal administrator of the international financial system and as a source of credit for member states 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. It is a strong supporter of efforts under the General Agreement on Tariffs and Trade to liberalise further and promote the growth of world trade, and to improve the developing countries' participation in it (see pp 88 and 365).

Britain is also a member of the Organisation for Economic Co-operation and Development (OECD), an instrument for inter-governmental co-operation among 24 industrialised countries on matters relating to economic and social policy. Its aims are to promote policies designed to achieve the highest sustainable economic growth and employment, and a rising living standard, in member

countries while maintaining financial stability, and thus to contribute to the development of the world economy; to contribute to sound economic expansion in member as well as non-member countries in the process of economic development; 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 current political, economic, social and scientific issues with a view to achieving a greater unity between its members. Membership is open to any European state which is a parliamentary democracy and accepts the principles of the rule of law and protection of human rights. The Council was responsible for the adoption in 1950 of the European Convention on Human Rights, to which Britain is a party.

DEVELOPMENT CO-OPERATION

The basic objective of Britain's aid programme, which is the responsibility of the Overseas Development Administration, is to help developing countries' efforts to raise their living standards. This involves assistance in the broadest sense (from the provision of finance to purchase capital goods to expert advice and training) to supplement developing countries' own programmes for generating economic growth and social development. Aid is provided either bilaterally on a government-to-government basis or multilaterally through contributions to international development agencies.

Recent British aid policy has focused on reducing absolute poverty in the developing world, reflecting a recognition that the poorest countries find it most difficult to generate investment funds domestically or attract external private flows. The emphasis in the aid programme, therefore, has been on the poorest countries and on the poorest communities within these countries. Since these communities live mainly in rural areas, the policy has meant increased support for rural development. The aim has been to alleviate poverty by providing more and better opportunities for productive employment, usually of a labour intensive nature, and the basic social services such as health care and education. At the same time, Britain has continued to support other projects to which developing countries attach priority.

In addition to the official aid programme, private investment in developing countries is encouraged by the provision of government insurance to private investors by the Export Credits Guarantee Department (see p 367). An important contribution is also made by the work of private voluntary organisations (see p 87).

Official Flows

Since 1945 total official aid disbursements have amounted to about £6,620 million. The average gross annual disbursement over the four years 1975–78 was about £580 million. In 1978 official aid flows totalled some £743 million, of which £685 million represented official development assistance and £58 million other official flows. Of the overall total, bilateral aid accounted for £555 million including technical co-operation funds of £153 million;

¹ Official development assistance, the international basis for reporting on aid performances, is defined as official flows for development purposes with a grant (concessional) element of 25 per cent or more.

assistance provided through multilateral agencies was £188 million. Repayments of capital and payments of interest on loans made previously came to

£,54 million and £,41 million respectively.

The strategy for the Second UN Development Decade, adopted in 1970, recommended that each developed country should progressively increase its official development assistance to the developing countries and exert its best efforts to contribute a minimum net amount of 0.7 per cent of its gross national product (GNP) annually. Britain has accepted this in principle without commitment to a target date, progress being dependent on Britain's own economy and other calls on resources. In 1978, net disbursements of official development assistance (see Table 5) amounted to £632 million, 0.39 per cent of GNP (the net official flow figure was £689 million, 0.43 per cent of GNP). Britain has also accepted the UN target of 1 per cent of GNP for total net financial flows (that is, including private and official flows) to developing countries.

Bilateral Aid

Historically, 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 1978 £401 million (74 per cent) of bilateral aid went to Commonwealth countries. Of this, £37 million went to Britain's remaining dependencies, which are a first charge on the aid programme, and £8 million to the Associated States.

In regional terms, most British aid goes to Asia, which in 1978 received £211 million (40 per cent) of the bilateral programme, followed by Africa (£175 million), Latin America and the Caribbean (£38 million) and Oceania (£30 million). The country receiving the largest amount was India with £119 million. Other major recipients included Pakistan, Bangladesh, Malawi, Kenya, Zambia and Jamaica.

In line with the policy of concentrating aid on the poorest countries, £313 million (58 per cent) of bilateral aid went to countries with a 1976 per capita income of \$280 or less.

TABLE 5: Official Development Assistance to Developing Countries 1975-78

		1 0	£, millio		
	1975	1976	1977	1978	
Bilateral Commonwealth countries (including	298·4	381-1	374.5	496.8	
dependent territories) Grants	233·3 57·7	304·3 163·9	251·0 151·2	367·5 235·7	
Technical co-operation (grants) Loans	70·0 105·5	94·9 45·5	60·1 39·7	74·9 57·0	
Other countries Grants	65·2 11·2	76·8 21·7	123·5 30·1	129·3 31·9	
Technical co-operation (grants) Loans Contributions to multilateral	26·2 27·7	32·5 22·6	66·5 27·0	78·3 19·0	
agencies	133.5	140.8	201.7	187.8	
Total Total net of amortisation (as used for	431.9	521.9	576-2	684.7	
calculation of the 0.7 per cent target)	388.3	462.1	523.7	631.6	
Interest receipts	38.5	38.4	37.8	36.5	

Source: British Aid Statistics

Differences between totals and the sum of their constituent parts are due to rounding.

Financial Aid

Bilateral financial aid in 1978 totalled £389 million; over 68 per cent was in grants and the rest in loans. Budgetary aid, over £14 million in 1978, is provided in the form of grants. Development aid can be in grant or loan form, but the greater part is provided in grants following a decision to provide aid to the poorest developing countries (which include India, Bangladesh, Sri Lanka and many African countries) in grant form only. The terms of development loans have been progressively relaxed since 1958. In 1978 loan commitments, excluding investments by the Commonwealth Development Corporation (see below) totalled £145 million, of which 40 per cent was on interest-free terms. Where loans bear interest it is at fixed concessionary rates ranging from 2 per cent to 6 per cent, and both kinds of loan carry from three to seven years' grace periods, during which repayments of capital are not made. Of all loans committed in 1978 the average maturity was 25 years. Britain has more than fulfilled the 1972 recommendations of the Development Assistance Committee of the Organisation for Economic Co-operation and Development on easing the terms of financial aid. In 1978 Britain announced its intention to cancel debts worth £900 million on past development loans to 17 of the poorest countries (see also p 88).

Loans and grants are normally tied to the purchase of goods, equipment and services from Britain, although there may be a limited element for local costs and a foreign content not exceeding 20 per cent in contracts financed from tied aid in appropriate cases. New loan commitments can be untied, if the recipient agrees, to the extent that goods can be purchased from the poorest developing countries as well as from Britain.

An important role in development assistance is played by Britain's Commonwealth Development Corporation (CDC), set up in 1948 to assist the economic development of the then dependent territories. Subsequent legislation extended its area of operations to independent Commonwealth countries and, with British Government approval, to other countries. By the end of 1978 some £275 million had been invested out of a total commitment of £397 million. Of the latter £96 million was in East Asia and the Pacific, £55 million in the Caribbean and virtually all of the remainder in Africa. Commitments approved in 1978 totalled over £59 million, of which 86.5 per cent went to the poorest countries and 53 per cent to renewable natural resources projects.

Technical Co-operation Technical co-operation, the transfer of specialised knowledge and skills from country to country, is complementary to financial aid, the availability of such expertise often being a precondition of a successful programme of financial aid or investment. Expenditure on it has increased in recent years and was £153 million, 28 per cent of bilateral aid, in 1978. Of this, £69 million was for the provision of expert personnel, including volunteers, £24 million for students and trainees in Britain, £10 million for research services and projects, £10 million for consultancy services, and £40 million for books and equipment for training and research.

During 1978, there were 8,014 people financed by Britain (other than volunteers) working in developing countries, of whom some 3,607 were engaged in the field of education, 1,383 in public works and communications, 1,144 in public administration, 1,057 in agriculture and allied fields, 521 in health services, and 302 in industrial posts. In addition, under the British Volunteer Programme there were 1,505 volunteers, mainly graduates or otherwise qualified, working in developing countries, the majority of them teaching. Recruitment, training and placing overseas is undertaken by four voluntary bodies: Catholic Institute for International Relations, International Voluntary Service, United

Nations Association and Voluntary Service Overseas; 90 per cent of the societies' costs are met by the British Government.

Britain receives large numbers of students and trainees from developing countries. Over 14,000 were financed in Britain in 1978 under regional programmes of technical co-operation, by awards under the Commonwealth Scholarships and Fellowship Plan, and under various British Council schemes.

To support practical development activity overseas, the Government maintains four specialist scientific organisations (the Directorate of Overseas Surveys, the Land Resources Development Centre, the Tropical Products Institute and the Centre for Overseas Pest Research) and provides support for many others. These organisations provide specialist information and advice, experts for service overseas and undertake field and laboratory research investigations.

Multilateral Aid

Britain is the second largest subscriber (after the United States) to the World Bank group of institutions-the International Bank for Reconstruction and Development, the International Development Association (IDA) and the International Finance Corporation. The British commitment to the IDA'S Fifth Replenishment (for 1977 to 1980) is £474 million. Britain has contributed or has agreed to contribute, to the Asian Development Bank, the Inter-American Development Bank, the Caribbean Development Bank and the African Development Fund. Britain's contribution to the United Nations Development Programme for 1979 is £,28.5 million, and it is the largest source for expertise and fellowships provided under the programme. In addition there is a major British contribution to other United Nations agencies and programmes (see p 83), and an increasing proportion of British development assistance is now being channelled through the European Community's aid programme (see p 73).

Voluntary Agencies

Voluntary agencies provided some £26 million for their work in developing countries in 1978. The funds were spent mainly on agriculture, health and nutrition, and education projects and on emergency relief operations. The Government co-operates with the agencies in various ways, especially in immediate post-disaster relief and rehabilitation operations and through its Joint Funding Scheme. Under this scheme, the Government meets half the cost of selected development projects undertaken by the agencies and aimed at helping the poorest. Two hundred such projects were approved in 1978, including community health, non-formal education, the improvement of food supplies, agricultural training, water supply and irrigation. Expenditure on the scheme in 1978 was over £1 million. Disaster relief and rehabilitation aid provided through the agencies during 1978 amounted to nearly £3 million.

Voluntary agencies also provide support for refugees. The Government finances about half the annual budget of the United Kingdom Standing Conference on Refugees, a consultative body for agencies engaged in assisting refugees, and in 1977 indicated its willingness to consider applications from agencies for grants for projects aimed at improving refugees' welfare and their ability to support themselves. In 1978 grants for such projects amounted to £,143,000.

NORTH-SOUTH DIALOGUE

The North-South dialogue, which embraces questions of development, transfer of resources, raw materials, trade and international monetary issues, is being conducted between the industrialised nations and the developing countries with a view to evolving a more equitable balance in the world's economy. Britain attaches importance to securing progress in the dialogue, and in its approach to

the discussions involved works in close association with its partners in the European Community.

As a Community member state Britain contributed significantly to the work of the Conference on International Economic Co-operation¹. The Conference did not achieve complete success but reached a considerable degree of agreement particularly on development issues (see p. 74).

A major development in aid policy in 1978 was the commitment by major donor countries, at a ministerial meeting of the Trade and Development Board of the UN Conference on Trade and Development (UNCTAD), to adjust the terms of past bilateral aid to bring them into line with prevailing more relaxed terms—known as retrospective or retroactive terms adjustment—or to take equivalent measures. It was following this that Britain decided to relieve 17 of the poorest countries of debt repayments worth some £900 million to the end of the century, thus placing past aid to these countries on the same grant-only basis as present assistance programmes (see p 86).

Britain, in close collaboration with its Community and OECD partners, made a full contribution to the discussions on North-South issues at the Fifth UNCTAD conference in Manila in mid-1979. The conference was a stage in the continuing dialogue, with discussions on most of the important issues between the developed and developing countries. Much attention focused on the Declaration and Programme of Action in which the Group of 77 developing countries set out their main demands.

In the commodities field, Britain took the initiative at the Commonwealth Heads of Government Meeting in 1975 in giving impetus to the establishment of price stabilisation arrangements on a commodity-by-commodity basis. This took shape in the programme of work on individual international commodity agreements initiated by the Resolution on the Integrated Programme for Commodities adopted by UNCTAD in 1976; the Resolution also called for a Common Fund to help finance the agreements. In the subsequent negotiations on the Common Fund and on individual commodities, Britain has played an active part within the European Community and consumer countries generally in the search for appropriate solutions. A framework agreement on the Common Fund was reached in March 1979, and negotiations on the detailed provisions were resumed later in the year.

In 1964 Britain was the first major developed country to support the idea of extending tariff preferences on a non-reciprocal and non-discriminatory basis to all developed countries. It therefore strongly supported the objectives of the latest round of multilateral trade negotiations. Set out in the 1973 Tokyo Declaration (see p 365), these were the further liberalisation of world trade through the progressive dismantling of tariff and non-tariff barriers, and within this, the provision of special and more favourable treatment for the developing countries where possible.

Since its entry into the European Community, Britain has adopted the Community's trade arrangements, which are among the most liberal applied by industrial nations, and has played a significant role in determining their nature. In particular it took a major part in the negotiations for the first Lomé Convention (see p 73), not only with a view to safeguarding the trading interests of

¹ The Conference on International Economic Co-operation met in Paris from December 1975 to June 1977 and was, while it continued, the focal point of the North-South dialogue. It was attended by representatives of eight western industrial countries (including the European Community as a single entity), known as the 'Group of Eight'; and seven members of the Organisation of Petroleum Exporting Countries and 12 other developing countries, who made up the 'Group of 19'. Discussions have since reverted to the United Nations and its constituent bodies.

Commonwealth developing countries, but also to ensure that reciprocal preferences would not be demanded from the developing countries as had been the case with previous Community arrangements. Britain also contributed to the successful conclusion of the second convention (see p 73). In addition, Britain has supported improvements to the Community's Generalised System of Preference scheme, 366, especially with regard to more liberal access into the Community for imports of manufactured and processed agricultural products and in its application to the poorest developed countries, particularly those in South Asia. Before entering the Community, Britain secured a commitment to expand and reinforce Community trade relations with the Commonwealth countries of Asia, and this has led to the conclusion of commercial co-operation agreements with India, Sri Lanka and Bangladesh.

4 Defence

POLICY

Britain's basic security depends on the continued strength of the North Atlantic Treaty Organisation (NATO) (see also pp 78-9) which celebrated its 30th anniversary in 1979. With the greater part of its military forces committed to NATO, Britain makes a major contribution to the full range of deterrent capabilities, both conventional and nuclear, required to maintain the North Atlantic Alliance's defensive posture. Britain believes that the Alliance's defence needs can best be met through co-operative action, and has agreed to participate fully in the Long Term Defence Programme which is a major co-operative undertaking adopted by the Alliance in 1978 in order to strengthen its defence and deterrent posture in the face of the continuing build-up in Warsaw Pact military strength. Britain also plays an important part in the efforts of the European members to assume, through closer co-operation, an increasing responsibility for Western defence. In the 'Eurogroup' Britain and ten other European members are working to improve their contribution to the Alliance and to achieve a more effective collective result from the available resources. The sub-groups of the Eurogroup, each of which concentrates on a specific area such as training or logistics, make an important contribution towards the strength of the Alliance by increasing co-operation among its members. Britain also participates in the independent European Programme Group of all European members of the Alliance; the Group extends co-operation among European countries in defence equipment and contributes to greater co-operation over equipment throughout the Alliance.

The Alliance complements its defence preparations with efforts to reduce tension and achieve a more just and lasting peaceful order in Europe through such measures as arms control and disarmament agreements, and Britain plays a major part in these efforts (see pp 79–81). In recent years, Britain has withdrawn from its commitments outside NATO wherever this has been consistent with its fundamental military and political obligations (see p 79).

PLANNING AND CONTROL

Supreme responsibility for national defence rests with the Government as a whole, which is responsible to Parliament. The formulation of defence policy is the responsibility of the Secretary of State for Defence who is assisted by a Minister of State, and by three Under-Secretaries of State—for the Navy, Army and Air Force respectively. They, together with the Chief of the Defence Staff, the three Service Chiefs of Staff, the Permanent Under-Secretary of State for Defence, the Vice-Chief of Defence Staff (Personnel and Logistics), the Chief Scientific Adviser and the Chief of Defence Procurement, form the Defence Council, which deals with major aspects of defence policy. The Chiefs of Staff Committee is responsible for giving professional advice on strategy and operations, and on the military implications of defence policy. The day-to-day management of the three Services is the responsibility of the Admiralty, Army and Air Force Boards of the Defence Council.

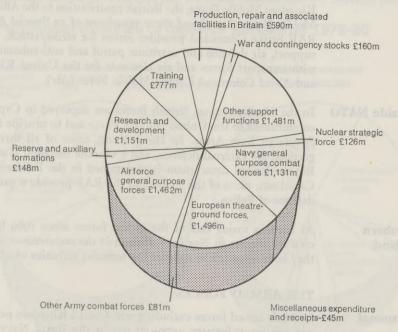
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Expenditure

The defence estimates for 1979-80 totalled £8,558 million, about 4.75 per cent of gross domestic product at market prices. Of this, £3,610 million (42 per cent) is on personnel (pay, allowances, pensions), £3,493 million (41 per cent) on equipment, and £1,455 million (17 per cent) on buildings and miscellaneous stores and services. (These figures do not take account of the latest armed services pay award nor of the additional f.100 million announced in June 1979 for defence equipment.)

Functional analysis of defence expenditure 1979-80



Total £8,558 million

DEPLOYMENT

NATO Strategy

The NATO strategy of flexibility in response, together with the principle of forward defence, is based on the premise that peace and stability can only be maintained if a potential aggressor is convinced that it would lose far more than it could ever hope to gain by the use of force. The strategy is designed to enable NATO to respond to aggression at a variety of levels, being flexible enough to allow the appropriate degree of effective military action to be taken. It requires the possession of a wide range of mobile and well-equipped conventional forces, and of theatre and strategic nuclear capabilities which provide a chain of options from which to choose the appropriate method of countering aggression.

Britain's NATO Contribution

Britain makes a major contribution to the forces required by NATO's present strategy. Together with its tactical nuclear forces, the British Polaris strategic force provides a unique European contribution to NATO's nuclear deterrent. Virtually all ships of frigate size and above are earmarked for assignment in an emergency to NATO. The Royal Navy also contributes to NATO's Standing Naval Force Atlantic, Standing Naval Force Channel, and the Naval On Call Force Mediterranean. The British Army of the Rhine (BAOR) and Royal Air

Force (RAF) Germany are deployed in the Federal Republic of Germany and there is a Field Force in Berlin. The main combat element of BAOR is First (British) Corps which comprises four armoured divisions, an artillery division, and an infantry formation. Its peacetime strength of around 55,000 would be more than doubled on mobilisation by reinforcements and reserves from Britain (see p 96). Virtually all the RAF's combat and combat support aircraft are assigned to NATO. RAF Germany is a tactical air force including strike/ attack, reconnaissance, close support and air-defence aircraft. In addition, combat units based in Britain form an important part of NATO's mobile reinforcement capability. These include the ground elements of the United Kingdom Mobile Force, the British contribution to the Allied Command Europe Mobile Force (Land) and three squadrons of 22 Special Air Service Regiment. RAF Strike Command provides forces for strike/attack, reconnaissance, close support, air defence and maritime patrol and anti-submarine warfare, together with transport forces and air elements for the United Kingdom Mobile Force and Allied Command Europe Mobile Force (Air).

Outside NATO

In the Mediterranean, British forces are deployed in Cyprus to meet Britain's commitment to the United Nations Force and to provide for the security of the Sovereign Base Areas. In Hong Kong, units of all three Services provide a garrison for external defence, and a Gurkha battalion is stationed in Brunei. A Royal Marines detachment is maintained in the Falkland Islands; and in the Caribbean, units of the Army and the RAF provide a garrison for the external defence of Belize.

Northern Ireland

At home a major task of the armed forces since 1969 has been to assist the civil authorities in Northern Ireland in the maintenance of law and order, and they have operated to counter the terrorist activities of extremist organisations.

THE ARMED FORCES

Personnel

Britain's armed forces excluding non-United Kingdom personnel totalled about 317,000 on 1 January 1979, 73,500 in the Royal Navy and Royal Marines, 158,100 in the Army and 85,400 in the Royal Air Force. The forecast total for 1 April 1980 is 321,900. The average number of civilian staff expected to be employed by the Ministry of Defence during 1979–80 is 263,300.

The three women's Services, the Women's Royal Naval Service, the Women's Royal Army Corps, and the Women's Royal Air Force, are integral parts of the armed forces, and servicewomen serve alongside servicemen in Britain and overseas. Nursing services are provided by Queen Alexandra's Royal Naval Nursing Service, Queen Alexandra's Royal Army Nursing Corps and Princess Mary's Royal Air Force Nursing Service.

Engagements

Britain's armed forces consist entirely of personnel serving on a voluntary basis. Engagements available to non-commissioned ranks range from three to 22 years, with a wide freedom of choice on the length and terms of service. Recruits to non-commissioned ranks are committed for only a minimum period of service (about three years, excluding training) and, subject to that minimum, may leave at any time at 18 months' notice. Discharge may also be granted on compassionate grounds, by purchase, or on grounds of conscience (applications being assessed by an independent tribunal). Commissions may be granted for short, medium and long terms. In all three Services there are opportunities for promotion from the ranks. Direct entry to commissioned ranks is on the basis

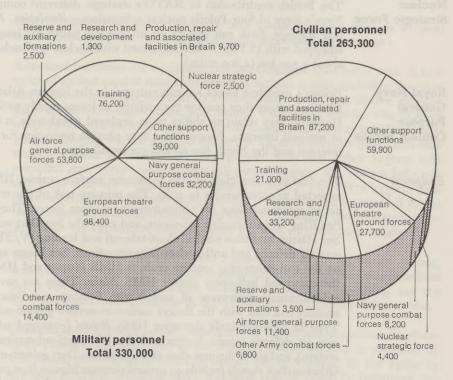
of educational and other qualifications. All three Services have schemes for university cadetships.

Training

Entrants to non-commissioned ranks are given basic training, and further and specialist training is given during the course of their careers. Young servicemen and women are encouraged to study for educational qualifications, and extensive facilities exist for this. Trade and technical training, though primarily designed for Service purposes, leads for about half the total number of service personnel to nationally recognised qualifications.

Service technical training is highly valued in industry, which is a significant advantage on return to civilian life. To assist resettlement the Services provide

Functional analysis of defence personnel 1979-80



Note: These are average strengths and include locally enlisted personnel.

an advisory service, familiarisation attachments to civilian organisations, and opportunity and assistance to study for suitable civilian qualifications. There are also opportunities for short- and longer-term retraining both before and after discharge from the Services.

Entrants to commissioned ranks receive initial training at the Britannia Royal Naval College, Dartmouth, the Royal Military Academy, Sandhurst, the Royal Air Force College, Cranwell, or similar institutions. This is followed by specialist training, often including degree courses at university or Service establishments.

Staff training is provided by the Royal Naval Staff College, Greenwich, the Army Staff College at Camberley, and the Royal Air Force Staff College at Bracknell. The National Defence College at Latimer is designed to fit selected mid-career officers of all three Services for key posts that contribute to

formulation of defence policy in the Ministry of Defence and on international staffs. Specially selected senior officers and civilian officials from Britain, the Commonwealth, NATO and other countries attend the Royal College of Defence Studies in London, which provides the wider background necessary for those destined to fill higher appointments.

Considerable operational training is carried out through joint-Service and inter-allied exercises. All three Services provide training for the armed forces of

allied and Commonwealth countries.

COMBAT FORCES Combat forces are functionally divided into the nuclear strategic force, Royal Navy general purpose combat forces, European theatre ground forces, other Army combat forces and Royal Air Force general purpose forces.

Nuclear Strategic Force

The British contribution to NATO's strategic deterrent comprises the Royal Navy's force of four Polaris nuclear submarines—Resolution, Repulse, Renown, and Revenge. Each can remain on underwater patrol for long periods and is equipped with 16 Polaris missiles, armed with nuclear warheads, with a range of about 4,500 km (2,800 miles).

Royal Navy General Purpose Combat Forces

Britain's maritime forces are concentrated in the Eastern Atlantic and English Channel, where they provide the majority of forces readily available to NATO. However, they retain an ability to be deployed world-wide in defence of allied or national interests. Nearer home they provide protection for Britain's fishing interests and the North Sea oil and gas installations.

Equipment

The first of a new class of anti-submarine warfare cruiser, HMS Invincible, is expected to enter service in 1980. The primary task of the cruisers will be to act as command ships for anti-submarine warfare forces. They will deploy the Sea King anti-submarine helicopter, and carry the Sea Dart missile system and Sea Harrier maritime vertical short-take-off and landing (V/STOL) aircraft for area air defence and anti-surface ship operations. Sea Kings are also embarked on the anti-submarine warfare cruisers HMS Hermes and HMS Bulwark and the command helicopter cruiser HMS Blake. There are seven County class guided-missile destroyers all armed with Seaslug and Seacat surface-to-air missiles and four with the Exocet surface-to-surface guided-missile system, the Type 82 guided-missile destroyer HMS Bristol (equipped with the Sea Dart area air defence missile system and the Ikara anti-submarine guided weapon system), and six of the new class of Type 42 Sea Dart guided-missile destroyers. Other surface vessels include 49 general purpose frigates (comprising 26 Leander class, seven Tribal class, eight Rothesay class and eight of the new Type 21 Amazon class), three anti-submarine frigates (including the first two Type 22 frigates), three anti-aircraft frigates, 39 mine counter-measure vessels (including HMS Brecon, the first of the Hunt class of glass-reinforced-plastic mine countermeasure vessels) and seven new Island class offshore patrol vessels. The frigate classes are variously armed with automatic guns, surface-to-air missile systems, underwater detection and anti-submarine weapons. Most have the Wasp helicopter embarked, which is being replaced, where appropriate, by the Anglo-French Lynx.

Exocet missile systems are being installed in some Leander class and Type 21 frigates, giving these vessels a better surface-to-surface capability, and in the Type 22 frigates, which also have the Seawolf surface-to-air missile system. Some Leander class frigates are also equipped with the Ikara anti-submarine weapon. Eleven nuclear-fleet submarines are in service, including the first five

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of the Swiftsure class, as are 16 conventional patrol submarines. There is also an amphibious capability comprising the two assault ships HMS Fearless and HMS Intrepid and the Royal Marines Commando Forces, supported by HMS Hermes and HMS Bulwark which retain a secondary role as commando ships.

Ships under construction include HMS Illustrious, and HMS Ark Royal, the second and third of the anti-submarine warfare cruisers, and four Type 22 frigates. In addition, work is in hand on three nuclear-fleet submarines, including two of a new class, eight Type 42 Sea Dart destroyers, and four Hunt class mine counter-measure vessels.

European Forces

The European theatre ground forces consist of BAOR, and the forces stationed Theatre Ground in Britain, the main elements of which have primary roles in support of the North Atlantic Alliance (see p 91-2).

Other Army **Combat Forces** Other Army combat forces comprise land forces stationed overseas to meet treaty commitments to Commonwealth and other countries (see p 92).

Equipment

Armoured regiments are equipped with the Chieftain main battle tank. A new series of tracked combat reconnaissance vehicles is in service, including Scorpion and Scimitar, mounting respectively a 76mm and a 30mm gun, Striker, carrying the Swingfire anti-tank missile, and Sultan, a command vehicle. The primary tracked armoured personnel carrier used by mechanised infantry battalions is the FV432. Entering service with the infantry is the crew-portable Milan anti-tank weapon system. Artillery units are equipped with the Abbot 105mm selfpropelled gun, 155mm and 175mm self-propelled guns, the 105mm light gun and Field Artillery Computer Equipment (FACE). The FH70 155mm field howitzer will enter service in 1979. Tactical nuclear support is provided by the Lance missile system. Air defence is provided by the Rapier low-level surface-toair missile system and the Blowpipe man-portable very-low-level missile.

General Purpose Forces

Royal Air Force The Royal Air Force general purpose forces consist of aircraft for air defence, strike/attack, reconnaissance, offensive support, airborne early warning, maritime patrol and anti-submarine warfare, transport and in-flight refuelling, and the RAF Regiment field squadrons in the anti-aircraft and ground defence roles.

Equipment

Phantom and Lightning aircraft, together with Rapier and Bloodhound surfaceto-air missiles, are employed in air defence. Radar warning is provided by Shackleton airborne early warning aircraft (to be replaced in the 1980s by specially equipped Nimrods which will form part of NATO's integrated airborne early warning force) and by the ground radars and control and reporting centres of the United Kingdom Air Defence Ground Environment system. Jaguars, Buccaneers and Vulcans operate in the strike/attack role; Jaguars, Canberras and Vulcans are employed for reconnaissance; Jaguars and the Harrier V/STOL aircraft for offensive support (with the Harrier also having a tactical reconnaissance capability); Nimrods for long-range maritime patrol and anti-submarine warfare and for offshore surveillance and fishery protection duty. The Tornado multi-role combat aircraft will replace the Vulcan, Buccaneer, Canberra, Phantom and Lightning aircraft in their respective roles during the 1980s. The first will enter service in the strike/attack role in 1980.

The VC10 provides strategic transport and the Hercules (which also has a strategic capability) is used for tactical transport over medium ranges. For short-range tasks, the Wessex and Puma helicopters are used, while for search and rescue operations Wessex, Whirlwind and Sea King helicopters are used in

Britain. Victor tankers are used for in-flight refuelling, which gives added range and flexibility to combat aircraft.

RESERVE FORCES Reserve and auxiliary forces are an integral part of the armed forces. Apart from their essential military role—to supplement the regular forces in time of war or emergency with trained personnel able immediately to take their places in the Services either as formed units or as individual reinforcements—they form an important link between the Services and the civil community. Some of their members have a reserve liability following a period of regular service (regular reserve); others are volunteer men and women who devote their spare time to training for the roles they would undertake in war or an emergency. The latter include the Territorial Army (TA) whose role is to re-inforce the ground forces committed to NATO and to assist in maintaining a secure home base in the United Kingdom, the Royal Naval Reserve, the Royal Marines Reserve and the Royal Airforce Volunteer Reserve. There is also the Ulster Defence Regiment which is a locally-recruited and largely part-time force designed to support the regular forces in Northern Ireland. On I January 1979 regular reserves totalled 184,200, and volunteer reserves and auxiliary forces 73,500. Cadet forces, which make a significant contribution to recruitment to the regular forces, totalled 141,100.

CIVIL DEFENCE

Civil defence arrangements are principally based on the extended and adapted use of existing public services operated by nationalised industries, local authorities, the police and government departments. Supplementary effort from volunteers and voluntary organisations would be brought in, either at the discretion of local authorities or in response to a national appeal, in time of crisis. Recent policy has aimed at improving the preparedness of local government to meet a war emergency. Since there is common ground between such planning and that required for a major peace-time emergency or national disaster a closer relationship in local planning for the different emergencies of peace and war has also been sought.

Within an annual budget of £35.8 million, emphasis is placed on a high quality of central and local government planning. Studies and seminars are arranged by the Home Office on staff college lines.

Arrangements also include an emergency system for decentralised governmental control and communications. The United Kingdom Warning and Monitoring Organisation, which includes the civilian Royal Observer Corps, 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.

DEFENCE PROCUREMENT

Responsibility for the procurement (that is, research, development and production) of defence equipment lies with the Procurement Executive within the Ministry of Defence. The Executive is responsible for liaising between the Service users and the machinery for procurement, and co-ordination with industry in the formulation of programmes; this ensures a cost-effective approach.

Research and Development

Most research is undertaken by the Ministry of Defence's research and development establishments, but the Ministry also sponsors a substantial amount of

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research by industry and the universities. The Ministry's establishments have a very wide technological capability, which has civil as well as military applications: for example, support is given to civil aerospace projects and advanced aeroengines. On the development side, the establishments collaborate closely with the Ministry's contractors by monitoring their progress, and by assisting in

testing programmes and in solving particular technical problems.

Modern defence equipment is becoming ever more complex, and its development requires a high initial investment; in 1979-80 the cost of British equipment research and development is estimated at £1,160 million. The search for a more efficient use of these resources has caused attention to be concentrated on collaborative projects, which enable development and costs to be shared with other countries. In some cases the outright purchase of foreign equipment is the most economical solution. Nevertheless, the importance of maintaining a sound national industrial base for defence procurement is recognised, and there is close consultation between government and industry both in the National Defence Industries Council and through other specialised machinery.

Collaboration between Britain and other European countries is extensive, and is expected to increase, particularly through the work of the European Programme Group. Successful joint projects include the Anglo-French Jaguar aircraft, the Martel air-to-surface missile, the Lynx, Puma and Gazelle helicopters and the Anglo-Belgian family of armoured combat reconnaissance vehicles. Production and development of the Tornado multi-role combat aircraft with the Federal Republic of Germany and Italy is continuing and good progress is being made in the development, with these two countries, of the medium artillery pieces FH70 and SP70. Equipment collaboration also facilitates joint logistic support and training arrangements, like those taking place among the five European countries which have agreed to purchase the Lance

surface-to-surface missile system from the United States.

National Projects

A considerable number of projects, covering all the main equipment areas, are under development. They include a complete range of new avionic and sonic equipment which will greatly improve the effectiveness of the Nimrods; an air defence variant of the Tornado; a search and rescue version of the Sea King helicopter with a greater range and capability; a new range of logistic vehicles for battlefield support; a new type of tank armour, Chobham Armour, which weight for weight provides greatly improved protection for armoured vehicles; and the Wisp and Wideye remotely-piloted helicopters. An airborne early warning (AEW) version of the Nimrod is being developed, equipped with an advanced AEW radar, which will complement the AEW force which other NATO countries are planning to procure.

Production

Following the development of defence equipment, either nationally or in co-operation with allies, production is usually undertaken by private industry on a contract basis or by the Royal Ordnance Factories and Royal Dockyards. Production may also be undertaken on a collaborative basis. The Defence Sales organisation provides support, assistance and advice to British industry and the Royal Ordnance Factories in promoting the sales of defence equipment overseas. In 1979-80 the value of exports of British defence equipment is expected to reach £1,200 million.

5 Justice and the Law

THE LAW

Although the United Kingdom is a unitary State, it does not have a single body of law. England and Wales, Scotland and Northern Ireland each have their own legal systems and law courts. There is substantial identity on many points, but considerable differences remain in law and in procedure. 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.

A feature common to the legal systems of the United Kingdom is the distinction made between the criminal law and the civil law. The criminal law is concerned with wrongs against the community as a whole while civil law is concerned with the rights, duties and obligations of individual members of

society between themselves.

Sources of Law

The main sources of law in the United Kingdom 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, or by-laws made by local government or other authorities exercising powers conferred upon them by Parliament. Common law is the ancient law of the land as deduced from custom and interpreted by the judges. Generally speaking it has never been precisely defined or codified but forms the basis of the law except when it has been superseded by legislation.

European Community law (see p 72) is largely confined to economic and certain social matters; in certain circumstances it prevails over domestic law. It is normally applied by the domestic courts, but the most authoritative rulings are

given by the European Court of Justice (see p 72).

CRIMINAL JUSTICE

Four distinct stages are involved in the British system of criminal justice: the enactment of criminal legislation which, for instance, defines prohibited acts, establishes criminal courts and provides for the treatment of offenders; the prevention of crime and the enforcement of the law-largely matters for the police service; the determination by the courts of the guilt or innocence of people accused of crimes, followed by the selection of appropriate sentences for the guilty; and the treatment of convicted offenders.

A Royal Commission has been set up to examine the powers and duties of the police in England and Wales, the rights and duties of suspects and accused people, and the process of and responsibility for the prosecution of criminal

offences.

The Criminal Law

The criminal law, like the law generally, undergoes constant reform in the courts as established principles are interpreted, clarified or refashioned to meet new

circumstances. Substantial changes in the law are the responsibility of Parliament. In practice most legislation affecting the criminal law is governmentsponsored, but there is often consultation between government departments and bodies representing the legal profession, the police and the probation and prison services. The views of voluntary bodies are also considered.

Crime Statistics Chief constables in England and Wales have a duty to 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) is contained 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.

The differences in the legal systems of the United Kingdom make it impractical to analyse in detail trends in criminality for the country as a whole. In considering trends it has to be remembered that the number of offences recorded by the police does not cover all offences committed since some offences go undiscovered and others are not reported to the police. Nevertheless it is clear that, as in western Europe generally, there has been an upsurge in crime since the early 1950s.

Table 6 shows the rate of indictable offences (the more serious offences) recorded by the police in 1978 in England and Wales. There were about 5,200 indictable offences per 100,000 population.

In 1978 424,029 people were found guilty of indictable offences by courts in England and Wales. Of these, about 49 per cent were under 21 years of age. Not all apprehended offenders are taken to court. For indictable offences 106,842 people were given formal oral cautions by the police; of these 90 per cent were under 21. For non-indictable offences (excluding motoring offences) oral cautions were given to 34,551 people of whom 50 per cent were aged under 21.

TABLE 6: Indictable Offences Recorded by the Police, per 100,000 Population (England and Wales) 1978

Offence Group	1978
Homicide	1
Violence against the person (excluding	•
homicide)	176
Sexual offences	46
Burglary	1,152
Robbery	27
Theft and handling stolen goods	2,934
Fraud and forgery	249
Criminal damage	624
Other offences	7
TOTAL	5,216

Source: Home Office

Criminological Research

A wide range of criminological and other social research is carried out by the Home Office Research Unit and by the research branch of the Scottish Home and Health Department. The results of the research are published in learned journals, the Home Office Research Studies series and the Scottish Office Social Research Studies series. Research is also carried out in university departments, much of it financed by the Government. The principal university research establishment is the Institute of Criminology at Cambridge.

Criminal
Injuries
Compensation
Scheme

The Criminal Injuries Compensation Scheme provides ex gratia compensation to victims of violent crimes including victims of violence within the family and to people hurt as a result of attempts to arrest offenders and prevent offences. It is administered by a board consisting of legally qualified members appointed by the Home Secretary and the Secretary of State for Scotland after consultation with the Lord Chancellor. Compensation, which is assessed on the basis of common law damages and usually takes the form of a lump sum payment, has totalled over £50 million since the scheme began.

The scheme does not apply in Northern Ireland where there is statutory provision in certain circumstances for compensation from public funds for criminal injuries caused to people and also for malicious damage to property (see below). Compensation for property damage includes losses of profits arising from the damage.

Measures to Combat Terrorism Various temporary measures to deal with terrorism in connection with Northern Ireland have affected some aspects of the British criminal justice system. Wideranging emergency powers in Great Britain and Northern Ireland, contained in recent legislation, include: the right to search, arrest and detain suspected terrorists; the proscription of organisations engaged in terrorism connected with Northern Ireland affairs and occurring in the United Kingdom; and the exclusion from Great Britain and Northern Ireland of people concerned in terrorism. People who are not British citizens can be excluded from the United Kingdom as a whole. There is also a system of controls at ports on passengers travelling between Great Britain and Ireland.

Trials in Northern Ireland criminal courts of offences involving terrorism are heard by a judge sitting without a jury to obviate the possibility of intimidation

of jurors.

The emergency laws are temporary and must be reviewed periodically; they have also been subject to independent examination. Although they confer special powers on the appropriate Secretary of State, they have been used sparingly. No one can be imprisoned for political beliefs; all prisoners except those awaiting trial have been found guilty in a court of law of criminal offences.

The security forces in Northern Ireland are subject to the law and can be prosecuted in the courts for criminal offences. The procedure for dealing with complaints against the police involves two independent elements: the Director of Public Prosecutions where allegations of criminal conduct are made; and the Police Complaints Board for Northern Ireland where complaints relate only to disciplinary offences.

The Criminal Jurisdiction Act 1975 creates extra-territorial offences under Northern Ireland law so that it is possible to try in the province 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.

As a result of the civil disturbances in the province since 1968, over £48 million has been paid from public funds in compensation for personal injuries

and about £200 million for damage to property.

THE POLICE SERVICE Crime prevention and crime investigation, the preservation of the peace and the bringing to trial of offenders are primarily the concern of the police service. British police action in enforcing the law rests mainly upon common consent, for there are only a small number of officers in relation to the population (roughly one officer to 430 people). Officers do not normally carry firearms (their only weapon is a truncheon) and there are strict limitations on police powers.

Forces

There are 43 police forces in England and Wales, eight in Scotland and one (the Royal Ulster Constabulary) in Northern Ireland. Each force is responsible for law enforcement in its own area, but there is constant co-operation among them.

Outside London most counties (regions or islands in Scotland) have their own police forces, though in the interests of efficiency several have combined their forces. In London, the Metropolitan Police Force, with headquarters at New Scotland Yard, is responsible for an area within a radius of about 24 kilometres (15 miles) from the centre, but excluding the City of London, where there is a separate force. The strength of the regular police force in Great Britain is over 124,000 (including nearly 9,700 policewomen); in Northern Ireland the strength of the force is about 6,500 (arrangements are being made to increase this to 7,500). The size of individual police forces depends on the area and population which they serve. The strength of the Metropolitan Police Force is over 22,600.

In addition to the regular police forces, constabularies are maintained by the British Railways Board, the United Kingdom Atomic Energy Authority, the Ministry of Defence and a few other public bodies. Considerable numbers of people are employed by commercial security organisations which are subject to the ordinary law of the land. Proposals made by the previous Government for licensing private security firms are under discussion.

Police Authorities and Chief Constables Each of the regular police forces is maintained by a police authority, a committee consisting of local councillors and, in England and Wales, magistrates. 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 primary duty of the police authority is to provide an adequate and efficient police force in the area for which it is responsible. Its functions, some of which are subject to ministerial approval, include appointing the chief constable, deputy chief constable and assistant chief constables and, if necessary, calling on them to retire; fixing the maximum permitted strength of the force; and providing buildings and equipment. In the Metropolitan Police area the chief officer of police and his immediate subordinates are appointed on the recommendation of the Home Secretary.

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

Central Authorities The Home Secretary, the Secretary of State for Scotland and the Secretary of State for Northern Ireland are concerned with the organisation, administration and operation of the police service. They approve the appointment of 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 any matters relating to the policing of his area, or cause a local inquiry to be held. They also have the power to make regulations covering such matters as police ranks; qualifications for appointment, promotion and retirement; discipline; hours of duty, leave, pay and allowances; and uniform and equipment. Some of these regulations are first negotiable on the Police Council (a negotiating body on which are represented the police authorities, police staff associations and ministers); others are discussed on representative advisory bodies, together with any general questions affecting the police service.

All police forces in Great Britain (except the Metropolitan Police for which the Home Secretary is directly responsible) are subject to inspection. Inspectors of constabulary carry out, under Her Majesty's Chief Inspector of Constabulary and Her Majesty's Chief Inspector of Constabulary for Scotland, a formal annual inspection of the forces in their regions, inquiring into efficiency and reporting to the Home Secretary or the Secretary of State for Scotland. Annual reports are published, covering the whole range of police matters. The inspectors also maintain close touch with forces for which they are responsible, and have various advisory functions.

In Northern Ireland periodic inspections of the Royal Ulster Constabulary

are made by Her Majesty's Chief Inspector of Constabulary.

Finance

The income of police authorities comes from central and local government. The Government's contribution, which is a half of approved expenditure (a third in the City of London), is conditional on the Home Secretary or the Secretary of State for Scotland being satisfied that a force is being efficiently administered and maintained.

Officers and Ancillary Staff In general, entry to the regular police force is open to men and women between the ages of $18\frac{1}{2}$ and 30. A chief constable may approve the appointment of

especially suitable older men and women.

The standard police ranks in England, Scotland and Wales, except in the Metropolitan Police and City of London Police areas, are: chief constable, assistant chief constable, chief superintendent, superintendent, chief inspector, inspector, sergeant and constable. The chief officer in the Metropolitan Police area, the Commissioner of Police of the Metropolis, is assisted by a deputy commissioner and four assistant commissioners. Next in rank are deputy assistant commissioners, and then commanders; from chief superintendent the ranks are the same as in the regions. In the City of London the ranks are the same as in the regions except that the chief officer is the Commissioner of Police and the second in command is an assistant commissioner. Police ranks in Northern Ireland are very similar to those in the rest of the United Kingdom.

Cadet training is designed to prepare boys and girls between 16 and 18½ years of age for a police service career. They have no police powers but, in addition to their educational studies and physical and adventure training, are instructed

in elementary police work.

In order to release as many uniformed police officers as possible for operational duties, police authorities employ some 25,000 civilians on administrative and technical duties.

Traffic wardens (of whom there are over 4,000) discharge specified duties normally undertaken by the police. They may be authorised to issue fixed penalty notices¹ for some minor traffic offences; to man police car pounds (except in Scotland and Northern Ireland); to enforce some aspects of the vehicle excise laws; and to obtain the names and addresses of people thought to have committed certain types of traffic offence. They may also be authorised to direct traffic, to act as parking attendants at street parking places, and as school-crossing patrols. Wardens are under the control of the chief constable.

Each police force has an attachment of special constables who volunteer to perform police duties without pay in their spare time. In England and Wales, they act as auxiliaries to the regular force when required. In Scotland they are employed only in emergencies although they may be assigned for duty for training. In Northern Ireland there is a largely part-time (and paid) reserve.

¹ A fixed penalty notice gives the recipient the option of paying a specified sum to the clerk of the appropriate court instead of having his case tried in the ordinary way.

Status and Duties

A police officer in Britain is an independent holder of a public office, an agent of the law of the land, not of the police authority nor of the Government, and may be sued or prosecuted for any wrongful act committed in the performance of police duties. Strict procedures, often including an independent element, govern the way complaints against police officers are handled.

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 associations which can make representations to ministers or to police outborities on protters of interest and i

authorities on matters of interest or concern to their members.

Police work ranges from the protection of people and property, road or street patrolling and traffic control to crime prevention, criminal investigation and the arrest of offenders. In urban areas, particularly, police officers often have to deal with social problems and they can bring in other social agencies and expert help. In England and Wales they also prosecute accused people (see p 104).

The main departments in all forces are the uniform department, criminal investigation department, traffic department and specialised departments,

including river or marine police, mounted police, and dog handlers.

Common Services

A number of common services are provided by the central government departments and by arrangements made between forces. The most important of these are: training services; a forensic science service in England and Wales with seven regional laboratories (in addition to the Metropolitan Police Laboratory); telecommunications services which supply and maintain police radio equipment; and central and provincial criminal records which are available to all forces. In addition, regional crime squads, consisting of teams of experienced detectives from several forces, investigate major crimes involving inquiries in more than one police area. The Scottish Crime Squad assists forces in the investigation and prevention of crime.

Certain special services such as liaison with the International Criminal Police Organisation (Interpol) are provided for other British forces by the Metropolitan Police Force. The services of the Force are available, on request, to assist any other police force in England and Wales in criminal investigation, as are the services of the Fraud Squad, which is run jointly by the Metropolitan Police and the City of London Police for the investigation of company frauds.

Research into technical services is organised in separate units within the Home Office Police Department: the Forensic Science Service Unit and its regional laboratories; a Central Research Establishment staffed by scientists; and a Directorate of Telecommunications with one section of engineers engaged solely on research and development. The Police Scientific Development Branch is staffed by scientists and technicians assisted by police officers seconded from the Police Research Services Unit; the Branch and the Unit are concerned with operational research into police methods and the development of equipment for police forces. The Economic Planning Unit, composed mainly of economists and accountants, is responsible for the development of a planning-programming-budgeting system for the police; this work includes the production of programme accounts and studies of the use of resources.

In all aspects of police work the use of scientific aids is widespread. A national police computer has been developed to rationalise the keeping of records and to speed up the dissemination of information.

Powers of Arrest

In England and Wales arrest may be made on a warrant issued by a judicial authority on sworn information laid before it or without warrant. An arrested person is entitled to ask the police to notify a named person, such as a relative

or a solicitor, about his or her arrest. The police may delay notification if they think it necessary in the interests of the investigation, the prevention of crime or the apprehension of offenders.

Anyone arrested without a warrant may be released by the police on bail and must be so released if he or she cannot be brought before a magistrates' court within 24 hours, unless the alleged offence is serious. If remanded in custody, the defendant must be brought before a magistrates' court as soon as practicable. People granted bail have to surrender to custody at an appointed time and place. On appearance before a magistrates' court, a defendant charged with an imprisonable offence may be refused bail in certain specified circumstances only, the most important of which are that there are substantial grounds for believing that he or she might abscond, commit further offences or otherwise interfere with the course of justice; if bail is refused by the magistrates, the defendant can apply to a judge of the High Court and, if committed to the Crown Court, may apply for bail to that court. In 1978 some 81 per cent of people committed for trial by magistrates were given bail.

Once anyone has been charged with an offence, the police may not put any further questions, save, in exceptional circumstances, to prevent or minimise harm or loss to any person or to the public, or to clear up an ambiguity in a previous answer or statement. This is laid down by the Judges' Rules which do not have the force of law but carry very great weight.

A person detained in custody who thinks that the grounds for detention are not lawful¹ may apply for a writ of habeas corpus against the person who detained him or her, this person being required to appear before the court on the day named to justify the detention. An application for such a writ is normally made to a divisional court of the High Court either by the person detained or by someone acting on his behalf. Similar procedures apply in Northern Ireland.

In Scotland the police have similar powers of arrest as have the police in England and Wales. Although the Judges' Rules do not apply, an arrested person must be cautioned and have the charge read out. Thereafter only voluntary statements made by the arrested person are used in evidence at the trial and the court will reject any statements he or she made unless it is satisfied that they have been fairly obtained. Anyone apprehended must be brought before a court with the least possible delay. Where a prosecution on indictment is contemplated, the accused is brought before a judge for judicial examination and may then be committed for trial or for further examination. Eight days may elapse between commitment for further examination and commitment for trial.

People in custody in Scotland, other than those charged with murder or treason, may be liberated on bail by the sheriff or, if the offence is within the jurisdiction of a summary court other than the sheriff court, by that court or by the police. Even in the case of murder or treason, bail may be granted at the discretion of the Lord Advocate or the High Court of Justiciary. There is a right of appeal to the High Court by the accused person against the refusal of bail, by the prosecutor against the granting of bail, or by either party against the amount fixed. The writ of habeas corpus does not apply in Scotland, but the High Court of Justiciary has power to release anyone unlawfully detained and trials must be brought to a conclusion within 110 days of committal to custody.

CRIMINAL COURTS
Prosecution

The decision to prosecute normally rests, in England and Wales, with the police and in Scotland with public prosecutors. In Northern Ireland there is a

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 lawful in the case of persons found to be mentally disordered.

Director of Public Prosecutions (see below). In England and Wales (and very exceptionally in Scotland) a private person may institute criminal proceedings. Police have powers to issue cautions (warnings in Scotland) instead of prosecuting, especially in the case of young people.

England and Wales

In England and Wales some offences can only be prosecuted by, or with the consent of, the Attorney General or the Director of Public Prosecutions, the latter acting under the superintendence of the Attorney General. Where the consent of the Attorney General is required, the Director is in practice responsible for prosecution; offences in the category include crimes such as bribery and corruption of officials, and the use and possession of explosives.

The Director has to prosecute cases such as treason and murder. The police must report to the Director's office a further list of offences, including serious offences against the person, sedition, criminal offences by police officers, and offences relating to obscene or indecent publications. The Director does not necessarily prosecute all such cases referred but may do so in any that appear to be important or where intervention is thought to be necessary; otherwise proceedings are conducted by solicitors employed by the police. The Director also considers whether proceedings should be taken in cases reported by government departments, and advises the police and others concerned with the administration of the criminal law.

When cases go for trial, barristers in private practice are instructed to appear on the Director's behalf; at the Central Criminal Court in London, these are drawn from a panel of 'Treasury Counsel' appointed by the Attorney General.

Scotland

The prosecution process in Scotland is different from that in the rest of the United Kingdom. The Lord Advocate (see p 121) is responsible for the prosecution of all crimes but delegates most of the work to the Solicitor General (see p 121), to ten Advocates Depute and to procurators fiscal. 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 by a staff of civil servants known as the Crown Office. Prosecutions in the High Court of Justiciary are prepared by the Crown Office while crimes tried before the sheriff and district courts are prosecuted by the procurators fiscal who are lawyers and full-time civil servants. The police investigate offences known to them and report to the procurator fiscal who decides whether or not to prosecute, subject to the discretion and control of the Crown Office.

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 deal with about 98 per cent of criminal cases in England and Wales, and conduct preliminary investigations into the more serious offences. The Crown Court, situated in a number of towns and cities, takes all criminal work above the level of magistrates' courts.

Magistrates' Courts Magistrates' courts hear and determine charges against people accused of 'summary offences', that is those that can be legally disposed of by magistrates sitting without a jury. There are some 700 courts and some 24,000 magistrates. Each court normally consists of a bench of three lay unpaid magistrates whose function is to ascertain the facts of a case and apply the law to them. The

magistrates are advised on points of law and procedure by a clerk to the justices (or an assistant) who is normally legally qualified and who is also in charge of the court's administrative arrangements. Magistrates are appointed by the Lord Chancellor.

In inner London and some other large urban areas where the pressure of work is heavy and continuous there are also professional 'stipendiary' magistrates who are full-time, salaried and legally qualified. They usually preside alone.

Magistrates must as a rule sit in open court, but when they make preliminary inquiries into a more serious case to see whether there is sufficient evidence to justify committal for trial in the Crown Court the proceedings must not be reported in the press at the time except at the defendant's request, unless the person is discharged by the magistrates.

Magistrates cannot usually impose a sentence of more than six months' imprisonment or a fine exceeding f,1,000. If an offence carries a higher maximum penalty, they may commit the offender for sentence to the Crown Court if they consider their own power inadequate.

Cases involving people under the age of 17 are heard in juvenile courts. These are specially constituted magistrates' courts which sit either in a different room or building from other courts, or at a different time; only limited publicity is allowed. If a young person under the age of 17 is charged jointly with someone of 17 or over, the case is heard in the ordinary magistrates' court. If the young person is found guilty, that court may remit the case to a juvenile court, unless it wishes to dispose of the case by penalty.

The Crown Court The Crown Court is responsible for trials of the more serious cases, the sentencing of offenders committed for sentence by magistrates' courts, and appeals from magistrates' courts. It has about 90 centres and is served by High Court judges, full-time 'circuit judges' and part-time recorders. All contested trials in the court take place before a jury. A High Court judge sits alone for the most serious cases. A circuit judge or recorder sits with between two and four magistrates for appeals and committals for sentence from magistrates' courts and may sit with magistrates to try the less important cases.

The Crown Court may impose a fine of any amount on a convicted offender and, within the maximum penalty determined for the offence by Parliament. any other custodial or non-custodial penalty.

In 1978 the Crown Court tried 80,000 people; 49,500 pleaded guilty to at least one charge and 25,850 not guilty to all charges. About a half of defendants pleading not guilty to all counts were acquitted.

Appeals

A person convicted by a magistrates' court may appeal to the Crown Court against the sentence imposed and, if he contested his guilt, against the conviction. 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, which sits in London and some regional centres (see pp 94-5). Appeals from the Crown Court, either against conviction or against sentence, are usually 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 House of Lords that the point is one that ought to be considered by the House. A prosecutor or defendant may appeal to the House of 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 consent.

Scotland

There are three criminal courts: the High Court of Justiciary, the sheriff court and the district court. The High Court tries serious crimes such as murder, treason and rape while 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 of Justiciary and the more serious ones in the sheriff courts are tried by a judge and jury. Proceedings are taken under summary procedure in the less serious cases in the sheriff courts, and in the district courts.

A government committee is considering the effect on the criminal courts and the prosecution system of the volume of minor offences dealt with by summary prosecution and whether some other process could be devised to deal with such offences while maintaining safeguards for accused persons.

District Courts

District courts are the administrative responsibility of the district and islands local authorities (see p 60). The judges are lay justices of the peace including up to one-quarter of the membership of district and islands authorities who may be nominated as *ex officio* justices. In Glasgow there are three stipendiary magistrates who are full-time salaried lawyers.

Sheriff Courts

Scotland is divided into six sheriffdoms which are further divided into sheriff court districts, each of which has a sheriff who is the judge of the court.

The High Court of Justiciary

The High Court of Justiciary is Scotland's supreme criminal court. It is both a trial court and an appeal court. Any one 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 who preside at sessions of the court in other towns. The main seat of the court is in Edinburgh where all appeals are heard.

Appeals

All appeals are dealt with by the High Court of Justiciary. In both solemn and summary procedure, an appeal may be brought against conviction, or sentence, or both. The High Court cannot order a retrial if it sets aside a conviction. Appeals are heard by three or more judges; there is no further appeal to the House of Lords.

Children's Hearings Children under 16 years (and in some cases people between 16 and 18) who have committed an offence or are considered to need compulsory care may be brought before an informal children's hearing comprising three members of the local community (see p 115).

Northern Ireland The structure of the courts in Northern Ireland is broadly similar to that of England and Wales. The day-to-day work of dealing summarily with minor local cases is carried out by magistrates' courts presided over by a full-time resident magistrate appointed from the legal profession by the Queen, on the recommendation of the Lord Chancellor. Young offenders under 17 years 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) with special qualifications for dealing with juveniles. Appeals from magistrates' courts are dealt with by the county court.

Crown Court

The Crown Court in Northern Ireland is responsible for dealing with all trials on indictment of criminal cases. It is divided into four circuits and is served by High Court and county court judges. Proceedings in the Crown Court are heard before a single judge: and all contested cases, other than those involving scheduled offences under emergency legislation, take place before a jury.

Appeals

Appeals from the Crown Court, either against conviction or sentence, lie to the Northern Ireland Court of Appeal. Procedures for a further appeal to the House of Lords are similar to those in operation in England and Wales.

Trial

All criminal trials in the United Kingdom take the form of a contest between the prosecution and the defence. Since the criminal law presumes the innocence of the accused until guilt has been proved, the prosecution is not granted any advantage, apparent or real, over the defence. A defendant has the right to employ a legal adviser and in certain circumstances may be granted legal aid wholly or partly from public funds. If remanded in custody, the person may be visited in prison by a legal adviser to ensure that a defence is properly prepared. In England, Wales and Northern Ireland during the preparation of the case, the prosecution usually informs the defence of any 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 any witnesses whose evidence may assist the accused and whom the prosecution does not propose to call. The defence or prosecution may suggest that the mental state of the defendant is such that he or she is unfit to be tried. A jury must decide whether or not this is so. If they find that it is, the defendant is admitted to a hospital specified by the Home Secretary in England and Wales, and in Northern Ireland to one specified by a health and social services board (see p 126).

Criminal trials in England, Scotland, Wales and Northern Ireland are normally held in open court and the rules of evidence (which are concerned with the way facts may be proved and what facts may not be proved) are rigorously applied. If evidence is admitted in contravention of the law, a conviction can be

quashed on appeal.

During the trial the defendant has the right to hear and subsequently to cross-examine (normally through his lawyer) all the witnesses for the prosecution; 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 either in person or through a lawyer—the defence having the right to the last speech at the trial. Moreover, 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, cross-examination about character or other conduct may be made only in exceptional circumstances and generally the prosecution may not introduce evidence of such matters. Although confessions made in the course of previous judicial proceedings are admissible as evidence if they have been made upon oath, no confessions made in any other circumstances are admitted unless it can be proved that they were made voluntarily.

The Jury

In jury trials the judge determines questions of law, sums up the evidence for the benefit of the jury, and discharges the accused or passes sentence. Only the jury decides whether the defendant is guilty or not guilty. 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. If the jury returns a verdict of 'not guilty', the prosecution has no right of appeal against the verdict and the defendant cannot be tried again for the same offence. From a verdict of 'guilty' there is a right of appeal by the defendant to the appropriate court.

A jury is completely independent of the judiciary. Once members are sworn in, they are protected from interference of any kind. Both the prosecution and the defence can object to particular jurors. In England, Wales and Northern Ireland people whose names appear on the electoral register are liable for jury service; in Scotland, where the minimum age for jurors is 21, not all those on the register are eligible to serve as the minimum voting age is 18.

Scotland

At summary trials in Scotland accused people are asked to plead to the charge at the first calling of the case and, if they plead guilty, the court may dispose of the case. Where the plea is 'not guilty', the court may proceed to trial at once or, more usually, may appoint a later date.

In Scottish trials on indictment, the first 'pleading' proceedings take place in the sheriff court, when the accused person is called upon to plead guilty or not guilty. If the plea is not guilty, the case is continued to the second 'trial' proceedings in the appropriate court. If the plea is guilty, and the case is to be dealt with in the sheriff court, the sheriff may dispose of it at once. If it is a High Court case, it is continued to the second proceedings for disposal.

The trial proceedings are held at least nine days after the pleading proceedings, either before the sheriff or the High Court, with a jury of 15. Evidence is presented without opening speeches, and there are closing speeches for the prosecution and for the defence, followed by the judge's charge to the jury. The jury may return a verdict of 'not guilty' or 'not proven', both of which result in acquittal, or they may find the accused 'guilty', in which case the court proceeds to deliver sentence. The verdict may be by a simple majority. With a few minor exceptions, no person may be convicted without the evidence of at least two witnesses, or corroboration of one witness by facts and circumstances which clearly implicate the accused in the crime.

SPECIAL COURTS
Coroners'
Courts

Most of the work of coroners' courts involves the investigation of violent and unnatural deaths or of sudden deaths where the cause is unknown. Cases may be brought to the notice of the local coroner (a senior lawyer or doctor appointed by local government) by doctors, the police, various public authorities or members of the public, and it is the coroner's duty to hold an inquiry into how, when and where the deceased died. If the death is a sudden one of which the cause is unknown, the coroner need not hold an inquest in court, but may order a postmortem examination to determine cause of death. Where there is reason to believe that the deceased died a violent or unnatural death or died in prison or in other circumstances provided for by statute, the coroner must hold an inquest.

In Scotland the office of coroner does not exist. The local procurator fiscal inquires privately into all sudden and suspicious deaths in his district and may report the result of his inquiries to the Crown Agent.

Coroners in Northern Ireland are mostly senior lawyers and are appointed by the Lord Chancellor; the work of their courts is similar to that of coroners' courts in England and Wales.

Courts Martial

Courts martial have jurisdiction over serving members of the armed forces and in certain circumstances over their dependants and other civilians who accompany them overseas. The courts do not deal with certain serious offences if

committed in the United Kingdom, such as treason, murder, manslaughter, and rape which are dealt with in the ordinary courts.

TREATMENT OF OFFENDERS

While custodial treatment is an important part of British penal practice, it is only one of several ways to deal with people who break the law.

Sentencing

The criminal courts' discretion to select the sentence most appropriate for an offender is modified by statutory provisions designed to ensure that prison sentences are kept to a minimum. In England, Wales and Northern Ireland a person who has not previously served a custodial sentence of a particular kind may not be sentenced to custodial treatment of that kind unless he or she is legally represented or has chosen not to be, and in the case of imprisonment unless the court is satisfied that no other sentence will suffice. 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. A few rare serious offences, such as treason, carry the death penalty but it is not mandatory.

In Scotland, 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, up to two years. In summary cases, the sheriff may impose up to six months' imprisonment.

Non-Custodial Treatment

Non-custodial treatment includes fines; probation; absolute or (in England, Wales and Northern Ireland) conditional discharge for up to three years (one year in Northern Ireland)—a discharge being made when the court feels that there is no need to impose punishment on a convicted person; and 'binding over' where the offender is required to pledge money, with or without sureties, to keep the peace and be of good behaviour.

In England and Wales, offenders aged 17 or over who are convicted of imprisonable offences can, with their consent, be given community service orders. Between 40 and 240 hours' unpaid service to be completed within 12 months, may be ordered. Examples of work done include decorating the houses of old or disabled people and building adventure playgrounds for children. Community service schemes have begun in Scotland and in Northern Ireland.

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 arrive at the most appropriate sentence, taking into account conduct after, for instance, some expected change in circumstances.

The courts may order a convicted offender to pay compensation for any personal injury, loss or damage resulting from an offence. In cases where the loss amounts to £15,000 or more they may make a criminal bankruptcy order against an offender. In Scotland a committee has reported to the Secretary of State and the Lord Advocate on the question of the potential role of the criminal court in ordering reparation by the offender to the victim.

In England, Wales and Northern Ireland a judge is free to pass a suspended sentence of not more than two years. The sentence is not served by the offender unless he or she 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. An offender receiving a suspended sentence of more than six months may be made subject to supervision by a probation officer for all or part of the period. The Criminal Law Act 1977 provided the

courts in England and Wales with power, when passing a sentence of between six months' and two years' imprisonment, to order that part should be served and the rest held in suspense, the suspended part being not less than one quarter nor more than three quarters of the whole. This provision has not yet, however, been brought into force.

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, a person convicted of a criminal offence need not disclose it, and the offence will not be held against him or her after a rehabilitation period of from six months to ten years depending on the nature of the sentence imposed. This does not apply to those who have received a prison sentence of more than 21 years.

Probation

Probation is designed to secure the rehabilitation of an offender, who continues to live an ordinary life under the supervision of a probation officer. The officer's duty is to advise, assist and befriend the probationer. Before making a probation order (which lasts for between six months and three years), the court must explain its effects and make sure that the probationer understands that failure to comply with its requirements will make him or her liable to be dealt with again for the original offence. An order can be made only if the offender is 17 years of age or over (14 in Northern Ireland) and must have his or her consent; it usually requires the probationer to keep in regular touch with the probation officer, to be of good behaviour and to lead an industrious life. It may also require the offender to live in a specified place, or in certain circumstances to receive psychiatric treatment.

In England and Wales the probation service is administered locally by probation and after-care committees consisting of local magistrates and coopted members with legal and specialist interests. In Northern Ireland it is administered by the Northern Ireland Office. Probation officers are usually members of small teams, although each has a large measure of independence in his or her casework with an offender.

Probation and after-care committees may, with the approval of the Home Secretary, provide and maintain day training centres (which offenders may be required to attend for up to 60 days), bail hostels, probation hostels and other establishments for use in the rehabilitation of offenders. The service is also responsible for administering the community service scheme.

In England, Wales and Northern Ireland, the services of probation and after-care officers are available to every criminal court. In Scotland, offenders subject to probation orders or to after-care supervision are supervised by

specially approved local authority social workers.

Prisons

Although the courts have made proportionately less and less use of prison as a penalty for criminal activity, there has been an increase in the prison population as a result of the rise in crime. In 1978 the average number of people in prisons, borstals, and detention centres was about 41,800 in England and Wales and 4,870 in Scotland; there are 113 prison service establishments and the size of the prison service in 1978 was 22,277. The Government is studying a committee of inquiry's report on Britain's prison services published in October 1979.

Prisons to which offenders may be committed directly by a court are known as 'local prisons'; all are closed establishments. Other prisons, which may be open or closed, receive prisoners on transfer from local prisons (open prisons do not have physical barriers to prevent escape). Sentenced prisoners in England and

Wales are classified into four groups for the purposes of security. Separate prisons cater for women prisoners.

People awaiting trial are entitled to privileges not granted to convicted prisoners and, as far as practicable, are separated from convicted prisoners. Prisoners under 21 are separated from older prisoners.

Many British prisons were built during the nineteenth century and are unsatisfactory by modern standards. Overcrowding is also a problem. However, a number of new prisons have been built in the past few years, and existing establishments are being redeveloped and modernised.

Remission of Sentence and Parole

All prisoners in Great Britain serving a determinate sentence of more than one month, except those sentenced to imprisonment for life, are allowed remission of one-third of their sentence provided that this does not reduce the sentence to less than 31 days (in Scotland, 30 days). Remission may be forfeited for serious misconduct in prison. In addition, prisoners serving fixed sentences of more than 18 months become eligible for consideration for release on parole after serving one-third of their sentence or 12 months, whichever expires later.

The parole licence remains in force until the date on which the prisoner would have been released had not parole been granted. The licence prescribes the conditions with which the offender must comply when on parole. About 9 per cent of prisoners granted parole in England and Wales in 1978 were recalled to prison.

Prisoners serving life sentences are also eligible for release on licence, after consultation with the judiciary and on the recommendation of the Parole Board. Those released in this way remain on licence for the rest of their lives and are subject to recall at any time should the circumstances warrant it.

In Northern Ireland, where there is no parole scheme, prisoners receive one-half remission on determinate sentences, provided that remission does not reduce the sentence to below 31 days. For those serving over a year, a court can order all or part of the outstanding balance of the remitted period to be served in the event of reconviction for an imprisonable offence in the remitted period, in addition to any penalty imposed for a further offence.

Prison Industries

The aims of prison industries are to give inmates work experience which will assist them when released and to secure an economic return which will reduce the cost of the prison system to public funds. The main industries are clothing and textile manufacture, engineering, woodwork, laundering, electro-mechanical production, farming and horticulture. Most production caters for internal needs and for other public services but a considerable volume is for the commercial market. A few prisoners are employed outside prison. Small payments are made to inmates for the work they do; in some prisons, incentive schemes provide an opportunity for higher earnings on the basis of output and skill.

Education

Education for those in custody is financed by the prison service and provided by the local education authorities. Every prison department establishment in England and Wales has an education officer assisted by a team of full-time and part-time teachers. Education is compulsory for young offenders below school leaving age. Some prisoners study for public examinations (including those of the Open University). Within the resources available there is teaching in recreational and leisure pursuits.

Physical education is voluntary for adults but those under 21 have to attend a certain number of classes. Many establishments, however, do not have the

proper facilities. In Northern Ireland the prison population has increased in recent years and industrial and educational facilities are being expanded on the same lines as those in the rest of Britain.

Education and vocational training are provided by the Prison Education Service.

Medical 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 there are some larger prison hospitals (some with up to 100 beds) to which patients can be transferred if necessary. Four prisons have surgical units and patients can also be transferred to hospitals within the National Health Service. There is one specialist psychiatric prison and some other centres in the prison service where patients can receive psychiatric care. In some establishments there is special treatment for alcoholics.

Psychological Services Prison psychologists are involved in the evaluation of treatment programmes and regimes, contribute to the management and treatment of individuals and groups, take part in advisory and training work with prison staff, and clinically examine selected inmates.

Privileges and Discipline

All prisoners have a general right to write and receive letters and to be visited by their relatives at regular intervals. They have such privileges as a personal radio, books, periodicals and newspapers, and the right to make purchases from the canteen with money they have earned in prison. Depending on the facilities available, they may be granted the further privileges of dining and recreation in association and watching television in the evening.

Breaches of discipline are dealt with by the prison governor, or by the board of visitors (visiting committee in Scotland), who have power to order, among other penalties, forfeiture of remission and forfeiture of privileges. Boards of

visitors consist of lay people, two of whom must be magistrates.

Welfare

The welfare of prisoners is the general concern of all the 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 make plans for after-care on 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. A chaplain of the Church of England (in Scotland of the Church of Scotland, and in Northern Ireland of the Church of Ireland and of the Presbyterian Church), a Roman Catholic priest and a Methodist minister are appointed to every prison. Ministers of other denominations are appointed or specially called in as needed.

Discharge

All prisons in England and Wales arrange pre-release preparations for prisoners. Those serving sentence of four years or more are considered for outside employment for a period before release. If 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.

Periods of home leave may be granted in the last nine months of sentence to

those serving two years or more to assist their resettlement.

After-care

The aim of after-care, run by the probation and after-care service, is to assist offenders on return to society by offering the help of skilled case workers. Compulsory supervision by probation officers is given to offenders under 21 when released, adult offenders released on parole, and those released on licence from a sentence of life imprisonment. A voluntary system is offered to the remainder. After-care is also provided by a number of voluntary societies, most of which are members of the National Association for the Care and Resettlement of Offenders. Hostels and other forms of accommodation are provided, often with some financial help from the Home Office.

Children in Trouble

England and Wales

In England and Wales no child under ten years can be held guilty of any offence. A child aged ten to 16 years who is alleged to have committed an offence may be the subject of criminal proceedings or of 'care' proceedings, both of which are normally held before juvenile courts (see p 106).

In care proceedings the fact that a child is found guilty of an offence is not in itself sufficient justification for the making of an order; the court must also be of the opinion that the child is in need of care or control which he or she is unlikely to receive unless an order is made. In criminal proceedings a court may make a care order without the need to consider whether the child is in need of care or control; this applies to a child found guilty of an offence (other than homicide) punishable in the case of an adult by imprisonment.

A number of orders are available to courts in both care and criminal proceedings. A care order commits the child to the care of the local authority, so that the authority becomes responsible for deciding where the child should be accommodated, for example, with foster parents or in a community home (see p 136). The care order must be reviewed every six months by the authority, and can be ended at any time by the court; normally it expires when the child reaches 18 or 19. For children who are too severely disturbed or disruptive to be treated in other child care homes, 'youth treatment centres' are provided by the Department of Health and Social Security.

Under a supervision order (usually valid for three years or less) a child normally remains at home under the supervision of a local authority social worker or a probation officer. He or she may be required to undergo 'intermediate treatment' which is a compromise between measures involving complete removal from home and those which do not. It consists 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. An intermediate treatment fund, administered by the Rainer Foundation with the help of government finance, has been created to give grants to individuals, groups or organisations willing to provide intermediate treatment facilities.

A court may also order a parent or guardian to enter into recognisances to take proper care of the child and to exercise proper control over him or her; such an order may only be made with the consent of the parent or guardian. In care proceedings, the court may order a stay in hospital in accordance with the mental health legislation.

The courts may also order payments of compensation, or impose fines or grant a conditional or absolute discharge. Offenders, both male and female, may be ordered to spend a total of (normally) 12 to 24 hours of their spare time on Saturdays at an attendance centre (up to three hours on any one occasion). The centres are for those found guilty of offences for which older people could be sentenced to imprisonment, and provide physical training and instruction in handicrafts or some other practical subject. For boys aged 14 or over courts may make a detention centre order (see p 115), and young people of 15 and

over may be committed to the Crown Court with a view to passing a sentence of borstal training. In the case of a very serious crime, detention in a place approved by the Home Secretary may be ordered by the Crown Court.

Scotland

In Scotland the age of criminal responsibility is eight years but prosecution of children in the criminal courts is rare and can take place only on the instructions of the Lord Advocate; court proceedings usually apply only to very serious offences such as murder or assault. Instead children under 16 years who have committed an offence or need care and protection may be brought before an informal children's hearing which decides the most appropriate measures of care and treatment (see p 136). An official 'reporter' decides whether a child should come before a hearing. If the grounds for referral are not accepted by the child and parents, the case goes to the sheriff court (sitting in its civil capacity) for proof. It can then come back to the hearing. The sheriff also decides appeals against a decision of a children's hearing.

Northern Ireland

The age of criminal responsibility in Northern Ireland is ten. Children aged 16 and under charged with committing a criminal offence may be brought before a juvenile court. If found guilty of an offence punishable by imprisonment in the case of an adult, the child may be sent to a training school, placed in the care of a 'fit person', possibly the area Health and Social Services Board or under supervision. Alternatively the court can order a period of attendance at an attendance centre or a remand home, or impose a fine or compensation. A conditional or absolute discharge is also possible. Whatever other order it makes, a juvenile court can also require the parents to enter into a recognizance as security for the child's good behaviour. Young people aged 16 or over may be given a sentence of borstal training. Children brought before the courts in need of care and protection may be placed in care locally. The law relating to young offenders and the care of children is under review.

Young Adult Offenders

Offenders aged 17 to 20 years are recognised as a category distinct from juvenile and adult offenders. The main non-custodial measures are generally the same as those used in dealing with adults. The custodial sentences available are:

detention in a detention centre, borstal training and imprisonment.

Some 12 senior detention centres provide a means of treating young male offenders (age 17–21) in Great Britain for whom a long period of residential training away from home does not seem necessary or justified by the offence, but who need to be taught respect for the law through some form of custody. There are also six junior centres for boys aged 14 to 16 years. The normal period of detention is three months but in England and Wales there is power to award up to six months and, exceptionally, nine months. Life in a centre demands the highest standards of discipline and achievement. Training comprises a normal working week of 40 hours, including an hour each day of physical training, with considerable attention paid to education. After discharge, all offenders are supervised for a year. An experimental project for stricter and shorter sentences is to take place at two senior detention centres in England.

Borstal training is remedial and educational, based on personal training by carefully selected staff. Emphasis is placed on vocational training in skilled trades. There is much freedom of movement and many borstals are open establishments. Offenders are placed as near their homes as possible in order to maintain their ties with the local community. The training system is available to offenders aged 15 to 20 years (16 to 20 years in Scotland and Northern Ireland). Courts rarely order borstal training unless they have already tried

fines, probation or detention centre training, perhaps all three. The training period usually ranges from six months to two years and is followed by supervision in the community.

A person under 17 years cannot be sentenced to imprisonment in England and Wales, and no court may pass a sentence of imprisonment on an offender aged 17 to 20 years unless satisfied that no other penalty is appropriate. A court cannot impose a sentence of between six months and three years unless the offender has already served a term of borstal training or at least six months' imprisonment. Sentences of up to two years may be ordered by a court to be suspended. Prisoners under the age of 21 at the time of their sentence are classified as 'young prisoners', and generally serve their sentences separately from older prisoners unless they are reclassified as adults and treated as such in an adult prison. In Scotland no offender under 21 years may be sent to prison; where neither borstal nor detention training is suitable for an offender aged 16 to 20 years, detention in a special 'young offenders' institution may be ordered.

Custodial sentences for young adult offenders are under review. The Government has announced its intention of amending legislation limiting prison sentences on young offenders. It also intends to give magistrates more clearly defined powers when making residential and secure care orders.

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 such concepts as negligence, defamation and trespass). Other branches of the civil law include constitutional and administrative law (particularly concerned with the use of executive power), industrial law, maritime law and ecclesiastical law. Scottish civil law has its own, often analogous, branches.

CIVIL COURTS England and Wales

Magistrates'
Courts

County Courts

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 concerning nuisances under the Public Health Acts 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, for instance, actions founded upon contract and tort (with minor exceptions) where the amount claimed is not more than £2,000; trust and mortgage cases, where the amount does not exceed £15,000; and actions for the recovery of land where the net annual value for rating does not exceed £2,000. Cases outside these limits may be tried in the county court by consent of the parties, or may in certain circumstances be transferred from the High Court to the county court.

Other matters dealt with by the county courts include hire purchase, the Rent Acts, landlord and tenant and adoption cases. In addition, undefended divorce cases are heard and determined in county courts designated as divorce county courts (defended cases are transferred to the High Court) and outside London bankruptcies are dealt with in certain county courts. The courts also deal with complaints of race and sex discrimination in education and the provision of goods, facilities, services and premises (see p 135). Where small claims are concerned (especially those for less than £200 involving consumers), there are special facilities for arbitration 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 the request of a party the court may, in exceptional cases, order a trial with a jury.

The High Court of Justice

The High Court of Justice is divided into the Chancery Division, the Queen's Bench Division and the Family Division. Its jurisdiction, which is both original and appellate and covers all civil and some criminal cases, is vested in all its divisions. 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 of children. 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.

There are 75 High Court judges, each of whom is attached to one division on appointment but may be transferred to any other division during his term of office. The Lord Chancellor is president of the Court of Appeal and of the Chancery Division—the administration of the Chancery Division being the responsibility of the senior judge known as 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 23 Crown Court centres.

For the hearing of cases at first instance, High Court judges sit singly. Appellate jurisdiction in civil matters from inferior courts is exercised 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 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 the county courts are heard in the Court of Appeal (Civil Division) and may (with leave of the court or of the House of Lords) go on to the House of Lords, which is the ultimate 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 17 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, and proceedings take the form of the normal proceedings of the House; judgments are given as speeches to a motion, and the decision is in the form of a vote.

Scotland

The main civil courts are the sheriff courts and the Court of Session.

Sheriff Courts

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

The Court of Session sits only in Edinburgh, and has jurisdiction to deal with all kinds of action, subject to a few exceptions. The main exception is an action exclusive to the sheriff court, namely one where the value claimed is less than £500. The Court of Session has sole jurisdiction in divorce and certain other actions. The court is divided into two parts: the Outer House, a court of first instance, and the Inner House, which is 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 holds the office of Lord Justice General in the High Court (see p 107).

The Scottish Land Court

The Scottish Land Court is a special court whose jurisdiction relates to agricultural tenancies and similar matters. It consists of a judge (ranking equally with the judges of the Court of Session) and four laymen who are specialists in agriculture.

Northern Ireland

Minor civil cases in Northern Ireland (where the amount in dispute is less than £1,000) are dealt with in county courts, though magistrates' courts also deal with certain classes of minor civil cases. The superior civil law court is the High Court of Justice from which an appeal may lie 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 the corresponding English courts. 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 as to 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, which notifies the defendant that the plaintiff has a claim and states the nature of the claim. If the defendant intends to contest the claim he or she 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 'request' 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 the special procedure introduced for a limited class of case in 1973 and extended to most undefended cases in 1977 dispenses with the need to give evidence in court and

provides for written evidence to be considered by the registrar.

Civil proceedings, because they are a private matter, can usually be abandoned or compromised at any time without leave of the court—the parties to a dispute being able to settle their differences through their solicitors before the stage of actual trial is reached. Actions that are brought to court are usually tried by a judge without a jury, except in cases involving claims for defamation, false imprisonment, or malicious prosecution, when either party may insist on trial by jury, or in a case of fraud, when the person against whom fraud is alleged may claim this right. The jury decides questions of fact and damages awarded to the injured party; majority verdicts may be accepted.

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 directing the defendant to do something or to refrain from doing something may result in imprisonment for contempt of court. Arrest under an order of committal may be effected only on a warrant of the court.

The general rule is that the costs of the action (the barristers' fees, solicitors' charges, court fees and other payments) are in the discretion of the court. Normally, the court orders them to be paid by the party losing the action.

In Scotland proceedings in the Court of Session or ordinary actions (of a value exceeding £500) in the sheriff court are initiated by serving on the defender 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 enter appearance 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 (actions normally of a value less than £500) in the sheriff court the procedure is less formal. The statement of claim is incorporated in the summons, which is a printed form obtained from the sheriff clerk. The procedure is designed to enable most actions to be carried through without the parties involved having to appear in court. They (or their representatives) need appear only when an action is defended or where there is some doubt about the method. Proceedings in Northern Ireland are similar to those in England and Wales.

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 experience and expertise in industry, commerce or public life.

Administrative Tribunals

Administrative tribunals consist of persons or bodies exercising judicial or quasi-judicial functions outside the ordinary hierarchy of the courts. As a rule, they are set up by Act of Parliament or under powers conferred by statute, which also govern their constitution, functions and procedure.

The continuing expansion of governmental activity and involvement in the social and economic affairs of the nation has greatly multiplied the occasions on which the individual may find himself at issue with the administration, with a group of people or with another individual. Consequently there has been a substantial growth of administrative tribunals adjudicating in disputes arising under regulatory or welfare legislation. Such tribunals include those concerned with: land and property; national insurance; supplementary benefits; employment rights; mental health; transport; taxation; and many which do not fall into any specified group. Usually they 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 but other authorities (for instance, the Lord Chancellor) have the power of appointment in appropriate cases. The Lord Chancellor (or the Lord President of the Court of Session in Scotland) makes

appointments in most cases where a lawyer chairman or member is required. Members usually hold office for a specified period.

There are also tribunals which enforce professional discipline (for example of doctors and solicitors) but these are entirely different in constitution from the statutory tribunals and have no jurisdiction over the general public.

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. An appeal may also be made to a specially constituted appeal tribunal, to a minister of the Crown or to an independent referee. The Employment Appeal Tribunal, which hears appeals on questions of law from decisions of industrial tribunals (see p 330), has High Court and Court of Session status. The Council on Tribunals (appointed jointly by the Lord Chancellor and the Lord Advocate) exercises general supervision over tribunals and reports on particular matters, those peculiar to Scotland being dealt with by the Scottish Committee of the Council.

ADMINISTRATION OF THE LAW

GOVERNMENT RESPONSIBILI-TIES 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, is responsible for the administration of all courts other than magistrates' courts, and appoints magistrates. On the civil law side, law reform and supervision of the legal aid and advice scheme are matters for the Lord Chancellor.

The Home Secretary is concerned with the criminal law (including law reform), the police service, prisons and the probation and after-care service. A general supervision over magistrates' courts is also held with some specific responsibilities (such as approving the appointment of justices' clerks). On matters relating to crime prevention and the treatment of offenders, the Home Secretary is advised by the Advisory Council on the Penal System. Prison policy and the administration of custodial centres are functions of the Home Office Prison Department and the Home Secretary appoints to each centre a board of visitors representing the local community to investigate and advise on the state of prison premises, administration and treatment of inmates. The boards have certain disciplinary powers in relation to serious breaches of discipline and they 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 the age of 17 is shared by

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 grant a free pardon in connection with a person's conviction, or to remit all or part of a penalty which may have been imposed on an offender by a court.

The Secretary of State for the Environment is responsible for providing accommodation for all the superior courts in England and Wales, except for the Central Criminal Court, which is the responsibility of the City of London.

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 ultimate responsibility for the enforcement of the criminal law; the Director of Public Prosecutions (see p 105) is subject to the Attorney General's superintendence. The Attorney General is concerned with the institution and prosecution of 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 crime prevention, the police and the penal system, and is advised on parole matters by the Parole Board for Scotland.

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. The Lord Advocate is closely concerned with questions of legal policy and administration and is also responsible for the Scottish parliamentary draftsmen, and for the public prosecution of all major crimes (see p 105).

Northern Ireland In Northern Ireland the judiciary are appointed by the Queen on the advice of the Lord Chancellor. The administration of all courts (including magistrates' 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 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. Lay magistrates in England and Wales need no legal qualifications but on appointment they undergo a period of basic training, so that they may gain sufficient knowledge of the law, including the rules of evidence, and may understand the nature and purpose of sentencing. A special committee advises the Lord Chancellor on training policies. The Scottish district court justices of the peace likewise need no legal qualifications, and the Secretary of State for Scotland is responsible for training. In Northern Ireland lay magistrates serving on 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 in England and Wales and Northern Ireland may be removed from their position by the Lord Chancellor, and in Scotland, by the Secretary of State on a report by the Lord President of the Court of Session and

the Lord Justice Clerk, by order subject to annulment by either House of Parliament.

In order to safeguard and perpetuate the independence of the judiciary from the executive, however, superior judges in England and Wales and Northern Ireland (other than the Lord Chancellor who, as a Cabinet minister, changes with the Government) are subject to a power of removal only by the Sovereign on an address presented by both Houses of Parliament; in Scotland there is no statutory provision for removal of judges of the Court of Session or High Court of Justiciary from office and it is probable that special legislation would be required to effect such 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 lay clients, while barristers advise on legal problems submitted through solicitors and present cases in the higher courts although 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 court cases.

A Royal Commission reported in October 1979 on the provision of legal services in England, Wales and Northern Ireland (see Bibliography). A similar

Commission is inquiring into legal services in Scotland.

In England and Wales every barrister and every student wishing to become a barrister must be a member of one of the four Inns of Court (Lincoln's Inn, Inner Temple, Middle Temple and Gray's Inn). To become a student member of an Inn, an entrant must normally have a law degree from a United Kingdom university or polytechnic. People with other degrees and 'mature' students may also be accepted, but they must pass a diploma in law. All students must pass the professional examinations run by the Council of Legal Education. After training, a student can be called to the Bar, but may not practise independently until a year's pupillage with an established barrister has been completed. The governing body of the profession is the Senate of the Inns of Court and the Bar. The Bar Council (composed of those members of the Senate who are elected by the Bar) maintains the standards and independence of the profession and improves its services.

A prospective solicitor in England and Wales must be considered suitable by the Council of the Law Society (the professional organisation of solicitors) and must enter into 'articles of clerkship' with a practising solicitor of not less than five years' standing before beginning a professional career. The term of articles lasts from two to four years, depending upon the educational qualifications of the student. An articled clerk must pass the necessary examinations prescribed by the Law Society and, with very few exceptions, is required to attend a course of studies at a recognised law school. Once qualified a solicitor may become a

member of the Law Society.

In Scotland prospective advocates and solicitors undergo much the same training. While the respective professional organisations—the Faculty of Advocates and the Law Society of Scotland—have their own professional examinations, candidates usually obtain exemption from them by including the necessary subjects in a law degree of a Scottish university. The prospective advocate must, thereafter, undergo a period of training (either of 21 months or of 12 months depending on whether or not exemption from nine months' training has been granted) in a solicitor's office, followed by about nine months' pupillage with a practising advocate. The prospective solicitor must serve an apprenticeship of two years in a solicitor's office before he or she can begin a professional career.

In Northern Ireland most students wishing to become solicitors or barristers must, after attaining a law degree, undertake a period of study at the Institute of Professional and Legal Studies for one year before being eligible to practise. Barristers are members of the Inn of Court of Northern Ireland; there is also a General Council of the Bar of Northern Ireland. The professional organisation for solicitors is the Incorporated Law Society of Northern Ireland.

LEGAL AID, ADVICE AND ASSISTANCE Assistance from funds provided by the State is available to a person requiring help in meeting the cost of legal advice and representation in court proceedings. The State is entitled to be reimbursed from contributions which assisted people may have to pay according to their means and costs, and damages recovered from legally aided people's opponents in litigation.

Advice and Assistance Where court proceedings are not involved, people with moderate means can obtain help from a solicitor on any legal matter either free or subject to a contribution. This includes giving advice, writing letters, drafting wills and obtaining opinions from a barrister. A solicitor may act for a client until costs and expenses reach a total of £25 (£45 for undefended divorce cases), but authority must be obtained for this limit to be exceeded. A person seeking help has to give the solicitor brief details about income and savings. The income limit laid down by the scheme is reviewed at least annually.

Law Centres

An important development of the last decade has been the growth of law centres in deprived urban areas providing free legal advice to people of limited means who might not otherwise obtain it. All law centres, which are voluntary organisations drawing their finance from various sources, including government grants, have at least one full-time salaried lawyer and many employ community workers. Most centres devote the largest proportion of their time to tenant-landlord disputes and other housing problems. Free legal advice is also available in many Citizens Advice Bureaux, consumer and housing advice centres and in specialist advice centres run by various voluntary organisations.

Aid in Civil Proceedings

Legal aid for civil proceedings is available to people whose disposable incomes and capital fall below certain prescribed amounts, but a contribution is payable according to the level of the applicant's income; if that is below a prescribed amount, legal aid is given free. As in the case of legal advice and assistance, the qualifying income limits are reviewed at least once a year.

An applicant for legal aid must also show reasonable grounds for taking or defending the proceedings. Provided the application is successful the case is then conducted in the ordinary way, except that no money passes between the assisted person and the solicitor—payments being made in and out of the legal aid fund. The costs of an action which an assisted litigant loses against an unassisted opponent may also, subject to certain conditions and if the court so orders, be met out of the fund. Solicitors and counsel have a duty to review the case at each stage to see that it is not being pursued unreasonably at public expense. Legal aid is not generally available in cases where redress is sought for alleged defamation or for representation in most proceedings in administrative tribunals.

The civil legal aid schemes are run by the Law Society, the Law Society of

Assessments of disposable income and capital are made by the Supplementary Benefits Commission and are governed by regulations which allow for deductions from gross income for maintenance of dependants, interest on loans, income tax, rent and other matters reasonably provided for out of income, and deductions for furniture and other household goods from capital.

Scotland and the Incorporated Law Society of Northern Ireland, under the general guidance respectively of the Lord Chancellor, the Secretary of State for Scotland and the Secretary of State for Northern Ireland.

Proceedings

Aid in Criminal 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's means are such that financial help is needed in meeting the costs of the proceedings. An order must be made when a person is committed for trial on a charge of murder or where the prosecutor appeals or applies for leave to appeal from the Court of Appeal (Criminal Division) or the Court Martial Appeal Court 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.

> Voluntary duty solicitor schemes at many magistrates' courts provide 'standby' help for unrepresented defendants.

> The criminal legal aid scheme in England and Wales is administered by the courts, under the overall responsibility of the Home Secretary.

> The arrangements for aid in criminal proceedings in Scotland and Northern Ireland are broadly similar, but in Scotland there is a statutory 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.

LAW REFORM

The duty of keeping the law under review in order to ensure that it meets the needs of modern society lies in England and Wales with the Law Reform Committee, the Criminal Law Revision Committee and the Law Commission, and in Scotland with the Scottish Law Commission. The Law Reform Committee and the Criminal Law Revision Committee are standing committees of judges and distinguished practising and academic lawyers, appointed respectively by the Lord Chancellor and the Home Secretary, to examine aspects of the civil and criminal law referred to them by the appropriate minister.

The Law Commission is a permanent body consisting of five lawyers of high standing, charged with the duty of scrutinising the law with a view to its systematic development and reform, including the possibility of codification, the elimination of anomalies, the repeal of obsolete and unnecessary enactments. and the reduction of the number of separate enactments. It reports to the Lord Chancellor. The Scottish Law Commission, which has a constitution similar to that of the English body and similar functions, reports to the Lord Advocate. The work of the two commissions has led to changes in many areas of the law, the repeal of some 950 obsolete Acts and the pruning of the contents of nearly 1,400 others.

The Law Commission is also concerned with the reform in Northern Ireland of those branches of the law which were outside the scope of the powers of the former Parliament of Northern Ireland. Other aspects of law reform in Northern Ireland are dealt with by 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. Education is described in Chapter 7, and housing in Chapter 9. The National Health Service supplies, largely free, the best medical service available to all, irrespective of means. The local authority personal social services and voluntary organisations provide advice and help 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 support during periods of inability to earn, helping families and compensating for disablement.

Joint finance and planning between health and local authorities aims to prevent overlapping of services and to encourage the development of community services. In deciding their priorities, some local authorities attach greater importance than others to the personal social services and to the various categories of people in need of help, with the result that provision can vary from area to area.

Central government is responsible directly 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 government authorities.

Spending on social welfare in 1978 was: health £7,615 million, personal social services £11,390 and social security £15,786 million.

NATIONAL HEALTH SERVICE

The National Health Service is based upon the principle that medical care and advice should be readily available to everyone, at little or no cost. Health services are available largely free of charge to everyone ordinarily resident in Britain. Visitors can also use the Service if they require immediate treatment for an unforeseen emergency; they are expected to pay if the purpose of their visit is to seek treatment. There are reciprocal health arrangements with some countries (see p 133). The Service is administered by appointed statutory authorities and is financed largely from general taxation; but sources of revenue include charges for some items and a small part of the national insurance contribution (see p 138).

How far the improvements in the nation's health over the past 30 years or so are attributable to the Service is difficult to determine, but some changes have been aided by the planning and provision of such a national system of care; the advances in maternal and child care, for example, the use of vaccines for the benefit of all sections of the community, the more efficient use of acute hospital services (for surgery, gynaecology and childbirth), and the establishment of primary health care teams and health centres. Like health care systems in other countries, the National Health Service has its problems, however. They range from regional disparities in health provision to shortages of resources and industrial relations difficulties. An additional problem is the high cost of technologically advanced equipment required for diagnosis and treatment.

The Government has announced its intention of improving the use of available resources within the National Health Service and of simplifying its organisation

by removing one tier of its administrative structure in England. It recognises the need to provide a more decentralised service with local health authorities having greater flexibility in responding to local needs. A Royal Commission on the National Health Service reported in July 1979 (see Bibliography). Its principal recommendations included a greater emphasis in the role of preventive medicine, measures to simplify the administration of the Service, changes in internal financing methods, and a review of national arrangements for negotiating pay and settling disputes.

ADMINISTRA-TION

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 areas. Within each of the four parts of the country 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 Scrvices in Northern Ireland) are responsible for strategic planning. Area health authorities in England and Wales and health boards in Scotland are responsible for planning and operational control of all health services in their area. In England, because of its greater size and population, there is an additional tier of regional authorities responsible for regional planning and certain services best administered on a regional basis (for example, research and major capital building work).

There are 14 regional health authorities and 90 area health authorities in England, 8 area health authorities in Wales, 15 health boards in Scotland. The authorities and boards, which consist of unpaid, part-time members are statutory agencies of central government and co-operate closely with local authorities responsible for social work, environmental health, education and other services. In general the areas covered by area health authorities and health boards correspond with those of the major local authorities. Health and local authorities in England, Wales and Scotland co-operate by means of joint planning arrange-

ments and joint consultative committees.

In Northern Ireland the four health and social services boards act as agents for the Department of Health and Social Services, spanning both health and personal social services.

The area authorities and health boards can determine the pattern of services best suited to their areas but have to take account of national priorities. In most areas the day-to-day running of services is carried out by management teams in districts which usually contain a district general hospital and have a population of between 200,000 and 500,000, though some are considerably larger (in Scotland, Wales and Northern Ireland they may be much smaller, particularly in the remoter areas). In Scotland a Common Services Agency organises certain central services; there are similar agencies in Wales and Northern Ireland.

There is statutory provision for professional advisory committees at national, regional and area level; the authorities have a duty to consult with these committees. The main national advisory bodies are the Central Health Services Council in England and Wales, the Scottish Health Service Planning Council in Scotland and the Health and Social Services Council in Northern Ireland. The Health Advisory Service for England and Wales reports to the Secretaries of State on conditions in hospitals and the community health service. The Scottish Hospital Advisory Service reports to health boards and to the Secretary of State.

Public representation in the Service for England and Wales is provided by community health councils. These consist of about 20 to 30 members, half of them appointed by local government councils and the rest mainly on the

nomination of voluntary bodies interested in local health services. They have access to the area health authority, the right to secure information and the right to visit hospitals. In Scotland local health councils have been set up by the health boards to represent the interests of the public. District committees exercise this function in Northern Ireland.

Health Service Commissioners

Legislation provides for the appointment of three Health Service Commissioners (for England, Scotland and Wales) to investigate complaints from members of the public about the health service. All three posts are held by the Parliamentary Commissioner for Administration (see pp 34–5), whose health service jurisdiction covers the failure of a health authority to carry out its statutory duties, maladministration, and injustice or hardship caused by a failure in a service. Complaints can only be considered if they are first sent to the relevant health authority; sufficient time must be given for the authorities to investigate the problem and reply to the complainant. Matters outside the Commissioner's jurisdiction include action taken solely in the exercise of clinical judgment and the action of family practitioners (see p 128).

The Commissioner reports annually to ministers who lay the reports before Parliament; and also publishes at regular intervals full texts of reports of

investigations without, however, naming individuals or institutions.

In Northern Ireland the Commissioner for Complaints (see p 66) investigates complaints concerning the health service, but not the actions of medical practitioners or the professions supplementary to medicine.

Finance

About 88 per cent of the cost of the health services 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, dental treatment and spectacles.

The charges for medical prescriptions do not apply to children under 16 years, expectant and nursing mothers, women aged 60 and over and men aged 65 and over, patients suffering from certain medical conditions, war and Service disablement pensioners (for treatment of their disability), and families with very low incomes, including those receiving supplementary benefits and family income supplement. Charges for dental treatment do not apply to clinical examination only, or to people under 21 (with the exception that young people between 16 and 21 who have left school pay for dentures), pregnant women or those who have had a baby within the last year. Children's spectacles are free. Certain low income groups are exempt from dental and optical charges.

A limited amount of accommodation may be made available at a small charge for hospital patients wanting privacy as long as the accommodation is not needed on medical grounds for non-paying patients.

Provision is also made at certain hospitals for patients to be treated as private patients on payment of the whole cost of their accommodation and treatment.

Hospital medical staffs are salaried and can be employed full-time or parttime. Part-time hospital doctors are free to accept private patients. General medical practitioners are self-employed and paid by a system of fees and allowances designed to reflect responsibilities, work load and practice expenses.

Dentists providing treatment in their own surgeries are paid on a prescribed scale of fees according to the treatment they have carried out. Pharmacists dispensing on their own premises are paid on the ingredient cost of the prescriptions they dispense. Ophthalmic medical practitioners and ophthalmic opticians taking part in the general ophthalmic service are paid approved fees for each

sight test made; opticians who dispense spectacles are paid according to the number and type of pairs supplied.

PRIMARY HEALTH CARE

Primary health care is in the hands of doctors, dentists, opticians and pharmacists working within the Service as independent practitioners, and district nurses, midwives and health visitors employed by the health authorities; a wide range of other services is also available including the school health service, social services and chiropody service.

Family Practitioner Services

The family practitioner services cover the services given to patients by doctors, dentists, opticians and pharmacists of their own choice. They are administered in England and Wales by family practitioner committees established by the health authorities, in Scotland by the health boards and in Northern Ireland by the Central Services Agency on behalf of the four health and social services boards.

There are nearly 27,000 family doctors under contract to the National Health Service. A doctor may not normally have more than 3,500 patients; the average number in Great Britain is about 2,300 and in Northern Ireland 2,150. Access to most other parts of the health service is obtained through the family doctor.

There are 949 ophthalmic medical practitioners and about 6,960 ophthalmic and dispensing opticians engaged in the general ophthalmic services which provide for the testing of sight and supply of spectacles. Patients requiring treatment are dealt with through the hospital eye service.

There are over 15,530 dentists taking part in the health service.

There are about 10,670 retail pharmacies under contract to the National Health Service with responsibility for the dispensing of prescriptions except for the small number dispensed by hospital pharmacies and some family doctors.

Midwives and **Health Visitors**

District Nurses, 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, there is a domiciliary service for mothers having their babies at home, with midwives and family doctors caring for mothers and babies after birth. Midwives also assist births in hospital. Health visitors are concerned with the health of the household as a whole and offer an advisory service for families including those with young children and elderly people; they undertake health teaching, assist in preventing ill-health, and work closely with family doctors, district nurses and social workers.

and Health Centres

Group Practices Family doctors often work as members of health care teams with health visitors, district nurses, and sometimes midwives or social workers. About four-fifths are in partnership or group practices. About a fifth of the doctors in Great Britain and just over a half in Northern Ireland work in some 962 modern and wellequipped health centres built and maintained by the health authorities. At health centres, child health services can be provided as well as facilities for health education, family planning, speech therapy, chiropody, assessment of hearing, physiotherapy and remedial exercises. Dental, pharmaceutical and ophthalmic services, hospital out-patient services and supporting social work services may also be provided.

HOSPITALS AND SPECIALIST SERVICES

The hospital and specialist services include district general hospitals with treatment and diagnostic facilities for in-patients, day-patients and out-patients, hospital maternity departments, infectious disease units, psychiatric and geriatric facilities, rehabilitation facilities, convalescent homes and all forms of specialised

treatment. A number of specialist hospitals for mentally ill, mentally handicapped and elderly people are also provided.

Hospitals

A large proportion of the hospitals in the National Health Service were built in the nineteenth century; some trace their origins to much earlier charitable foundations, such as the famous St. Thomas' and St. Bartholomew's hospitals in London. Much has been done to improve and extend existing hospitals, some of which are housed in inconvenient buildings, and many new hospitals have been or are being opened. The most recent development in hospital design is the 'nucleus' hospital of some 300 beds which will make a more intensive use of space and facilities; it can be used either as the first stage of a new hospital or as an extension of an existing hospital. Building work on the first nucleus hospital began in 1978.

The policy of recent Governments has been to concentrate acute facilities in large district general hospitals, and to limit the role of the small hospital in acute medicine while at the same time expanding its role in the care of the long-stay patient, particularly the elderly. The Government intends to examine this policy which, it considers, involves the risk of hospital services becoming too remote from the local communities that they serve. There are 2,700 National Health Service hospitals with nearly half a million beds and a nursing and midwifery staff of nearly 415,700 (whole time equivalent). There are over 37,260 medical staff including over 13,780 consultants.

Rehabilitation

Rehabilitation is an important part of medical care beginning at the onset of illness or injury and aimed at helping people to live as normally as possible. Rehabilitation is especially important for elderly, disabled and mentally-ill people who need such help in order to become self-sufficient. Facilities are provided in the majority of hospitals and at special centres. The work is carried out by teams of doctors, nurses, physiotherapists, remedial gymnasts, occupational therapists, speech therapists and social workers. The hospital departments work closely with the Disablement Resettlement Service of the Manpower Services Commission (the Department of Manpower Services in Northern Ireland).

Medical services may include the provision, free of charge, of artificial limbs and eyes, hearing aids, surgical supports, wheelchairs, and other appliances. Very severely physically handicapped patients may be issued with electrical control equipment which enables them to operate devices such as alarm bells, radio and television, a telephone, and heating. The controls are operated by continuous depression of a microswitch or by sustained suction through a pneumatic tube with a pipe-stem mouthpiece. Nursing aids for the handicapped at home can be borrowed.

Social workers, home helps and occupational therapists are available to hospital patients who, because of their illness, have difficulties on their return home.

Hospices

Some 40 hospices provide care for the dying either directly in residential homes or through the provision of nursing and other assistance in the patient's own home. About ten are administered entirely by the National Health Service; the remainder, most of which receive support from public funds, are run by independent charitable organisations. Control of symptoms and psychological support for patients and their families form the central features of hospice care. The hospice movement, which is worldwide, orginated in Britain.

Drug Dependence

Treatment for narcotic drug dependence is provided mostly on an out-patient basis in the drug treatment units provided by the National Health Service,

although some addicts have a period of in-patient treatment when necessary. Following legislation in 1968, only doctors licensed by the Home Secretary are allowed to prescribe heroin and cocaine for the treatment of drug addiction. (In Northern Ireland licensing is the responsibility of the Department of Health and Social Services.) These doctors work mainly in National Health Service treatment centres. Doctors who are not licensed can no longer prescribe these drugs except for the relief of pain due to organic disease or injury. All doctors must notify the Home Secretary of any patient they consider to be addicted to certain controlled drugs (in Northern Ireland the chief medical officer of the health department).

In addition to hospital-based facilities there are a number of non-statutory agencies which work with and complement the Health Service provision. In 1978 an experimental short-stay residential unit for unstable young multiple drug users was established with substantial financial support from the Department of

Health and Social Security.

Rehabilitation facilities are less commonly available and are mainly provided by voluntary organisations, some of which receive financial help from local authorities. Social work help is given by the probation service and local social services departments.

The Advisory Council on the Misuse of Drugs, set up under the Misuse of Drugs Act 1971, advises ministers on a wide range of matters associated with the prevention and treatment of drug abuse and connected social problems.

Alcoholism

Treatment and rehabilitation for alcoholics is provided by the National Health Service, social services and voluntary organisations. Treatment includes inpatient and out-patient services in general hospitals, psychiatric units and hospitals and specialised alcoholism treatment units of which there are 34. Primary care teams (general practitioners, nurses and social workers) play an important part. Two experimental detoxification centres have been sponsored by the Department of Health and Social Security.

Parents and Children

Special preventive health services, including free dental care, are available for expectant and nursing mothers and young children. A feature of the service is the education of parents before and after the birth by means of talks, discussion groups, demonstrations and classes. Pre-school-age children receive regular medical examination and are tested for vision, hearing, speech and language deficiencies so that any handicap can be identified. Family planning advice and help is provided at many clinics, and welfare foods (dried milk and vitamins) are distributed from them.

Sick children are treated at home or in hospital as in-patients, day-patients or out-patients. If admission to hospital is necessary, the Government encourages health authorities to accommodate them in children's departments under the care of consultant pacdiatricians and specially trained nurses.

The school health service, which is part of the National Health Service, organises health surveillance of school children including medical inspection and dental inspection and treatment where appropriate. The staff of the school health service work closely with local education authorities in the medical assessment of handicapped children thought to need special attention.

Child guidance and child psychiatric services provide help and advice for

children with psychological or emotional problems.

Family Planning

Free family planning facilities are available to everyone through family planning clinics, hospitals and a domiciliary service. Most family doctors provide a similar service for women only.

Abortion

Under the Abortion Act 1967 termination of a pregnancy may take place if two registered doctors think that its continuance would involve a greater risk to the life of the pregnant woman (or 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 the two doctors think that there is a substantial risk of the child being born with severe physical or mental abnormalities. Abortions may be carried out in National Health Service hospitals or in premises officially approved for the purpose. The Department of Health and Social Security has issued guidance on counselling women with unwanted pregnancies. The Abortion Act does not apply in Northern Ireland.

Blood Transfusion

The blood transfusion service has about 2 million voluntary unpaid blood donors. There are 19 regional transfusion centres in Britain recruiting donors and organising donor sessions in towns and villages, factories and offices, and in establishments maintained by the armed forces. Donors must be between the ages of 18 and 65. The regional centres are also responsible for blood grouping and testing, maintaining blood banks, providing a consultant service to hospitals, teaching in medical schools, and instructing doctors, nurses and technicians. There are four central laboratories which prepare blood products and undertake research.

Ambulance Services

Where necessary on medical grounds, free transport by ambulance is provided by the health authorities. The work of the ambulance service falls into two categories: 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.

The London Ambulance Service is probably the largest of its kind in the world, catering for 7 million residents and non-residents in an area of 1,580 sq km (610 sq miles). It uses over 1,000 vehicles at 75 ambulance stations and has a staff of over 2,000. On an average day it receives 1,500 emergency calls (one call every minute) and carries out 9,000 non-urgent patient journeys.

In some areas the ambulance service for non-urgent cases is augmented by volunteers using their own cars.

In Scotland an air ambulance service is available in the islands off the north and west coasts and in the remoter parts of the mainland.

HEALTH EDUCATION

In England, Wales and Northern Ireland health education is promoted by the Health Education Council which assists in the development of programmes of health education with the health authorities, professional organisations, voluntary bodies and industry. Central health education services in Scotland are organised by the Scottish Health Education Unit, which is part of the Common Services Agency. Major themes of publicity campaigns are the encouragement of family planning, correct diet and exercise, and warnings against cigarette smoking and excessive consumption of alcoholic drink. Although expenditure for health education is met largely from central government funds, the Health Education Council is free to determine its own priorities and programme.

Within the National Health Service, medical officers advise health authorities on health education, and specialist officers have executive responsibility.

SAFETY OF MEDICINES

Under the Medicines Act 1968, which came into force in 1971 and applies to the whole of the United Kingdom, 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 medicines and a Committee on Safety of Medicines advises the health ministers on the safety, efficacy and quality of new medicines and monitors adverse drug reactions. The Committee on Dental and Surgical Materials gives advice on products not appropriate to the Medicines or the Veterinary Products Committee. A review of medicines on the market began in 1975, the health ministers being advised by the Committee on the Review of Medicines. The Act also controls the advertising, labelling, packaging, distribution, sale and supply of medicines.

THE HEALTH PROFESSIONS

Only people whose names are on the medical and dental registers may practise as doctors and dentists in the National Health Service. University medical and dental schools are responsible for teaching medical students; the National Health Service provides hospital clinical facilities for their training. 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 governing body of the medical profession is the General Medical Council and that of the dentists is the General Dental Council. The British Medical Association is the doctors' main professional association; that of the dentists is the British Dental Association.

The minimum period of hospital training required to qualify for registration as a nurse is normally three years. Training may be in general, sick children's, mental or mental subnormality nursing. An enrolled nurse takes a two-year course. The examining bodies of the nursing profession in England and Wales and in Scotland are the general nursing councils. Midwives in England and Wales and in Scotland must have the certificate of the appropriate Midwives Board. The examining body for nurses and midwives in Northern Ireland is the Northern Ireland Council of Nurses and Midwives. Most pupil midwives are already registered general nurses or sick children's nurses; for them the two-year midwifery training period is reduced to one year and for other registered and enrolled nurses to 18 months. The Royal College of Nursing and the Royal College of Midwives are the professional bodies for nurses and midwives. Health visitors are registered general nurses who have undergone at least the first part of the midwifery course or obstetric nursing before taking a year's course in health visiting, promoted by the Council for the Education and Training of Health Visitors. District nurses are state registered or state enrolled nurses, the majority of whom have undertaken additional training.

A retail or hospital pharmacist must have his or her name entered in the register maintained by the Pharmaceutical Society of Great Britain, the governing body of the profession; in Northern Ireland the register is maintained by the Department of Health and Social Services on behalf of the Pharmaceutical Society of Northern Ireland. Four years' academic study and practical training are necessary for registration. The dispensing of all medicines on doctors' prescriptions and sale of certain specified medicines can be carried out 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 may 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, radiographers and remedial gymnasts. The governing bodies are eight boards,

corresponding to the eight professions, under the general supervision of the Council for Professions Supplementary to Medicine. A professional training lasting two to four years is needed to qualify for registration. Only members of those professions 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.

HEALTH
ARRANGEMENTS WITH
OTHER
COUNTRIES

Britain has special health arrangements with other member States of the European Community under which most United Kingdom nationals are entitled to receive immediately necessary treatment in another Community country on the same basis as insured nationals of that country. There are also reciprocal arrangements with some other countries under which similar treatment is available.

PRIVATE MEDICAL TREATMENT Though practically all residents in Britain use the National Health Service, a number of people choose to pay for private consultations and treatment. Among the major users are the families of subscribers to the provident schemes which make provision for private health care in return for annual subscriptions. The Government intends to introduce legislation to facilitate the wider use of private medical care. It plans to repeal the legislation for the phasing out of private facilities within the National Health Service introduced by the previous administration and to examine methods of encouraging the private sector to develop as a service complementary to the National Health Service.

ENVIRONMEN-TAL HEALTH Environmental health officers employed by local authorities are responsible for the control of air pollution and noise, the inspection of offices, the investigation of unfit housing, and in some instances for refuse collection. Doctors who specialise in community medicine and are employed by the health authorities advise local authorities on the medical aspects of environmental health. They may also assist the water authorities responsible for water supply and sewerage. Environmental health officers are also stationed at ports and airports where they carry out a range of 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 which is injurious to health, unfit for human consumption, or not of the nature, substance or quality demanded by the buyer. In England and Wales the composition, labelling and description of food are the concern of food and drugs authorities (county councils, London borough councils and the City of London Corporation) while food hygiene and the safety and fitness of food are the concern of district councils, London borough councils and port health authorities. 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 for human consumption. There are special regulations controlling the safety of particular foods such as milk, meat and ice-cream. The Department of Health and Social Security, the Ministry of Agriculture, Fisheries and Food and the Welsh Office are the central departments responsible for giving advice and making regulations. Expert committees of these departments periodically review regulations dealing with food.

In Scotland regional and islands councils are responsible for food standards and labelling, and district and islands councils for food hygiene. District councils in Northern Ireland are responsible for food hygiene, food standards and labelling.

CONTROL OF INFECTIOUS DISEASES The health authorities have general responsibility for the prevention of disease and co-operate with the local authority environmental health services. The area health authorities and health boards carry out programmes of vaccination and immunisation against diphtheria, measles, rubella (females only), poliomyelitis, tetanus, tuberculosis and whooping cough. Although vaccination is voluntary, the Government encourages parents to obtain protection for their children from these diseases.

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 epidemic diseases. Its largest establishment is the 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. In addition it has a surveillance centre, which investigates and monitors human communicable diseases. In Scotland bacteriological work is done mainly in hospital laboratories. In Northern Ireland a central public health laboratory shares the bacteriological work with hospital laboratories.

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). Many of their services are directed towards the same groups of people needing health services, for example, many elderly or disabled people. Other groups helped are young families with social problems, children deprived of a normal home life, the mentally disordered and young offenders. Close cooperation is maintained between local authority social services departments and health authorities. In Scotland local authorities also undertake duties similar to those of the separate probation and after-care service in England and Wales (see p 111).

The Personal Social Services Council advises ministers on policy issues and provides information and advice to all concerned with the personal social services in England and Wales, based on research projects or inquiries sponsored by the Council. Its members are from local government, voluntary, educational and research bodies, and professional organisations. There is cross-representation with the Central Health Services Council and the Central Council for Education and Training in Social Work. Finance comes from central and local government. In Scotland there is an Advisory Council on Social Work and in Northern Ireland a Central Personal Social Services Advisory Committee. Advice on health and personal social services for children in England and Wales is given by the Children's Joint Committee; its members are nominated by the Central Health Services Council, the Personal Social Services Council, and the Secretaries of State for Social Services and for Wales.

The Handicapped

Social services authorities have a duty to provide social services for disabled people. They are required to establish the number of disabled people in their



A Seacat missile launcher in the high altitude and climatic chamber of British Aerospace. The research helps in determining the best methods of overcoming the build-up of ice that endangers ships sailing in Arctic waters.

Measuring the toxic emissions from aircraft engines in the stratosphere (below); developing methods of improving 'fuel burn' is the aim of research being carried out at Sheffield University for the US National Aeronautics and Space Administration (NASA).







HMS Invincible, the first of the Royal Navy's new class of anti-submarine cruiser, undergoing sea trials (far left). The cruiser will be equipped with the Sea Harrier (the latest version of the world's first operational 'jump-jet'), and the new 'ski-jump', for take off (left).



One of the world's largest man-made caverns which will house the main plant of the Dinorwic pumped-storage power station in North Wales; three million tons of slate have been hewn out of a mountain but after landscaping all that will be seen of the project is a door in the mountainside. When completed, Dinorwic will be able to contribute 1,320 MW to the national grid within ten seconds of demand.

area and to publicise services. A wide range of facilities may be available including advice on personal and social problems arising from disability, assistance in overcoming the effects of disability, adaptations to people's homes (such as fitting ramps, ground floor toilets and grab rails) and various aids to daily living. In certain circumstances a telephone or a television set may be installed. Other facilities include social and occupational clubs, residential homes and the organisation of outings and holidays. In addition some authorities make arrangements for the teaching of handicrafts and other occupations. Voluntary organisations also provide services for disabled people.

Help available from other sources includes social security, medical treatment, special education, employment and training services and specially designed

housing and means of access to public buildings.

The Elderly

Services for elderly people are provided by statutory and voluntary bodies to help them to live at home for as long as possible. These may include the advice and help of social workers, domestic help, delivery of cooked meals, sitters-in, night attendants and laundry services as well as day centres, clubs and recreational workshops. In many areas 'good neighbour' and friendly visiting services are arranged by the local authority or a voluntary organisation. Social services authorities also provide residential accommodation for the elderly and infirm and have powers to register homes run by voluntary organisations or privately. The newer homes usually have accommodation for some 30–50 residents. About 2,600 homes for elderly people are provided by local authorities in England which house about 1.5 per cent of the population over the age of 65. There are similar homes in Scotland, Wales and Northern Ireland.

Local authorities, as part of their responsibility for public housing, build flats specially designed for elderly people; some of these blocks have resident

wardens. Housing associations also build this type of accommodation.

The Mentally Ill and the Mentally Handicapped

Social services authorities must make arrangements for helping the mentally ill or mentally handicapped in the community, and for prevention and after-care services. Recent developments in the treatment of mental illness, which enable patients either to be treated at home or to be discharged from hospital more quickly provided support is available in the community, are adding to demands for these services and particularly for social work support. Arrangements include training centres for the mentally handicapped, day centres for the mentally ill, as well as social centres and a variety of residential care for the mentally ill and mentally handicapped of all ages. Social workers help patients and their families to deal with social problems arising from mental illness or handicap and can arrange compulsory admission (on a medical recommendation) of mentally disordered people to hospital in certain circumstances.

Help to Families

Social services authorities, through their own social workers or a voluntary organisation, make available help and advice to families facing special problems. The home help service provides practical assistance at home for sick and disabled people, elderly people and expectant mothers.

Some authorities make direct provision for the special needs of unmarried mothers and their babies, but most contribute to the cost of work done by

voluntary organisations and other bodies.

Child Care

Day care facilities for children under five are provided by local authorities, voluntary agencies and privately. In allocating places in 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 play-

groups operating in their area.

The authorities have a duty to offer advice, guidance and assistance to families in difficulties in order 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 juvenile court.

The recognition, prevention and management of cases of child abuse are the concern of many authorities, agencies and professions, and area review committees have been established throughout the country to provide a forum for the discussion and co-ordination of all those involved and to 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 or 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 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 before that time. In certain circumstances the local authority may pass a resolution assuming the rights and duties of one or both parents. The parents must be notified and if they give notice of objection the continuance of the resolution will depend upon its being upheld by a court of law. When taking a decision on 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, efforts are 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 are in need of care or control which they are unlikely to receive unless a care or other relevant order is made by the court. Local authorities are responsible for undertaking inquiries through social workers, consultation with parents, schools and the police. Children may be committed to the care of a local authority under a care order if the juvenile court is satisfied that they are in need of care or control. As an alternative the court may make a supervision order for a period of up to three years. Supervision is carried out by a social worker or a probation officer.

In Northern Ireland the court may send children to a training school (see p 115), commit them to the care of a fit person (which may include a health and

social services board), or make a supervision order.

In Scotland children in trouble (see p 115) 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 be sent to 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.

When practicable, children in care are boarded out with foster parents, who receive an allowance to cover the cost of maintenance. If foster homes are not considered appropriate or cannot be found, the children may be placed in children's homes, voluntary homes 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 either 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, although training schools and remand homes are administered separately.

Regulations regarding conduct of community homes and registered voluntary homes and the boarding out of children in care are made by central government.

Voluntary Organisations Voluntary organisations, many of which were pioneers in child care, continue to play a valuable part in providing accommodation for children both in the care of local authorities and voluntary organisations. Some children's homes run by voluntary organisations which are not within the community homes system are registered with central government.

Voluntary bodies concerned with the welfare of children in their own homes include local family casework agencies and the Family Service Units. The National Society for the Prevention of Cruelty to Children and its Scottish counterpart maintain inspectors and visitors to investigate reported cruelty or neglect.

Adoption

Adoption of children is strictly regulated by legislation and some 12,000 adoption orders were made in England and Wales in 1978 and 1,350 in Scotland; the Registrars General keep confidential registers of adopted children. Local authorities have the power to act as adoption agencies and eventually will be obliged to offer such a service. Voluntary adoption societies (over 60 societies in Britain arrange adoptions) must be registered with their local authority.

Adoptions of minors under the laws of some European and Commonwealth countries are recognised but this does not confer British citizenship on the adopted person.

Social Workers

The effective operation of the social services is largely dependent upon the availability of professionally qualified social workers trained in the methods of social work. Training courses in social work are provided by universities, polytechnics and colleges of further education; their length depends upon previous educational qualifications and can extend from one to four years. The Central Council for Education and Training in Social Work recognises social work courses and offers advice to people considering entry to the profession.

Professional social workers (including those working in the National Health Service) are employed by social services authorities. Others work in voluntary organisations or in the probation service (see p 111). Not all social workers employed by social services authorities are professionally qualified, but efforts are being made to increase the number of trained personnel.

SOCIAL SECURITY

National insurance, industrial injuries benefits, child benefit, family income supplement, supplementary benefits, and war pensions constitute a comprehensive system of social security. The payment of many benefits depends on prior payments to the national insurance scheme, while others are available without contribution conditions. The former 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.

The Department of Health and Social Security administers these services in Great Britain; within the Department, the Supplementary Benefits Commission is responsible for the system of supplementary benefits. In Northern Ireland social security benefits are administered by the Department of Health and Social Services and the Supplementary Benefits Commission for Northern Ireland is responsible for determining entitlement to supplementary benefits. 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. Appeals relating to claims for the various benefits are decided by independent tribunals.

A series of Acts in the 1940s established a comprehensive social security system which became operative in 1948. Benefits were flat-rate but as the level of earnings rose in the 1950s and 1960s the gap between earnings and benefits tended to widen. In the 1960s, therefore, a modest earnings-related addition to retirement pension based on graduated contributions was introduced; this principle was extended to unemployment and sickness benefit and, in 1975, to maternity allowance. In the 1970s new benefits have included better pension arrangements for widows, pensions for people aged 80 and over who have not qualified for a national insurance retirement pension, and more benefits for disabled people (see pp 141-2). The new earnings-related state pension scheme provides improved retirement, widows', and invalidity pensions.

Measures are taken to ensure that social security payments go only to those for whom they are intended and increased efforts are to be made to cut down on fraudulent claims. The size of the problem, however, remains small; the value of benefits unclaimed by people entitled to them is believed to be very many times greater than that of the money lost by fraud. The Government has announced its intention of examining a number of aspects of the social security system with the aim of generally simplifying its administration. It also intends to change the basis on which the annual increases for longer-term benefits is made (see p 139).

CONTRIBU-TIONS

Employees and Employers

Class I contributions are earnings-related and cover the employee for retirement pension, sickness and invalidity benefits, unemployment benefit, maternity benefits, widows' benefits, death grant and child's special allowance. Earnings-related supplement to sickness and unemployment benefit and maternity allowance and earnings-related addition to widows' allowance are also covered. Industrial injuries benefits, although non-contributory, are payable from the national insurance fund. Additional payments are made for dependants.

The contribution paid by the employee varies; if he or she is not a member of a 'contracted-out' occupational pension scheme run by his or her employers (see p 139), the contribution is 6.5 per cent of earnings up to £135 a week (the upper earnings limit) provided that these earnings are at least £19.50 (the lower earnings limit). The employer pays 10 per cent of the same earnings range. If the employee is a member of a 'contracted-out' occupational pension scheme, a lower Class 1 contribution is payable, namely 6.5 per cent of earnings up to the lower earnings limit and 4 per cent of earnings between the two limits; the employer's contribution is 10 per cent and 5.5 per cent respectively. Contributions are collected through the 'Pay As You Earn' income tax system. The employer also pays to the Exchequer a national insurance surcharge of 3.5 per cent of the earnings range for each employee (see p 348).

Self-employed People

Self-employed people pay a flat-rate Class 2 contribution of $\pounds_{2\cdot 10}$ a week and a Class 4 contribution amounting to 5 per cent of net profits or gains between $\pounds_{2\cdot 250}$ and $\pounds_{7\cdot 000}$ a year. Self-employed contributors receive basic retirement

pension (see below) and the same benefits as employees with the exception of unemployment benefit, earnings-related supplements, and industrial injuries benefits.

Married Women and Widows

Certain married women and widows retain the right to pay Class 1 contributions at the reduced rate of 2 per cent when employed and to pay no Class 2 contributions when self-employed. This right is being phased out and is retained only by those entitled to it at 5 April 1978. Reduced contributions do not count for the purposes of benefit. The employer's contribution is not affected.

Voluntary Contributions

Voluntary Class 3 contributions of £2 are payable by people wanting to safeguard rights to some benefits. Class 3 (and Class 2) contributions are paid by stamping a national insurance card or by direct debit of a bank or National Girobank account.

Exemptions

Some people do not have to pay contributions. Employees who continue working after pensionable age (60 for women and 65 for men) do not pay contributions though the employer remains liable. People earning less than the lower earnings limit are not liable for contributions, neither are their employers. Self-employed people with earnings below £1,050 a year and those over pensionable age are excused payment of contributions.

BENEFITS

For most of the benefits there are two contribution conditions. First, before benefit can be paid at all, certain contributions have to be paid; secondly, the full rate of benefit cannot be paid unless contributions have been paid or credited up to a specific level over a specified period. There are special rules to help a widow not entitled to a widow's pension at widowhood or when her children have grown up, to qualify for sickness, unemployment or maternity benefit in the period before she can have established or re-established herself in insurance through her own contributions; there are also provisions to help a divorced woman who was not paying contributions during her marriage. The main benefits (payable weekly) are summarised below. The rates quoted are those effective from November 1979; allowances for children include child benefit.

Since 1975 benefits such as retirement pension have been increased annually in line with percentage movements in retail prices or average earnings, whichever was the greater; short-term benefits such as sickness benefit have been linked with movements in retail prices. The Government is to introduce legislation to link the uprating of all benefits with percentage increases in retail prices.

Retirement Pension

A state retirement pension is payable to women at the age of 60 and to men at the age of 65. People who are still working five years after the minimum pension age are eligible to receive the pension. The weekly rate of basic pension is £23·30 for men and women qualifying on their own contributions and £14 for a married woman qualifying on her husband's contributions. In 1978 the new state pension scheme came into operation and will mature fully after 20 years of contributions; the retirement pension will consist of the basic pension plus an additional (earnings-related) pension. The additional pension will be 1.25 per cent of earnings between the earnings limits (see p 138) for each year of contributions up to a maximum of 20 years.

Employers are free to 'contract-out' their employees from the state scheme for additional pension and 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. Lower national insurance contributions are payable if contracting-out takes place.

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.

A small pension may also be payable to those people who contributed to the state graduated pension scheme which operated between 1961 and 1975. Since 1978 graduated pension has also been protected against inflation.

In real terms the value of the basic retirement pension for a married couple

has more than doubled since 1948.

A non-contributory retirement pension of £14 for a man, single woman or widow and £8.40 for a married woman (including an age addition of 25p) is payable to people over the age of 80 who have not qualified for a contributory pension or who qualified for one at a lower rate than the non-contributory pension. The age addition is also paid to all other pensioners aged over 80.

Mothers and Children Maternity Benefits A maternity grant of £25 is payable for each living child born and for a still-born child if the pregnancy lasts for at least 28 weeks. Maternity allowance is £18.50 a week and is payable normally from 11 weeks before the expected week of confinement until the sixth week following the birth. Mothers who have paid full Class 1 or Class 2 contributions while they were working may qualify for maternity allowance even if they gave up work some time previously. An earnings-related supplement may also be payable.

Child Benefit

The non-contributory child benefit is the main social security benefit for children. The rate is \pounds_4 for each child; an additional $\pounds_2 \cdot 50$ is payable for the only, or older child of single-parent families (it is proposed to extend this addition to any other person bringing up a child alone). Child benefit, which is tax free and is paid to the mother, 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 education; benefit is not payable if the young person is taking a degree, teacher training or any other advanced course or if the education is sponsored by an employer, or in Northern Ireland, by a body such as the Department of Manpower Services or an Industrial Training Board.

Child's Special Allowance

A contributory child's special allowance of £11·10 for each child, inclusive of child benefit, is payable to a mother on the death of a former husband if the marriage was dissolved or annulled and if the husband was contributing to the support of the children.

Guardian's Allowance

A non-contributory guardian's allowance is a weekly payment of £7·10 for an orphaned child 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. One of the dead parents must have satisfied a residence condition. Where guardian's allowance is payable, that child cannot be counted for the purposes of other social security benefits for children.

Other Benefits

Additions for children are payable with widows', sickness, unemployment and other benefits.

Widows

A widow's allowance is payable for the first 26 weeks of widowhood at the rate of £32.60 plus £11.10 for each child, inclusive of child benefit. An earnings-

related addition earned by the late husband's Class I contributions may also be payable. After this a widowed mother receives a basic widowed mother's allowance of £23.30 plus £11.10 for each child, inclusive of child benefit. 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; the rates payable range from £6.99 for widows of 40 to £23.85 for widows of 50 or over.

The widow's pension and widowed mother's allowance consists of a basic pension and an additional pension earned by the late husband's contributions. If the widow is aged between 40 and 50 when widowed (or when her children have grown up), additional pension is reduced like the basic pension. Payment continues irrespective of earnings until the widow remarries or begins

drawing retirement pension.

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.

Industrial Injuries There are also benefits for widows under the industrial injuries scheme. A pension of £32.60 is payable for the first 26 weeks of widowhood. A widow may also receive an earnings-related addition if sufficient Class I contributions have been paid by her late husband on earnings in excess of the lower earnings limit in the relevant tax year. Thereafter, she can receive a pension of £23.85 a week if she was aged 50 at the date of her husband's death, or has dependent children or fulfils certain other conditions; otherwise, she receives £6.99 a week. If she was living apart from her husband, a pension is payable only if she was receiving or entitled to receive at least 25p a week for her maintenance from him.

> In addition allowances are paid for children within the child benefit age limits. For widows they are fire for each child inclusive of child benefit.

> Certain other dependants, such as parents and other relatives, may be entitled to pensions, allowances or gratuities.

Sick and Disabled People or disablement.

There is a large variety of benefits for people unable to work because of sickness

Sickness Benefit

Contributory sickness benefit of f, 18.50 a week is payable for up to 28 weeks. There are allowances of £11.45 for a wife or other adult dependant and £5.70 for each child inclusive of child benefit. An earnings-related supplement may be payable for up to six months but the total of flat-rate benefit (including increases for dependants) and supplement cannot exceed 85 per cent of the reckonable weekly earnings on which the supplement is based. Where the flat-rate benefit alone exceeds this figure it is payable in full.

and Allowance

Invalidity Pension Invalidity pension of £23.30 plus £14 for a wife and £11.10 for a child, inclusive of child benefit, is payable when sickness benefit ends if the beneficiary is still incapable of work. Invalidity allowance (ranging from £1.55 to £4.90 according to age) is paid with the pension to those people who become sick more than five years before retirement age.

Invalidity pension consists of a basic pension and an earnings-related pension

calculated in the same way as that for retirement pension.

Benefits

Industrial Injuries Various benefits are payable for injury or disablement caused by an accident at work or a prescribed disease.

> Injury benefit for an adult is £21.25 a week plus £11.45 for an adult dependant and £5.70 for each child, inclusive of child benefit. It is paid when the employed

earner is incapable of work and payment can continue for a maximum of 26 weeks beginning on the date of the accident or development of the disease. A person entitled to sickness benefit who draws injury benefit instead, also receives an earnings-related supplement subject to the 85 per cent limit on total benefit (see p 141).

When injury benefit ends disablement benefit may be paid if, as the result of the industrial accident or prescribed disease, there is a loss of physical or mental faculty. The amount depends on the extent of the disablement as assessed by a medical board; it varies from £38 a week for 100 per cent disablement to £7.60 for 20 per cent disablement, but for disablement of less than 20 per cent a

gratuity is normally paid.

In certain circumstances disablement benefit may be supplemented as follows: unemployability supplement at the weekly rate of £23.30; invalidity allowance according to age (see above); constant attendance allowance of up to £15.20 a week normally, or up to £30.40 in exceptionally severe cases; an allowance of £15.20 a week payable in addition to constant attendance allowance in certain cases of exceptionally severe disablement; a special hardship allowance of up to £15.20 for a person who is unfit to return to his or her regular job or to do work of an equivalent standard; and hospital treatment allowance which raises the disablement benefit to that for a 100 per cent assessment during hospital treatment for the industrial injury. Increases of disablement benefit for dependants may be payable with unemployability supplement. There are benefits for widows and their children (see p 141).

Other Benefits

An attendance allowance of £18.60 may be payable to severely disabled people requiring a great deal of attention by day and at night. A lower rate of £12.40 may be paid to those who need help either by day or at night. A non-contributory invalidity pension of £14 is payable to people of working age unable to work and not qualifying for the national insurance invalidity pension; it is also payable to disabled housewives incapable of work and unable to perform their normal household tasks.

A weekly invalid care allowance of £14 is payable to people (aged between 16 and pension age) who cannot go out to work because they are caring for a

severely disabled relative receiving an attendance allowance.

Physically disabled people unable or virtually unable to walk may be entitled to a mobility allowance of fiz a week to help pay their transport costs. The allowance is intended for people aged between 5 and 65. At present the age group 5-60 is covered. The phasing-in of the allowance, covering the age group 61 to 64, will be completed in November 1979. An independent organisation called Motability assists those disabled drivers and disabled passengers wanting to use their mobility allowance to obtain a vehicle.

Benefit

Unemployment Unemployment benefit at the same rate as sickness benefit (see p 141) is payable for up to 312 days (not counting Sundays) in any one spell of unemployment. Periods of unemployment benefit which are 13 weeks or less apart and periods of unemployment benefit which are more than 13 weeks apart but which are linked by periods of sickness benefit or training allowance count as one period. Earnings-related supplement may be payable on the same basis as that for sickness benefit. Generally speaking anyone claiming unemployment benefit has to be registered for employment at a local office of the Manpower Services Commission (in Northern Ireland the Department of Manpower Services) which helps people to find jobs.

Death Grant

A death grant is payable on the death of a contributor or a contributor's near relative. It is normally £30 for an adult and a smaller sum for a child.

SUPPLEMEN-TARY BENEFITS

Any person aged 16 or over who is not in full-time work and who does not have enough money to live on may be entitled to supplementary benefit. It is not awarded to people attending school or for the requirements of people involved in an industrial dispute (dependants of strikers, however, are covered). In Northern Ireland a residence condition must also be satisfied. The benefit takes the form of a supplementary allowance for people under the minimum retirement age, and a supplementary pension for those over. The benefit is the amount by which a person's needs exceed his or her available resources, both being defined by rules approved by Parliament. The calculation of needs is based on different amounts for single people and family groups (for blind people there are special higher amounts) with, in each case, an addition for rent. A higher long-term scale is used for retirement pensioners and for people under pension age who have received supplementary benefit for more than two years without having to register for work. Additions can be made for requirements such as a special diet or extra heating. Certain needy groups receive the heating addition automatically. A single payment may be made to meet an exceptional need. When resources are calculated, most social security benefits are taken into account in full. Part of most other income including part-time earnings, disablement benefit and war widow's pension is ignored, as is the capital value of an owner-occupied house or capital resources of less than £,1,250.

The payment of a supplementary allowance to an able-bodied person of working age may be conditional on registering for work at an unemployment benefit office of the Department of Employment or, in Northern Ireland, the Department of Manpower Services. The supplementary benefits scheme is administered by a Supplementary Benefits Commission within the Department of Health and Social Security in England, Scotland and Wales; there is a similar commission in Northern Ireland.

The Supplementary Benefits Commission also has a duty to influence people without a settled way of living to lead a more normal life. It provides temporary accommodation for them in 21 reception centres, one of which is administered by a local authority on its behalf. For men who have been unemployed for long periods and who are receiving supplementary allowances, the Commission runs 17 re-establishment centres, three of which have residential accommodation, where they are given help to fit them again for work. These provisions do not apply in Northern Ireland.

FAMILY INCOME SUPPLEMENT Family income supplement is a cash benefit for families with small incomes where the head of the family is in full-time work and where there is at least one dependent child. It is payable when the gross weekly income of a family falls below a prescribed amount, fixed at £54 a week where there is one child plus amounts ranging from £4 to £5 for each additional child. The weekly rate of the supplement is half the difference between the family's income and the prescribed amount up to a maximum of £12.50 for a one-child family and this is increased by £1 for each additional child.

Families receiving the supplement are automatically entitled to a number of other benefits including an additional £1 a week for heating, free school meals, milk and vitamins for expectant mothers and for children under school age, exemption from prescription charges and National Health Service charges for

dental treatment and glasses.

A similar, but independent, scheme is run in Northern Ireland.

WAR PENSIONS AND RELATED SERVICES The war pensions scheme is administered throughout the United Kingdom by the Department of Health and Social Security. Pensions are payable to people disabled as a result of service in the armed forces or from injuries received in the merchant navy or civil defence during war-time or to civilians injured by enemy action.

The current basic pension for 100 per cent disablement for a private soldier is £38 a week, but the amount varies according to rank and to the degree of disablement. Allowances for a wife and children are paid in addition to the basic pension. There is a wide range of supplementary allowances, the main ones being for unemployability (£24.70 a week), constant attendance (up to £15.20 and, exceptionally, £30.40 a week), comforts (£3.30 or £6.60 a week), and lowered standard of occupation (up to £15.20 a week). An age allowance (between £2.65 and £8.20 a week) is payable to disabled pensioners who are aged 65 or over and whose assessment is 40 per cent or more.

Pensions are also paid to war widows and war orphans. The standard rate of pension for widows of private soldiers is £30.20 a week, with additional allowances for their children and, in certain cases, a rent allowance (up to £11.50 a week). There is an additional allowance of £2.95 for widows aged 65 which is increased to £5.90 at the age of 70. Parents or other relatives who were dependent on a person whose death resulted from service in the Forces may receive pensions

if they are in financial need.

The Department of Health and Social Security maintains a welfare service for war pensioners, war widows and war orphans. It works in close co-operation with many voluntary and ex-Service organisations who give financial aid and personal help to disabled ex-Service men and women and their families.

TAXATION

Social security benefits (other than child, maternity, unemployment, sickness, invalidity, injury or disablement benefit) are included in the taxable income on which income tax is assessed. On the other hand various income tax reliefs and exemptions are allowed on account of age or liability for the support of dependants. Supplementary benefit, family income supplement, attendance allowances and war disability pensions including supplementary allowances, war widows' pensions and allowances for children are not taxable.

OTHER WELFARE BENEFITS In addition to payments provided under the social security legislation, there are a number of other benefits for which people with low incomes may be eligible. These include legal aid and assistance (see p 123), rent rebates and allowances (see p 187), rate rebates (see p 156), exemption from health service charges (see p 127) and free school meals (see p 156).

VOLUNTARY SERVICES

The State services are complemented by those provided by voluntary organisations and by individual volunteers. Voluntary organisations, especially the churches, pioneered the development of many social services by providing schools, hospitals, clinics, dispensaries and social and recreational clubs. However, these facilities were not uniformly spread throughout the country and did not cover everyone in need. Gradually the State accepted responsibility for the major services by developing a comprehensive structure to ensure a minimum standard of living and well-being for the population.

State and voluntary social services work in co-operation. Central and local government make grants to the voluntary agencies. Public authorities plan and carry out their duties taking account of the work of voluntary organisations.

Local authorities and voluntary agencies provide residential care for elderly, disabled, mentally ill and mentally handicapped people and for children. It has been estimated that about 5 million people take part in some voluntary work during the course of a year.

Co-ordination of government interests in voluntary social service throughout Britain is the responsibility of the Home Office Voluntary Services Unit.

Many voluntary organisations are registered charities, and in England and Wales the Charity Commission, a government agency, gives free advice to trustees of charities, making schemes to modify their purposes or facilitate their administration when necessary. It maintains central and local registers of charities which are open to public inspection, and it investigates and checks abuses, though it has no power to act in the administration of a charity.

Voluntary Organisations

There are thousands of voluntary organisations ranging from national bodies to small individual local groups. Most are members of larger associations or are represented on local or national co-ordinating councils or committees. Some are chiefly concerned with giving personal service, others in the formation of public opinion and exchange of information. Some carry out both functions. They may be staffed by both professional and voluntary workers.

The main voluntary body in England which aims to provide central links between voluntary organisations and official bodies is the National Council of Social Service which works to extend the involvement of voluntary organisations in dealing with social issues, to protect the interests and independence of voluntary agencies, and to provide them with a range of advice, information and other services. There are also the Scottish Council of Social Service, the Council for Social Service for Wales and the Northern Ireland Council of Social Service, which perform similar functions.

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, who help 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, Task Force, Scouts and Girl Guides.

Voluntary service to the sick and disabled 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, MIND (National Association for Mental Health), the National Society for Mentally Handicapped Children, the Spastics Society, Alcoholics Anonymous, Age Concern, Help the Aged and their equivalents in 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 and the Jewish Welfare Board.

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 flatlets and residential clubs for the elderly, helps with family problems and assists in hospitals and clinics, as well as doing relief work in emergencies.

Some 825 Citizens Advice Bureaux give explanation and advice to citizens who are in doubt about their rights or who do not know about the State or voluntary services available. There are law centres (see p 123) and housing advisory centres in some areas.

The Volunteer Centre The Volunteer Centre is a national voluntary organisation and a centre for information and research on voluntary work, established with the aid of a government grant. There are many full-time and part-time local volunteer bureaux.

EQUAL OPPORTUNITIES FOR WOMEN

The Sex Discrimination Act 1975, one of the most comprehensive on this subject in the world, makes 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. The Act applies to both direct and indirect sex discrimination: direct discrimination is treating one person less favourably than another on the grounds of his or her sex; indirect discrimination is applying a condition or requirement which, though apparently neutral, in effect acts significantly to the disadvantage of one sex and cannot be justified on its merits. Northern Ireland has similar legislation.

Under the Equal Pay Act 1970 (and corresponding legislation in Northern Ireland), women are entitled to equal pay with men when doing work that is the same or broadly similar or work which has been given an equal value under a job evaluation scheme.

The Equal Opportunities Commission assists in the enforcement of both Acts and promotes equal opportunities between the sexes. There is a separate commission in Northern Ireland.

Preventing Sex Discrimination Employers must not discriminate against a man or woman because of his or her sex. This applies to recruitment, promotion, the provision of benefits, dismissals and training. It is also unlawful for employers to discriminate against a person on grounds of marriage. There are a limited number of exceptions including employment in private households and employment in jobs where a person's sex is a 'genuine occupational qualification', such as acting. Employers of not more than five people are exempt from the Act.

Co-educational schools, colleges and universities may not discriminate in the provision of facilities or in their admissions. Single-sex establishments are permissible, however, and there are arrangements for such institutions to move gradually towards co-education if they wish.

It is unlawful to discriminate against a man or a woman in the sale or letting of land, houses, flats and business premises. The law applies equally to public and private housing, furnished and unfurnished. The Act does not apply to lettings in a small dwelling occupied by the landlord or a near relative.

Discrimination is also unlawful in the provision of goods, facilities and services. For example, banks, building societies or finance companies must not refuse to give credit, mortgages or loans to women on terms that would be applied to men. Exceptions include services provided in certain special

care establishments such as hospitals; places used for religious purposes where religious susceptibilities would be offended; places where it is necessary to preserve decency or privacy; competitive sports in which for reasons of physique women would be at a disadvantage; and life insurance and similar matters where risk is assessed on reliable actuarial or other data.

It is unlawful to publish or place advertisements which contravene the Sex Discrimination Act whether for jobs, goods, facilities or services.

Complaints

Complaints of discrimination may be brought before the county courts in England and Wales or the sheriff courts in Scotland, except for complaints concerning employment, which are dealt with by industrial tribunals (see p 330). Complaints concerning State educational establishments must first be made to the relevant Secretary of State before they can be brought before a court. Only the Equal Opportunities Commission is responsible for handling complaints about discriminatory advertisements and can bring proceedings in matters concerning advertising. Where necessary, legal advice or assistance, or legal aid if the case is taken to court, are available for complainants with low incomes (see p 123). Legal aid is not available for industrial tribunal cases but applicants can receive advice and assistance.

Equal Opportunities Commission

The Equal Opportunities Commission helps to enforce the Sex Discrimination Act and the Equal Pay Act. Its aims are to eliminate sex discrimination and to promote equal opportunities. The Commission advises people of their rights under both Acts, and in certain circumstances, may give financial help or assist individuals to prepare and conduct a case before a court or tribunal. It may also attempt to secure a settlement. The Commission has power to conduct formal investigations and, if satisfied that practices are unlawful, can issue non-discrimination notices requiring discriminatory practices to stop. For certain formal investigations, the Commission has the power to require a person to give information and to attend hearings to give evidence. In addition it keeps the workings of the Sex Discrimination and Equal Pay Acts under review and may submit proposals for amending them to the Home Secretary and the Secretary of State for Employment respectively.

RACE RELATIONS

After the 1950s considerable numbers of people entered Britain from Commonwealth countries in the West Indies, Asia and Africa to settle and take up employment, and they make an important contribution to the economy and the public services. In 1977 the population of New Commonwealth¹ and Pakistani ethnic origin was estimated at some 1.8 million (about 3.4 per cent of the total population) of whom 40 per cent were born in Britain. Nearly three-quarters live in the south-east and the west Midlands. Although, as Commonwealth citizens, they have full political and civic rights, many suffer from social and economic disadvantages. This can partly be attributed to the fact that many initially lack the skills needed in an industrial society and occupy low-status jobs in poor environments of the older towns. Another factor, the extent of which is difficult to determine, is that of racial discrimination.

The difficulties experienced by residents of the older inner city areas are being alleviated by continuous social programmes which benefit the whole community and others which are directed at areas of special social need. Additional

¹ All Commonwealth countries except Canada, Australia and New Zealand and including, therefore, people from Cyprus, Malta and Gibraltar.

teachers have been appointed to schools with ethnic minorities and government grants are available to local authorities with substantial ethnic minority groups towards the salaries of extra staff, such as interpreters, health visitors and helpers in schools and community homes. Language teaching is recognised to be of prime importance in schools and schemes arranged for adults include classes at their place of work and language groups run by voluntary organisations. The welfare of ethnic minorities and good relations between minorities and the local community are promoted by community relations councils and other voluntary bodies.

A major report published in 1976, while showing that many members of minority groups were at a disadvantage in terms of the level of their jobs or the quality of their housing, found that minorities did not regard racial discrimination as their main difficulty in making a life in Britain but saw themselves as relative newcomers in a country where prices were rising and jobs hard to get. Only a small proportion of Asians and West Indians believed that they had personally encountered discrimination. Policies for promoting equality of opportunity among ethnic minorities are pursued against a background of legislation designed to protect them from discrimination.

Race Relations Act

The Race Relations Act 1976 makes discrimination unlawful on grounds of colour, race 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 the previous legislation passed in 1968 which, in turn, widened the scope of the first race relations legislation enacted in 1965.

The 1976 Act brought the law against racial discrimination into line with that against sex discrimination (see above), and gave complainants direct access to civil courts and, in the case of employment complaints, to industrial tribunals. Complaints concerning educational establishments are made first to the appropriate education minister. The remedies available from the courts are damages, a declaration of rights or an injunction. Industrial tribunals are also able to declare the rights of parties, make recommendations or award compensation. Legal aid (see p 123) is available to complainants with low incomes.

The 1976 Act also strengthened the criminal law on incitement to racial hatred. A prosecution made under the Act may only be brought in England and Wales by, or with the consent of, the Attorney General.

Commission for Racial Equality

The Commission for Racial Equality works towards the elimination of discrimination and to promote equality of opportunity and good relations between different racial groups. It has powers to investigate unlawful discriminatory practices and to issue non-discrimination notices, enforceable in the courts, requiring that such practices should cease. The Commission has sole responsibility for those contraventions of the 1976 Act which do not result in a particular person being discriminated against, for example, discriminatory advertisements and instructions; it may also assist individuals with their complaints. It has an important educational role and has power to issue codes of practice in employment.

The Commission supports and co-ordinates the work of nearly 100 local community relations councils operating in areas with significant minority groups; their purpose is to promote harmonious community relations. It makes grants towards the salaries of community relations officers and towards special projects which help to improve community relations or to assist members of the ethnic minorites. Particular encouragement is given to self-help schemes run by members of the minority communities.

7 Education

British education aims to develop individual abilities to the full and to shape those abilities for the benefit of society as a whole. Compulsory schooling takes place between the ages of five and 16, although some provision is made for children under five and many pupils remain at school beyond the minimum leaving age. Post-school education (mainly at universities, polytechnics and further education colleges) is organised flexibly to provide a wide range of opportunities for academic and vocational education and continuing study throughout life.

Most expenditure on education comes from public funds; some £8,660 million in 1978 which represented 6.1 per cent of the gross national product.

Most of the money is spent by local education authorities.

Priorities

Following more than two decades of substantial innovation and change, which have affected both school and post-school education, and of expansion of numbers, particularly of students in higher education, the Government is giving particular emphasis to improving the quality of education at all levels. Its policies involve increasing parental choice; allowing local education authorities to organise the publicly-maintained schools in their areas according to local wishes and to take up places for pupils at independent schools where appropriate; and plans to assist less well-off parents whose children would benefit from attendance at certain non-maintained schools.

The fall in the birth rate (see p 8) lasting more than a decade has caused the number of primary school children to decrease sharply, and over the next few years the secondary schools will face a similar decline. The trend is having its effect on teacher-training programmes (see p 159), and the development of the higher education system in the 1990s is being discussed in this context.

The Government is also encouraging further links, especially locally, between schools and industry, to try to ensure that pupils grow up with a basic understanding of the economy and the activities which are necessary for the creation of the country's wealth, and to encourage more of the able pupils to consider and prepare for careers in productive industry. Many organisations already work to improve liaison between school and industry; higher education courses are being developed with a strong orientation towards industry; and a national scholar-ships scheme for engineering students has been established.

Administration

Educational responsibilities are devolved in varying degrees to ministers of the four countries of Britain. The Secretary of State for Education and Science is responsible for all aspects of education in England, and for the Government's relations with and support for universitics throughout Great Britain. (He is also responsible for civil science, p 375). The Secretaries of State for Wales, Scotland and Northern Ireland have full educational responsibilities in their countries except that the Secretaries of State for Wales and Scotland are consulted about university education but are not responsible for it.

Administration of publicly provided schools and further education is

decentralised. Responsibilities are divided between the central government departments (the Department of Education and Science, the Welsh Office, the Scottish Education Department, and the Department of Education for Northern Ireland), local education authorities (education and library boards in Northern Ireland), and various voluntary organisations. The relationship between these bodies is based on consultation and co-operation.

Local education authorities are responsible for the provision of school education and most post-school education outside the universities, and provide grants to students proceeding to higher education (including universities). They employ the teachers and other staff, provide and maintain the buildings, supply equipment and materials and decide local policy. In Scotland the central institutions which provide most vocational further education to degree level, and colleges of education which provide teacher training, are administered by independent governing bodies. Three of the central institutions are financed by the Department of Agriculture and Fisheries for Scotland; all the remaining central institutions and all the colleges of education are financed directly by the Scottish Education Department which also pays grants to students on advanced courses. In Northern Ireland the Ulster Polytechnic (an institution of higher education) is likewise administered by an independent board of governors and is financed directly by the Department of Education for Northern Ireland. Colleges of education are controlled by the Department or voluntary agencies.

Universities are autonomous and their governing bodies are appointed according to the terms of their individual charters or statutory provisions. The Government exercises its responsibilities in relation to the universities and provides financial help to them through the University Grants Committee (see p 157).

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.

Over 11 million children attend Britain's 38,000 schools. Most receive free education financed from public funds, but a small proportion (very roughly four per cent) attend schools wholly independent of public financial support.

Boys and girls are taught together in most primary schools and in an increasing number of secondary schools. Over 80 per cent of pupils in maintained secondary schools in England and Wales and over 50 per cent in Northern Ireland attend mixed schools. In Scotland nearly all secondary schools are mixed. Most of the independent schools for younger children are co-educational, but of those providing secondary education the majority are single-sex.

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 have mostly been established by religious denominations and receive varying amounts of public finance according to type ('aided', 'controlled' and 'special agreement'). Nearly a third of the 30,470 schools maintained by local education authorities in England and Wales are voluntary schools: some 5,900 are Church of England, 2,660 are Roman Catholic, and 370 belong to other groups and religious denominations. Each publicly maintained school has a body of managers or governors, some or all of whom are appointed by the local education authority. Legislation before Parliament would provide for the wider representation of parents and teachers on school governing bodies. It is proposed that all schools should have at least two parent and two teacher governors who would in general be elected by parents and teachers. In Scotland most

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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 152).

In Northern Ireland there are two main categories of school: voluntary schools which are mainly, though not exclusively, under Roman Catholic management receiving grants of up to 85 per cent of capital costs and up to 100 per cent of running costs; and controlled schools owned and managed by the Area Education and Library Boards and having all their expenditure met from public funds. Government policy is to encourage integration between Protestant and Roman Catholic school education where there is a local desire for it, but it is not the intention to enforce integrated education against the wishes of local communities.

Fees

In England and Wales no fees are charged to parents of children attending maintained schools, and books and equipment are free. In Scotland, education authorities may charge fees where this can be done without prejudice to the adequate provision of free school education (although no authorities make use of this power).

In Northern Ireland no fees are charged to parents of children attending grant-aided schools, with the exception of grammar schools, where a small proportion

of pupils are admitted on a fee-paying basis.

Nursery and Primary Schools Successive Governments have expanded nursery education within the constraints of limited resources, and by 1978 the number of children in nursery schools or nursery classes in England had risen to over 200,000. In addition about 215,000 children under five were attending infants' classes in primary schools. This means that over half of all four-year-olds and about 15 per cent of all three-year-olds were receiving education in publicly-maintained schools. In addition many children attend informal pre-school playgroups organised by parents and voluntary bodies.

Compulsory education begins at five when children in England and Wales go to infant schools or departments; at seven they go on to junior schools or departments. The usual age of 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 or 10 and 'middle' schools covering various age ranges between 9 and 14. In Scotland, the primary schools take children from 5 to 12, normally having infant classes for children under 7, although in a few areas there are separate infant schools.

Secondary Schools

England and Wales

The publicly maintained system of education aims to give all children an education suited to their particular abilities. Over 80 per cent of the maintained secondary school population in England and Wales attend some 3,600 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. They can be organised in a number of ways including schools 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 'tertiary' college for pupils over 16. Most of the remaining children receive their secondary education in 'grammar' and 'secondary modern' schools to which they are allocated after selection procedures at the age of 11; in 1978 there were 320 grammar schools in England and Wales and 671 secondary modern schools. Legislation passed in July 1979 removed the compulsion on

local education authorities to reorganise their schools on comprehensive lines. A Bill before Parliament would ensure that parents' wishes are taken into account as fully as possible in the choice of schools for their children, that parents receive full information about the schools available, and that they have open to them an effective channel of appeal at a local level.

In the past a small number of selective and otherwise independent grammar schools have received direct grant payments from central government funds in return for providing places for certain more able children. The system was being phased out but the Government which took office in May 1979 has introduced legislation to establish an assisted places scheme which would provide help for parents through an income-related grant towards fees and would differ from the direct grant scheme in a number of important respects: for example, it would ensure a better geographical spread of opportunity. The purpose would be to allow such children the opportunity to benefit from the type of education provided in cases where their parents could not afford the fees.

Scotland

Secondary education in Scotland is almost completely organised according to the comprehensive principle and virtually all pupils in education authority secondary schools are in schools with a non-selective intake. The majority of schools are six-year comprehensive schools. Because of local circumstances there are some comprehensive schools at which courses may extend to four years or less; pupils may transfer at the end of their second or fourth years to a six-year comprehensive school.

Northern Ireland

Northern Ireland secondary education is organised largely along selective lines. An invitation previously extended to the education and library boards to plan a restructuring along comprehensive lines has been withdrawn.

Independent Schools Independent schools receive no grants from public funds but all are open to inspection and must register with the appropriate government education department which has power to require them to remedy any objectionable features in their premises, accommodation or instruction and to exclude any person regarded as unsuitable to teach in or to be the proprietor of a school. In default, the appropriate Secretary of State can, in effect, close a school, but schools have a right of appeal to an independent tribunal against any of the requirements. There are about 2,300 registered independent schools.

Independent schools cater for pupils of all ages. The largest and most important of them are the public schools, which accept pupils at about 12 or 13 years of age usually on the basis of a fairly demanding examination. There are about 460 public schools in England and Wales, most of them single-sex (about half of them for girls) and at least partly boarding; but there are some co-educational schools, and certain boys' schools have recently begun to admit girls direct to their top forms. Combined tuition and boarding fees in the public schools are on average £2,100 a year, but some of this may be remitted for children winning competitive scholarships. Local education authorities in England and Wales may assist with the payment of fees for children at independent and other non-maintained schools; or they may take a specified number of places at such schools for pupils winning competitive scholarships. A number of preparatory schools,

¹ 'Public schools' are usually taken to mean those schools in membership of the Headmasters' Conference, the Governing Bodies Association or the Governing Bodies of Girls' Schools Association. They should not be confused with the State-supported public schools in Scotland.

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day and boarding, co-educational and single-sex, prepare children for entry to the public schools.

Special Education

Special education is provided for children who require it because of physical or mental disability either in ordinary schools or special schools (including hospital schools). It has long been government policy to send as few handicapped children as possible to special schools, and a law yet to be brought into effect in England and Wales provides for such children to be educated in ordinary schools whenever practicable and compatible with efficient teaching. There are, however, some 1,800 separate special schools (both day and boarding) for a number of categories of disability. These are the blind, partially sighted, deaf, partially hearing, delicate, educationally subnormal (mentally handicapped in Scotland), epileptic, maladjusted, physically handicapped, autistic and those suffering from speech defects. There is no separate category for the delicate in Scotland. As many children have multiple handicaps, there is a growing tendency to relate educational provision to an assessment of overall needs.

A new framework of special education, based on the concept of special educational need, was recommended by the Warnock Committee in 1978 (see Bibliography). It would cover not only children with disabilities of mind or body but also those who have significant difficulties in learning, many of whom are at present the concern of remedial services, as well as those with emotional and behavioural disorders. The Committee's recommendations have been widely discussed and are being reviewed by the Government.

Teachers

Teachers in publicly maintained schools are appointed by local education authorities or schools, governing bodies or managers. There are more than 550,000 teachers (including the full-time equivalent of part-time teachers) in publicly maintained and assisted schools in Britain and the pupil/teacher ratio is about 20 to 1. Teachers must hold qualifications approved by the appropriate education department. Their salaries are determined by nationally negotiated scales, taking account of qualifications, responsibilities and experience.

The Curriculum

In England and Wales the secular curriculum in maintained schools is the responsibility of the local education authority, or, in the case of secondary schools, of the schools' governors. In practice, responsibility is largely devolved upon head teachers and their staff. In Wales, the Welsh language is taught and is used as either the main or secondary medium of teaching in some schools. Her Majesty's Inspectors of Schools are responsible to the Secretary of State for Education and Science and the Secretary of State for Wales for the inspection of all schools, including independent schools. They review and report on the content and value of the education provided and advise local education authorities, schools and the Government. Local education authorities also employ inspectors or advisers to guide them on maintained schools. Institutions concerned with the education and training of teachers are additional sources of advice. Curriculum materials and further guidance and encouragement for school-based research and development is available to teachers through the Schools Council for Curriculum and Examinations. The Council, an independent body representative of all educational interests, acts as an advisory body and sponsors and carries out research and development work on curricula, teaching methods and examinations in primary and secondary schools. The Schools Committee for Wales carries out similar activities in Wales. In many cases there are Teachers' Centres (some 500 in England and Wales) at which teachers meet for curriculum development work, discussion and in-service training.

In Scotland the function of Her Majesty's Inspectors is in general the same as in England and Wales; the content and balance of the curriculum is kept under continuous review by the Consultative Committee on the Curriculum. Provision is made, where appropriate, for the teaching of Gaelic. Northern Ireland has a Schools Curriculum Committee which works in close liaison with the Schools Council; the Inspectorate of the Department of Education helps and advises teachers and inspects and evaluates the work of all schools.

Religious Education in Schools

In England and Wales by law all children in county or voluntary schools receive religious instruction and take part in a daily corporate act of worship unless their parents choose otherwise. In county schools, and sometimes in voluntary schools, religious instruction of a non-denominational character is given which may include the study of comparative religions. In all kinds of voluntary school there is opportunity for denominational instruction. In Scotland, subject to safeguards for the individual conscience, religious instruction must be given, but the content is determined by education authorities and by the schools themselves. Roman Catholic children generally have their own schools. 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.

Educational Standards

The content, balance and breadth of the school curriculum, the extent to which it meets national needs, and the question of educational standards have been the subject of continuing public interest in recent years. A number of initiatives have been taken, by the Government and others, to stimulate discussion and review.

There is a general concern that each school's curriculum should meet the needs of the individual and of modern Britain, and that there should be a coherent and soundly-based means of assessment for individual pupils, for schools, and for the educational system as a whole. The period of rapid change and experiment in the school curriculum and teaching methods has given way to one of re-appraisal. The new methods (such as the child-centred approach, mixed-ability teaching and integrated and new subjects) have become a standard part of teaching practice in some schools, while others have retained traditional approaches and many a mixture of the two.

The Assessment of Performance Unit of the Department of Education and Science, which promotes the development of methods of assessing and monitoring the performance of children at school, has commissioned research teams to develop tests suitable for national monitoring in English language, mathematics and science. The first national survey of mathematics performance involved samples of 13,000 primary and 13,000 secondary school children. Language monitoring began in 1979 and is being followed by science monitoring in 1980. At the same time the Unit is being asked to devise tests to set national standards in reading, writing and arithmetic.

Educational Aids

In the majority of schools, teachers and pupils make use of a range of educational aids to assist the processes of teaching and learning. In addition to printed resources, these also include audio-visual aids of every kind which may be commercially made or produced in a resource centre, either within the school or in one serving all the schools in a local education authority's area. Educational broadcasting is of major importance. Almost all the schools are able to receive radio and television programmes. Flexibility in use is increased when these are recorded; most educational radio programmes are used in this way and an increasing number of educational television programmes are also used in

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recorded form. In addition the British Broadcasting Corporation produces a large number of radiovision programmes which, in effect, are low cost tape/slide units. Teachers' notes and pupils' pamphlets accompany many broadcast series. Each year more than 500 hours of school radio and 600 hours of school television are transmitted by the BBC and the Independent Broadcasting Authority.

The Council for Educational Technology for the United Kingdom and the Educational Foundation for Visual Aids, among their other functions, advise those connected with education on the use of audio-visual aids. In Scotland this function is undertaken by the Scottish Council for Educational Technology.

Computers are increasingly used to assist learning, to plan timetables, and in the management of courses.

Secondary School Examinations There is no national school-leaving examination in England and Wales, but secondary school pupils may attempt examinations, in various subjects, leading to the Certificate of Secondary Education (CSE) or the General Certificate of Education (GCE). Both the CSE and the GCE Ordinary ('O') level are designed for pupils completing five years of secondary schooling and are normally taken at the age of 16. The GCE Advanced ('A') level is normally taken after a further two years' study. The CSE is controlled by 14 regional examining boards while the GCE examinations are conducted by eight independent examining boards, most of them connected with a university. Entries for GCE examinations are accepted from candidates at further education establishments and from candidates entering privately.

The highest grade in the CSE (grade 1) is widely accepted as being of the same standard as at least grade C at GCE 'O' level and these are the qualifying grades for entry to further education and training. The 'A' level examination is the standard for entrance to higher education, university and to many forms of professional training. The examination system has been widely discussed for some years by the Schools Council and others and among suggestions for change is the introduction of an additional examination, the Certificate of Extended Education (CEE), to be taken after a one-year course by young people who stay on in full-time education after 16 but for whom 'A' levels are not suited. The Government is to review the whole examination system (including the proposed CEE) in the light of further consultations and advice, with a special regard to the maintenance of standards.

In Scotland examinations are conducted by the Scottish Certificate of Education Examination Board. School pupils in the fourth year of secondary courses sit an examination at 16 years for the Ordinary grade of the Scottish Certificate of Education, and pupils in the fifth or sixth year are presented for the Higher grade. Passes at the Higher grade are the basis for entry to university 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 a Certificate of Sixth Year Studies. Proposals have been made for the development of courses suitable for less able pupils who do not take or achieve a low grade in the 'O' grade examination as well as courses more challenging than 'O' grade for particularly able pupils.

In Northern Ireland candidates may take the Northern Ireland General Certificate of Education or the Northern Ireland Certificate of Secondary Education, which are equivalent to those examinations in England and Wales.

The International Baccalaureate, which is offered to sixth formers by several educational institutions in Britain, leads either to a diploma, or to separate subject certificates, the latter being recognised for admission to higher education in Britain and many other countries.

Health and Welfare of School Children

Physical education, including organised games, is part of the curriculum of all schools. Those receiving financial assistance from public funds must have the use of a playing field, and most secondary schools have a gymnasium.

The Department of Health and Social Security is responsible for the medical inspection of school children and for advice and treatment of specific medical

and dental problems associated with children of school age.

Local education authorities must provide free school milk, normally onethird of a pint (0·19 litre), on each school day, for all pupils in maintained special schools, pupils up to seven years in other maintained schools, and, on health grounds, to pupils up to eleven. They have discretionary powers to provide free milk for all other junior pupils in maintained schools. The authorities must also provide for all day pupils in maintained schools a midday meal at a subsidised charge (which is remitted in cases of need). Under certain conditions the authorities must provide free school transport, and they have discretionary powers to assist financially in the provision of transport for pupils between their home and school. Legislative proposals before Parliament would relax the obligation on authorities to provide school milk, meals and free transport.

School Building Local education authorities and voluntary bodies (in Scotland education authorities) are responsible, under the general supervision of the central departments, for providing the schools and other buildings needed for public education in their areas. The central departments determine the maximum size of the authorities' individual programmes in the light of national priorities; they also offer guidance to authorities in various ways.

> Since 1945 an extensive school building programme has been carried out resulting in the completion of about 16,300 new schools in Britain, together with extensions, alterations and remodelling of existing schools; over q million new

places have been provided.

Grants of up to 85 per cent of the approved cost are normally available from the Department of Education and Science or the Welsh Office for the building of new voluntary aided schools and for alterations and external repairs to existing aided schools. In Northern Ireland capital grants of 85 per cent are available for voluntary schools managed by maintained school committees and voluntary grammar schools which have entered into an agreement under statutory provisions.

The school building programme has provided for new ideas and methods in design and construction. Industrialised building techniques have been widely adopted. New schools are designed to be light, airy and colourful as well as to have enough teaching area and space for auxiliary activities and outdoor games. Space is being used more flexibly, particularly in primary schools to meet the

needs of new teaching methods.

POST-SCHOOL **EDUCATION**

Education for those who have left school is organised very flexibly. It is available to everyone above school-leaving age, is provided at all levels and may be part-time or full-time, vocational or non-vocational.

More than a third of young people receive some form of post-school education compared with a fifth in 1965. Many courses lead to recognised qualifications, varying from degrees and professional qualifications through technician level to qualifications similar to those obtained before leaving school. Further education is a broad term usually taken to refer to all post-school education outside the universities. Higher education (postgraduate, first-degree and similar level work) is provided at universities and on advanced courses at polytechnics and other establishments of higher and further education. Adults of every age make EDUCATION 157

extensive use of facilities for the educational and cultural leisure activities included under the term 'adult education' (see p 161).

Institutions

The principal institutions of post-school education are the 45 universities (see p 158); the 30 polytechnics in England and Wales and the 14 Scottish central institutions, in which advanced (or higher) courses outside the universities are increasingly being concentrated; the Ulster Polytechnic in Northern Ireland; and well over 600 other colleges which are maintained or assisted from public funds, some of which provide a very wide range of courses, while others concentrate on particular subjects. These colleges include the 'liberal arts' colleges and institutions of higher education in England and Wales into which the former colleges of education (for teacher training) have been assimilated. All these institutions offer courses leading to recognised qualifications, while their premises as well as school and other premises are often also used for adult education.

Apart from the universities, most establishments of post-school education are maintained and administered by the local education authorities. The Scottish central institutions, however, the Scottish colleges of education and the Ulster Polytechnic do not come under the control of the education authorities, but are managed by independent governing bodies, representative of the authorities and other appropriate interests.

In addition, there are many independent specialist establishments, such as secretarial colleges, correspondence colleges and colleges teaching English as a foreign language; a number of voluntary bodies and private undertakings providing cultural and general education, sometimes with financial or other assistance from local education authorities; and a large number of other education and training schemes run by public or private organisations.

Finance

Most establishments for post-school education are either maintained or assisted from public funds. Where industrial training is provided by a college, the charges are the responsibility of the employer, and broadly reflect the economic cost of provision.

Although largely dependent on public funds, the universities are guaranteed as autonomous institutions by a special financial arrangement. The University Grants Committee is appointed by the Secretary of State for Education and Science to advise on State aid to the universities; its members are drawn from the academic and business worlds. This body acts as a link and buffer between the Government from which it receives a block grant and the universities to which it allocates this grant. So, although the Government is responsible for financing over 90 per cent of universities' expenditure (universities or colleges within universities may have their own investments, endowments and budgets), it does not control their work or teaching. The Open University (see p 159) is financed directly by the Department of Education and Science and in Northern Ireland government grants are made direct to the universities by the Department of Education on the advice of the University Grants Committee.

Students

Well over 839,000 students take full-time and sandwich courses (courses where substantial periods of full-time study alternate with periods of supervised experience on a relevant job) at universities and other major establishments of further education in Britain (1976–77 figures). Of these about 279,000 are at universities while another 245,000 follow advanced courses outside universities, at colleges of further and higher education, polytechnics and Scottish central institutions. More than 314,000 take non-advanced courses, most of them studying for recognised vocational or educational qualifications.

Additionally, there are over 3.3 million part-time students, over 600,000 of whom are released by their employers for further education during working hours. Many of the remainder take part in adult education classes (see p 161).

Student Grants

Many full-time students are helped by awards from public funds. These awards are mandatory for most 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.) They are assessed to cover tuition fees and a maintenance grant, but where parents can afford to contribute towards the cost this is taken into account. In England and Wales these awards are made by local education authorities up to first-degree level; in Scotland by the Scottish Education Department; and in Northern Ireland by the education and library boards. Grants for postgraduate study and research are offered by the education departments and the research councils. In all, about 90 per cent of full-time students on advanced courses receive help from public funds. Some scholarships are available from endowments and from particular industries or companies.

Higher Education The provision for higher education has almost tripled in size since 1960. It caters for about 500,000 full-time and sandwich students and about 250,000 part-time students through a variety of courses and in a variety of institutions. More than 12 per cent of 18-year-olds enter courses of higher education. This expansion has been achieved by creating ten new universities and by developing a number of colleges into universities; by forming 30 polytechnics specialising in advanced work out of further education colleges; and by expanding the size of all these institutions. Colleges of education which specialised in training teachers were expanded rapidly to cope with the rising numbers of pupils in schools but faced with the prospect of a fall in numbers (due to a fall in the birthrate) some have been closed while many have been amalgamated with other colleges, leading in some cases to the development of institutes or colleges of higher education providing a range of courses.

The number of students taking full-time and sandwich courses (excluding teacher training) is evenly divided between science-based and arts-based courses; although this is not a matter for explicit government policy, it has been the subject

of much public discussion.

Universities

There are 45 universities in Britain, including the Open University, compared

with 17 in 1945.

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, Newcastle upon Tyne, Nottingham, Oxford, Reading, Salford, Sheffield, Southampton, Surrey, Sussex, Warwick, and York. The London Graduate School of Business Studies and the Manchester Business School also have university status. The federated University of Wales includes five university colleges, the Welsh National School of Medicine, and the University of Wales Institute of Science and Technology. 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 New University of Ulster in Coleraine.

The universities of Oxford and Cambridge date from the twelfth and thirteenth centuries, and the Scottish universities of St. Andrews, Glasgow,

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Aberdeen and Edinburgh from the fifteenth and sixteenth centuries. All the other universities were founded in the nineteenth or twentieth centuries.

Admission to universities is by examination or by selection. Prospective candidates for nearly all the universities apply for places through the Universities Central Council on Admissions. The only students to apply directly are applicants to the Open University and British candidates who apply only to the universities of Glasgow, Aberdeen and Strathclyde.

Most students at universities are undergraduates: in 1977–78 there were about 280,525 full-time university students in Britain, including over 48,871 postgraduates. Just under a half lived in colleges and halls of residence, over one-third were in privately rented accommodation, and the remainder lived at home. There were about 32,209 full-time university teachers paid wholly from university funds. The ratio of staff to students was about one to eight or nine, 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 may require five or six. In spite of the extension of facilities for obtaining a degree in other ways the majority of students on full-time first-degree courses are at universities (the non-university sector offers a variety of other higher-education courses besides degrees).

Actual degree titles vary according to the practice of each university; in England and Wales the commonest 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), Doctor of Philosophy (PhD); while in Scotland Master is used for a first degree. On the other hand, uniformity of standards between universities is promoted by the practice of employing outside examiners for all university examinations, and the general pattern of teaching (a combination of lectures, small group seminars or tutorials with practical classes where necessary) is fairly similar throughout Britain.

In addition to the universities, there is the University College at Buckingham which opened in 1976 and which receives no assistance from public funds. It does not yet award degrees, but its Licence has been accepted as the equivalent of a degree by relevant professional bodies and by other universities for admission to postgraduate studies.

The Open University The Open University is a non-residential university which provides part-time degree and other courses, using a combination of television and radio broadcasts, correspondence courses and summer schools, together with a network of viewing and listening centres. No formal academic qualifications are required to register for these courses, but the standards of its degrees are the same as those of other universities. The university's first degree, the BA (Open), is a general degree awarded on a system of credits for each course completed; the average amount of study needed for a full course is estimated at 12 to 14 hours a week. The first courses began in 1971, and in 1979 some 75,040 undergraduate and over 7,000 associate students were following courses. About 5,322 people a year obtain degrees from the Open University—about 1 in 14 of the total for Britain. The university also has a consultancy service to make its advice and facilities available on a fee-paying but non-profit-making basis to bodies throughout the world.

Teacher Training

In order to teach in a maintained school in England and Wales all new entrants to teaching must generally have taken a course of professional teacher training. From 1980 onwards the most usual route to a teaching qualification will, for

non-graduates, be by way of a three- or four-year course leading to the Bachelor of Education degree; for graduates it will be by way of a one-year postgraduate Certificate of Education course. Teacher training is being integrated with the rest of higher education with training places concentrated in polytechnics, institutes or colleges of higher education and universities.

In response to the change in demand for newly trained teachers, caused by restrictions on public expenditure and the decline in the size of the school population, the number of teacher-training places planned for 1981 has been considerably cut.

In Scotland all teachers in education authority and grant-aided schools must be registered with the General Teaching Council for Scotland. All teachers of academic subjects in Scottish secondary schools must be graduates.

Teacher training capacity in Scotland has also been reduced because of demographic trends but is being maintained in the ten separate colleges established for this purpose. Courses in colleges of education lead to the award of a Teaching Qualification (Primary Education) or a Teaching Qualification (Secondary Education). Graduates and holders of specialist diplomas undergo a one-year course; courses in practical and aesthetic subjects for non-graduates extend to two, three or four years. Most Scottish colleges of education also offer four-year courses leading to the degree of Bachelor of Education.

In Northern Ireland teacher training takes place in the two university education departments, three colleges of education, the Ulster Polytechnic and one technical college. The principal courses are three-year (certificate) and four-year (Bachelor of Education) but there are also one-year courses for graduates or holders of other appropriate qualifications.

Increased importance is being given to the continued professional education of practising teachers in Britain, and local authorities, universities and colleges provide a variety of in-service courses.

Other Advanced Courses

In 1977–78 about 339,000 students, including part-time students, were taking advanced courses other than in universities in a wide variety of subjects, including architecture, art and design, catering, engineering, natural sciences, social work and business and management studies and teacher training. An increasing proportion of the students were taking courses leading to the awards of the Council for National Academic Awards (CNAA). The Council has power to award degrees and other academic qualifications, comparable in standard with those granted by universities, to students who successfully complete approved courses of study in establishments which do not have the power to award their own degrees. 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 England and Wales a major contribution to higher education provision is being made by 30 major national institutions named 'polytechnics'. These provide all types of courses (full-time, sandwich and part-time) on a wide range of subjects at all levels, though the trend is towards a concentration on advanced work. In Scotland similar provision is made in 14 central institutions and a few further education colleges managed by education authorities, though there is a tendency for the Scottish establishments to specialise more by subjects than do the English polytechnics. In Northern Ireland such higher education provision is concentrated within the Ulster Polytechnic.

The institutes and colleges of higher education, formed as the result of the integration of teacher training with the rest of further education, account for a significant proportion of higher education students, and some other further

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education colleges have some higher education courses, usually of a specialised nature.

Vocational Courses

The British education systems offer facilities for obtaining all types of vocational education and training, to both school leavers and adults, and are notable for providing alternative routes to higher qualifications for those who have found themselves unable to continue full-time education after leaving school.

Many broadly vocational educational courses are available at the polytechnics and the 600 or so further and higher education colleges. Some university courses have always had close links with certain industries and professions and these

links have grown.

There is a wide variety of courses for people in various trades and occupations, leading to nationally recognised qualifications at the end of courses of up to five years. At technician level the Technician Education Council (TEC) has responsibility for developing a unified system of courses in England, Wales and Northern Ireland and courses leading to TEC certificates and diplomas and higher certificates and diplomas are replacing those formerly available. (TEC higher diplomas approach the standard of a pass degree.) A similar council has been established in Scotland.

Many further education colleges offer courses in shorthand, typing, book-keeping, and office studies. More advanced business studies are generally available in polytechnics and some other colleges. The further education sector makes a major contribution to management education at all levels (for example, courses for the postgraduate Diploma in Management Studies for those with experience of the work are run by about 75 colleges) and this work in England and Wales is co-ordinated by 12 regional management centres.

Much business education is related to the specialised examination requirements of various professional bodies, and courses leading to them are provided in many colleges, although numbers of candidates seeking such qualifications do so through correspondence courses. There is a Business Education Council with the same functions as the Technician Education Council (see above) in relation to courses of business education. In Scotland, similar courses lead to the Scottish National Certificate, the Scottish Higher National Certificate and the Scottish National Diploma in Business Studies, awarded by the Scottish Business Education Council.

Adult Education

There is increasing recognition that school and even immediately post-school education cannot provide for everyone's needs throughout life, and growing emphasis is put on opportunities for adults to return to both general and vocational education and training. The success of the adult literacy campaign, for example, has given rise to greater interest in basic education for adults and its continuation into further opportunities for education throughout life.

'Adult education' is generally taken to mean courses of post-school education outside the main areas of higher, professional and technical education. Courses are provided by local education authorities, certain residential colleges, the adult education ('extra-mural') departments of universities and various voluntary and

statutory bodies.

A major part of adult education is financed by local education authorities and provided mainly in their establishments, including schools used for adult evening classes and in some cases in 'community schools' which provide educational, social and cultural opportunities for the wider community. Most of the courses are part time. In addition local authorities maintain or aid most of the short-term residential colleges or centres, of which there are 45 in England and

Wales, and which provide courses varying in length between a weekend and a fortnight. Many of the courses are practical, but there are widespread opportunities for academic study.

Long-term residential colleges (eight in England and Wales, one in Scotland) which are grant-aided by the central government departments, provide courses of one or two years, some of which lead to a diploma. The colleges aim to provide a liberal education and do not apply academic entry tests. Most students admitted to them are entitled to full maintenance grants.

The adult education departments of the universities and the Workers' Educational Association (WEA), the largest of the recognised voluntary bodies, provide extended part-time courses of more academic studies, though recently the number of short courses organised for special (including vocational) interests has increased. Often the WEA provides the organisation and the teaching is provided by the university departments.

There are a large number of other organisations, both national and local, which provide many kinds of education and training. Several non-political bodies, such as the National Federation of Women's Institutes and the National Council of Young Men's Christian Associations, receive government grants; others are commercially or privately financed. Some are open to the public as a whole, others to a particular group, such as the disabled or the unemployed, or the employees or members of an organisation.

The National Institute of Adult Education provides a national centre of information, research and publication for adult education, as well as a channel of co-operation and consultation for the many interested organisations in England and Wales. It is mainly financed by contributions from local education authorities and assisted by a grant from the Department of Education and Science. The Institute has a government-funded Adult Literacy Unit to act as a focus for adult literacy work, to commission special projects of relevance to local authorities, and to assist voluntary projects promoting literacy. The Scottish Institute of Adult Education is the Institute's Scottish counterpart.

Teaching Methods

The general pattern of teaching and learning on full-time courses at universities and colleges remains a mixture of lectures, prescribed or suggested reading, seminars or tutorials, exercises and tests, and, where appropriate, practical work. Modern educational aids including computers, language laboratories, radio and television for both teaching and research are widely available at most universities, polytechnics and colleges.

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. BBC radio study programmes are transmitted in half-hour sessions late at night on weekdays and in a four-hour session on Sunday afternoons. Educational television programmes are shown on Saturday and Sunday mornings, during the day on weekdays with some early and late evening transmissions. Both the BBC and independent television 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 159), producing and broadcasting radio and television programmes as part of the courses.

EDUCATIONAL RESEARCH

Research into the theory and practice of education and the organisation of educational services is supported financially by the central government education departments, local education authorities, philanthropic organisations, universities and teachers' associations. Some research is also sponsored at

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further education institutions and by a few independent organisations. The Schools Council and the Social Science Research Council are important channels

for government support.

The major institute undertaking research in education, outside the universities, is the National Foundation for Educational Research in England and Wales, an autonomous body which derives its income mainly from funds received from research projects and from corporate members, including local education authorities, teachers' organisations and universities. It also receives an annual grant from the Department of Education and Science. There are also the Scottish Council for Research in Education and the Northern Ireland Council for Educational Research.

EDUCATIONAL LINKS OVERSEAS The interchange of ideas and the movement of people between different countries is an important part of education. School children, students, teachers and experts come to Britain from overseas to study and many British people also work and train overseas. Many of the opportunities for such movement are the result of international co-operation at government level within the European Community and within the Commonwealth and also of educational schemes, courses and professional contacts organised by a number of official and voluntary organisations in Britain. The British aid programme also encourages links between educational institutions in Britain and in developing countries.

British membership of the European Community is creating closer ties with other countries. Both in schools and in the colleges and universities there has been an expansion of interest in European studies and languages. Post-to-post exchanges of teachers have been encouraged and exchanges take place between school children and students within the Community. 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 school education for children of people employed in the European Community institutions.

Three aspects of education being given particular attention within the Community are foreign language learning, the language and other educational needs of migrants and their children, and the relationship between education and working life. In addition, studies are being made of policies of admission to higher education in member countries.

Educational Exchanges The promotion of cultural and educational relations with other countries is a major concern of the British Council (see p 69) and it plays an important part in the management of the British aid programme to education. It recruits teachers for work overseas, organises short visits overseas by British experts and encourages cultural exchange visits. The Council is also responsible for a variety of schemes to promote academic interchange including the Academic Links Scheme between universities and higher education institutions in Britain and Europe; the Commonwealth University Interchange Scheme; the Academic Interchange with Europe Scheme; the Young Research Workers Interchange Scheme; and a number of schemes to encourage exchange between Britain and individual countries overseas.

The Central Bureau for Educational Visits and Exchanges is an independent foundation financed by the Government which has considerable experience over the whole range of educational travel and exchange. It is responsible, with the League for the Exchange of Commonwealth Teachers, for the schemes for the exchange and interchange of teachers with a number of foreign and Commonwealth countries; and for the linking of British schools and local education authorities and their overseas counterparts. The resulting visits and exchanges

have been largely related to the teaching of modern languages, but other areas of the curriculum have been involved. The Bureau's publications include a series of annual guides on visits to other countries for students and teachers and

a journal published each term, called Educational Exchange.

The Inter-University Council for Higher Education Overseas, funded from the official aid programme, encourages co-operation between universities in developing countries and in Britain. It assists with staff recruitment, secondment of staff from British universities, inter-departmental/faculty link schemes, local staff development, short-term teaching and advisory visits and general consultative services. The Technical Education and Training Organisation for Overseas Countries, an agency of the British aid programme, recruits teachers for work in technical education institutions overseas.

The Association of Commonwealth Universities promotes co-operation between 222 member universities in 28 Commonwealth countries. It organises meetings of various kinds, provides information (see below) and academic appointments services; administers the Commonwealth Scholarship and Fellowship Plan in Britain; and generally promotes the movement of academic and administrative staff and of students from one country to another.

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.

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. In the academic year 1977-78 there were about 123,760 overseas students in Britain of whom about 35,890 were at universities, another 50,220 were at further education colleges and the remainder learning English or training as teachers, nurses, for the law, banking and accountancy, or in industry. About 43 per cent of all overseas students were from the Commonwealth and 70 per cent were from developing countries.

Many of those who come to Britain do so for advanced training. Of the 50,300 students enrolled for full-time postgraduate study or research at British universities in 1977, 37 per cent came from overseas. Of those working for a master's degree 46 per cent came from overseas and of those working for a doctorate 34 per cent.

The majority of overseas students pay their own fees and expenses or hold awards from their own governments. In addition, over 13,000 overseas students were fully supported in 1978 under British technical co-operation with develop-

ing countries.

A range of 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 Marshall Scholarships and the independently funded Rhodes Scholarship, and the Churchill Scholarships for men and women in all walks of life. Many British universities and colleges offer scholarships for which graduates of any nationality are eligible. (The British Council and the Association of Commonwealth Universities are involved in the selection of British students for awards offered by many overseas countries.) The Atlantic College at St Donat's, south Wales (one of the colleges of the United World Colleges), provides two-year residential courses for overseas students prior to their entering university.

The Association of Commonwealth Universities publishes four handbooks

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(see Bibliography) which contain information about sources of financial aid tenable in Britain (as well as sources of financial support to enable British graduates to study or do research overseas).

The Teaching of English

The continuing increase in interest in English as a foreign language is reflected in the growth of the number of private language schools and the greater proportion of these recognised as efficient after inspection by the Department of Education and Science in collaboration with the British Council. Much of this demand is for English needed for specific educational or vocational purposes. At the same time the British Council has greatly expanded the volume of its own teaching of English overseas by opening new centres in many countries and extending existing ones. Publications and other material relating to English language teaching have also increased in number and are now a large component in publishers' lists and constitute a major export.

The BBC's English by Radio and Television Service provides a worldwide

facility for the individual learner in his or her own home.

THE YOUTH SERVICE

The aim of the youth service is to promote the social and informal education of young people by offering them opportunities in their leisure time to mix socially and to develop and enlarge their range of interests. The service is provided by a partnership between public authorities and a large variety of voluntary organisations. Membership of groups is voluntary and there is no attempt to create anything in the nature of a national youth movement.

State Involvement

The youth service forms part of the education system. Government education departments formulate broad policy objectives for the service and encourage their achievement through financial assistance and advice. They assist national and local voluntary youth organisations through grants towards administrative and building costs. The Scottish Education Department is advised by the Scottish Council for Community Education while in Northern Ireland the advisory body is the Youth Committee for Northern Ireland.

Local education authorities (education and library boards in Northern Ireland) are responsible for local administration of the youth service. Authorities provide and run their own youth clubs and centres (some of which are residential) which may be purpose-built or associated with schools. They also assist local voluntary youth groups by lending premises and equipment and by contributing to their capital and running costs. Many authorities have appointed youth committees on which official and voluntary bodies are represented, and employ youth organisers to co-ordinate youth work and to arrange in-service training. In Scotland these committees and organisers are normally concerned with services for both young people and adults.

Voluntary Organisations

Although there are many local education authority youth clubs and centres, national voluntary organisations still promote the largest share of youth activities through local groups which raise most of their day-to-day running expenses by their own efforts. These have an estimated combined membership of over 6 million. They vary greatly in character, some concentrating on social and recreational pursuits, others on educational or religious activities. Most of the national organisations in England are members of the National Council of Voluntary Youth Services, a consultative body which takes action only in the name and with the consent of its member bodies. The Council has 65 national

organisations and 47 local co-ordinating bodies as members. In Scotland, Wales and Northern Ireland there are similar representative bodies.

Among the largest of the voluntary youth organisations in membership of the National Council are the Scout and Girl Guides Associations (with about 600,000 and 800,000 members), the National Association of Youth Clubs (about 500,000), the National Association of Boys' Clubs (some 170,000) and the Youth Hostels Association (about 280,000). The three pre-service organisations (the Combined Cadet Force, Army Cadet Force and Air Training Corps) are also members. They are financially assisted by the Ministry of Defence and combine social, educational and physical development with training for possible entry to the armed forces.

Training of Youth Workers

There are some 4,000 full-time youth workers in Britain and these are supported by many thousands of part-time workers, many of them unpaid. Part-time workers usually have no professional qualification in youth work but some have allied qualifications, for instance as teachers, and a large number attend short courses and conferences on youth work. Qualified school teachers are recognised as qualified youth workers.

In England and Wales, there is a basic two-year training for youth and community workers. Provided at certain universities and higher education colleges, the course leads to the status of a qualified youth and community worker. In addition a number of teacher training colleges provide a study of youth work as a principal or subsidiary subject within teacher-training courses. In Scotland one- and three-year courses are provided at certain colleges of education and in Northern Ireland courses are provided by the Ulster Polytechnic.

Other Organisations Concerned with Young People The Duke of Edinburgh's Award Scheme, which operates through bodies such as local authorities, schools, youth organisations and industrial firms, is designed as a challenge to young people from Britain and other Commonwealth countries to reach certain standards in leisure-time activities with the voluntary assistance of adults.

A substantial sum of money is awarded by the many grant-giving foundations and trusts each year for activities involving young people.

The Royal Jubilee Trusts, formed in 1978 from King George's Jubilee Trust (started in 1935 at the 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) exist to support work involving young people aged 8 to 18 (King George's Jubilee Trust) and young people up to the age of 25 involved in community service work (the Queen's Silver Jubilee Trust). King George's Jubilee Trust has distributed over £3.5 million since 1935 and the Queen's Silver Jubilee Trust over £600,000 since May 1978.

Community Service by Young People

Thousands of young people voluntarily take part in community service designed to assist those in need, including the elderly and the disabled. Organisations providing opportunities for community service such as International Voluntary Service, Task Force and Community Service Volunteers receive grants from the Government. Many schools also organise community service activities as part of the curriculum.

The Community Projects Foundation is an independent body which advises interested organisations in England and Wales on methods of involving young people in providing service to the community. The Foundation is grant-aided by the Government and employs teams of young people who are available on request to assist such bodies as local authorities, voluntary organisations and hospital boards in promoting voluntary service.

8 Planning and 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. There is no 'national plan' for urban and land development, but there is a statutory system of land-use planning applying over the whole country and to virtually every kind of development, and there are laws dealing specifically with environmental health and the control of pollution. All 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. The underlying approach is to identify people's needs and possible ways of meeting them, and there is a growing move away from narrow land-use allocation towards broader strategic planning recognising the community's social and economic goals.

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. Large-scale planning in England and Wales is primarily the responsibility of the county councils and the Greater London Council while district councils and 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 other environmental health matters. In certain areas of planning, the two types of authority exercise concurrent powers. 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 islands areas, 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 its local offices which work closely with the district councils. The councils have local environmental health

responsibilities.

Special provisions, in addition to the general town and country planning measures, control the location of major industry (see p 221). General problems of industrial development are dealt with jointly by a number of government departments, but each development scheme, as a rule, requires the local planning authority's consent. Financial incentives from the Government encourage the location of industry in particular areas.

Throughout Britain voluntary organisations take an active interest in planning, conservation and the control of pollution.

Development Plans and Development Control 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) and indicate 'action areas' where comprehensive development or improvement is expected to start within a specified period. Local plans, which have to conform generally with the structure plan, contain detailed proposals including plans for 'action areas' and are normally prepared by district councils, though sometimes by county councils. Local plans are adopted by the planning authorities without being subject to ministerial approval unless the Secretary of State calls in a plan for his own decision. All plans are under continuous review and may be altered from time to time. Scotland has a similar planning system which can include however, the production of a regional report by regional and island authorities, outlining their broad priorities and policies. In Northern Ireland there is a single-tier system; plans are prepared by the Department of the Environment for Northern Ireland.

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 holds an examination in public of matters on which he requires more information in order to reach a decision. In the case of local plans objectors have a right to be heard, and a public local inquiry is normally held by the planning authorities for this purpose.

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. The applicant has a right of appeal to the appropriate Secretary of State if planning permission is refused or granted subject to conditions. Most appeals are transferred for decision to inspectors (in Scotland

reporters) appointed by the Secretary of State.

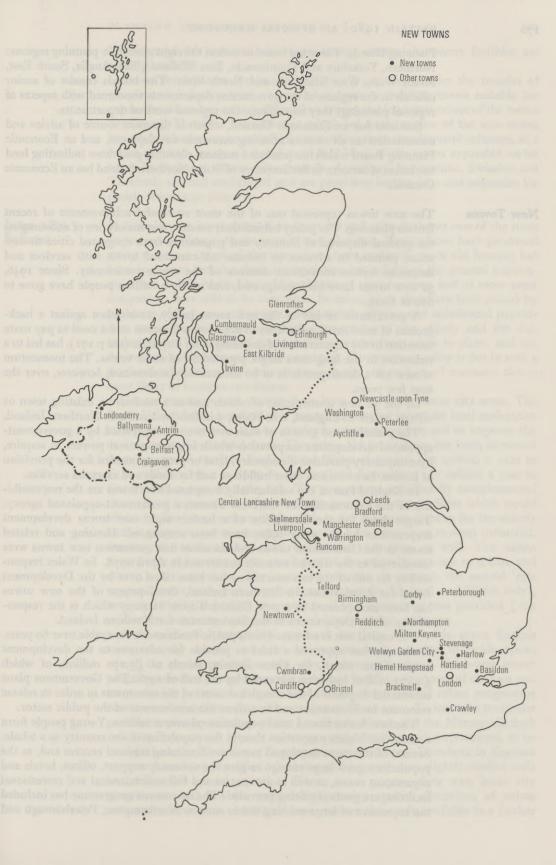
The Secretary of State can direct that a planning application be referred to him for decision. This power is exercised sparingly and usually only in respect of proposals of national or regional importance. The applicant has the right to be heard by a person appointed by the Secretary of State and a public inquiry is normally held for this purpose. In the case of development schemes of national or regional importance or of a technical or scientific nature, and if an ordinary inquiry is inadequate for the purpose, the ministers responsible may decide to set up planning inquiry commissions to carry out investigations and hold inquiries locally. Where highway development is proposed, the government minister concerned can hold such inquiries as he considers appropriate.

Similar provision is made in Northern Ireland for public participation in the planning process and for the hearing of objections. There is a right of appeal to

an independent Planning Appeals Commission.

Regional Planning

The Secretary of State for the Environment has responsibilities for regional planning in England, which is carried out with the help of the Regional Economic



Planning Boards. There is a board in each of the eight economic planning regions: Northern, Yorkshire and Humberside, East Midlands, East Anglia, South East, South West, West Midlands and North West. The boards consist of senior officials in the regions of the government departments concerned with aspects of regional planning; they co-ordinate the regional work of departments.

Scotland has an Economic Council, which is the main source of advice and consultation on all matters affecting economic development, and an Economic Planning Board which has produced national planning guidelines indicating land use issues of concern to the Secretary of State; Northern Ireland has an Economic

Council.

New Towns

The new towns represent one of the most successful achievements of recent British planning. The policy behind their creation was mainly one of encouraging the gradual dispersal of industry and population from congested cities to new areas, planned in advance to become self-contained towns with services and amenities within convenient distance of the whole community. Since 1946, 32 new towns have been designated, and nearly a million people have gone to live in them.

A government review of the new towns policy, undertaken against a background of substantial reductions in population forecasts and a need to pay more attention to the regeneration of declining inner city areas (see p 171), has led to a reduction in the long-term target populations of some towns. The momentum of new town development is to be substantially maintained, however, over the next few years.

Of the 32 new towns, most of which had as a nucleus an existing town or village, 21 are in England, 2 in Wales, 5 in Scotland and 4 in Northern Ireland.

The planning and growth of each new town is supervised by a government-appointed development corporation which is given general powers to acquire, by compulsory purchase if necessary, land or property needed for the provision of houses, factories and other buildings and for roads and essential services.

In England four of the substantially completed new towns are the responsibility of the Commission for the New Towns, a government-appointed agency. Target dates for the dissolution of a further eight new towns development corporations by the early 1980s have been announced. Housing and related assets in the Commission towns and six other first generation new towns were transferred to the district councils concerned in April 1978. In Wales responsibility for one of the two new towns has been taken over by the Development Board for Rural Wales. 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.

The capital cost is advanced from public funds and is repayable over 60 years. Parliament has approved a fund to provide for advances to the development corporations, which, for Great Britain, stands at £3,250 million, of which £2,570 million had been advanced by the end of 1978. The Government plans substantial disposals of the completed assets of the new towns in order to release resources for investment and to reduce the involvement of the public sector.

The new towns have a total population of over 2 million. Young people form a somewhat higher proportion than in the population of the country as a whole. Several of the more developed towns are becoming regional centres and, as the populations grow large enough to give the necessary support, offices, hotels and department stores, as well as art centres and full entertainment and recreational facilities, are gradually being provided. The new towns programme has included the expansion of large existing towns such as Northampton, Peterborough and

Warrington; this has the advantage, among others, that many facilities are already available.

Town development (or 'expanding town') schemes involve the transfer of people and industry from overcrowded areas to existing towns suitable for expansion; these are arranged directly between the local authorities of the towns concerned. The same consideration which led to the review of the new towns has made it necessary to review all outstanding town development schemes, as a result of which many are being curtailed. Most of the towns expanded under town development schemes (for example, Aylesbury, Basingstoke, Swindon and Thetford) are well established and are providing homes, jobs and amenities for people from large cities.

Inner City Policies

Revitalising the inner areas of many towns and cities presents one of the most important challenges to modern British planning. Past policies have produced many successes (most of the slums have been replaced, much old housing has been improved and the clean air legislation has enhanced the general environment and public health) but old problems of poor housing, and in some areas congestion, have still to be overcome. In many areas they have been joined by problems of high unemployment, decay and dereliction and unbalanced population structures with relatively high proportions of the elderly and the disadvantaged. The extent of these problems varies from place to place, and the inter-relationship between them is complex. Government policy is not to seek a universal solution but to work out for each city the package of measures that is most likely to improve conditions.

Greater resources and priority have been given to the inner city areas. The Inner Urban Areas Act 1978 gave powers to selected inner city local authorities to support the creation of new employment opportunities and to improve the environment of industrial areas. The urban aid programme has been increased from a 1977-78 level in England and Wales of under f.30 million a year to £140 million a year in 1979-80 (in Scotland from about £7 million a year to £21 million a year by 1980-81). The programme traditionally complemented the work of major social programmes by providing extra facilities which would otherwise not have been available, such as day nurseries, centres for the elderly and language classes for immigrants, but has been recast so as to cover industrial, commercial, environmental and recreational provision as well. The urban programme represents only a small part of the central assistance to urban, and other, local authorities. The main contribution is through the annual 'rate support' grant, transport supplementary grant (in England and Wales only), housing subsidy and other programmes. The Government also provided £100 million for inner city construction work between 1977 and 1979.

A co-ordinated 'partnership' approach has been adopted in seven English areas whereby central and local government work together to tackle places where the problems are greatest. 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 £7 million to £20 million a year. To meet the particular problems and opportunities of the London docklands and the Merseyside dock area the Government intends to set up urban development corporations, to be modelled on the New Town Development Corporations. Elsewhere in England 15 areas have been identified where the problems are on a slightly smaller scale but still merit special attention. These areas prepare their own inner city programmes and like the partnerships receive special allocations of urban programme resources. Additional resources are also made available to a further

14 English and five Welsh districts designated under the Inner Urban Areas Act.

In Scotland a major urban renewal exercise in Glasgow to regenerate the city's east end is 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 Northern Ireland a special effort is being made to tackle Belfast's inner city problems.

Historic Buildings and Areas

Lists of buildings of special architectural or historic 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; nearly 290,000 buildings are already listed. It is an offence to demolish 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 record of the building. Emergency 'building preservation notices' can be served by the local planning authority to protect buildings not yet listed.

The respective Secretaries of State (on the recommendation of the appropriate Historic Buildings Council) can make grants and loans for the repair or maintenance of buildings (or groups of buildings) of outstanding interest, and local authorities can make grants and loans for any building of architectural or historic interest even if it is not listed. A Government-sponsored Architectural

Heritage Fund provides loans for local historic buildings trusts.

Local planning authorities have designated for special protection over 4,000 'conservation areas' of particular architectural or historic interest. Grants and loans are available for works for the preservation or enhancement of outstanding conservation areas.

The Secretaries of State for the Environment, Scotland and Wales are responsible for the maintenance of royal parks and palaces and for the protection of ancient monuments of which about 800 are in their care. The Ancient Monument Boards recommend which monuments are considered to be of national importance and therefore worthy of preservation.

In Northern Ireland 144 historic monuments are maintained and protected by the Department of the Environment for Northern Ireland, which acts on the advice of the Historic Buildings Council in listing buildings of special architectural or historic interest, paying grants for their repair and maintenance and designating conservation areas.

Tree Preservation

The 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, impose conditions to secure the preservation or planting of trees. Landowners are generally required to replace 'preserved' trees, which die or are removed or destroyed in contravention of a preservation order.

Green Belts

In order to restrict the further sprawl of large built-up areas, to prevent adjacent towns merging into one another, and in some cases to preserve the 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 building development and where people can seek recreation) have been established or proposed on the fringes of certain urban areas. Much of London's green belt, for example, is agricultural land or woodland, some of which can be used for

recreation. There are also areas specifically for recreational use, such as country parks, public open spaces, playing fields and golf courses.

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 coastal areas of scientific interest.

A comprehensive study of the coastline of England and Wales, undertaken by the Countryside Commission in 1966–70, recommended that certain stretches of undeveloped coast of particular scenic beauty should be treated as heritage coast. There is a practical programme aimed at the designation of 42 such coasts which together would cover over 1,300 kilometres (808 miles), some 40 per cent of the undeveloped coastline. Jointly with local authorities, the Commission has defined 33 of these coasts so far, protecting just over 1,000 kilometres (621 miles).

In 1965 the National Trust (see p 182) launched its Enterprise Neptune campaign to raise funds for the nation to acquire stretches of coastline of great natural beauty and recreational value. More than £3 million has been raised so far and as a result the Trust has under its protection 622 kilometres (387 miles) of coastline in England and Wales. Some 127 kilometres (79 miles) of coast in Scotland are protected by conservation agreements with the National Trust for Scotland. In Northern Ireland 56 kilometres (35 miles) of coast and coastal path have been acquired.

In exceptional cases economic arguments override conservation; the development needs of North Sea oil and gas are making a major impact 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.

The protection of the coastline against erosion, for which the Department of the Environment, the Welsh Office and the Scottish Office are centrally responsible in Great Britain, presents difficult engineering problems and heavy costs for the maritime local authorities. All sizeable coast protection schemes drawn up by the authorities under the Coast Protection Act 1949 are investigated by government engineering staff. Substantial grants from central funds (up to a maximum of 79 per cent) may be made to the authorities. Protection against sea flooding where there is no question of erosion is the responsibility of the water authorities (see pp 274 and 285). To help to prevent the pollution of the sea and coastline, international conventions restrict the discharge of oil into the sea (see p 179).

Outdoor Advertising The display of outdoor advertisements is controlled by planning legislation. General consents have been issued for certain classes of advertisement but these can be withdrawn in particular cases where there is a serious threat to amenity or public safety. Consent for advertisements outside these classes must be sought from the local planning authority. Rural areas and urban areas requiring special protection can be designated as areas of special control which may impose more restrictive standards.

Countryside Commissions

Two Countryside Commissions (one for England and Wales, the other for Scotland) are responsible for encouraging and promoting measures to conserve

and enhance the natural beauty and amenity of the countryside and for encouraging the development 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 within easy reach of towns; the establishment of camping sites and picnic areas; and the increased use of reservoirs, canals and other waterways for bathing, sailing and other activities. Some 150 country parks and 200 picnic sites have been recognised in England and Wales by the Countryside Commission. In Scotland a large number of local authority schemes for the provision of a variety of countryside facilities have been approved for grant aid. The Commissions may undertake research projects and experimental schemes, working in consultation with local authorities and such bodies as the Nature Conservancy Council (see p 175) and the Sports Councils (see p 421). In England and Wales, the Countryside Commission may give financial assistance to public bodies and individuals carrying out countryside recreation and amenity projects. Attention is increasingly being given to techniques of countryside management to supplement the statutory planning controls.

National Parks and Areas of Outstanding Natural Beauty 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' and to make proposals for the creation of long-distance footpaths and bridleways. Ten national parks have been established: Northumberland, the Lake District, the Yorkshire Dales, the North York Moors and the Peak District in northern England; Snowdonia, the Pembrokeshire Coast and the Brecon Beacons in Wales; Exmoor and Dartmoor in south-west England. They cover some 13,600 sq km (5,250 square miles), or 9 per cent of the area of England and Wales. Administration is the responsibility of special committees or planning boards which carry out all or most of the planning functions. Some 33 areas of outstanding natural beauty have been designated, covering some 14,500 sq km (5,600 square 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 preservation, 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 central government grants. Some 2,528 km (1,580 miles) of long-distance footpaths and bridleways have been approved. Large stretches of these paths are already public rights of way.

In Northern Ireland the Ulster Countryside Committee advises on the preservation of amenities and the designation of areas of outstanding natural beauty. Eight areas of outstanding natural beauty have been designated and six areas are being managed as country parks.

Although there are no national parks in Scotland, there are five national park direction areas, in which all except minor planning applications are subject to scrutiny by the Secretary of State. The areas are: Loch Lomond-Trossachs; Glen Affric-Glen Cannich-Strathfarrar; Ben Nevis-Glen Coe-Black Mount; the Cairngorms; and Loch Torridon-Loch Maree-Little Loch Broom. Ministerial supervision, with the advice of the Countryside Commission for Scotland, is exercised over planning permission in 'areas of special planning

control' which are areas of particular beauty, designated by the Secretary of State. One such area forms part of the Pentland Hills to the south of Edinburgh. Over 98 per cent of the land in Scotland has been designated as country-side within the jurisdiction of the Countryside Commission for Scotland.

Forest Parks

The Forestry Commission (see p 291) has formed, and opened to the public, seven forest parks in some of the finest country in Great Britain: Argyll, Galloway, Glen More and the Queen Elizabeth Forest Park in Scotland; the Forest of Dean and the Wye valley woods on the borders of England and Wales; Snowdonia in Wales; and the Border Forest Park on the borders of England and Scotland. They cover some 243,000 hectares (600,000 acres), and camping and other recreational facilities are provided in all of them. The historic New Forest, in Hampshire, although not a forest park, is also open to the public. The Forestry Commission and Hampshire County Council jointly manage the Queen Elizabeth County Park in Hampshire. In addition the Forestry Commission welcomes the public to much of the land under its management. In Northern Ireland, the Department of Agriculture has established six forest parks (Tollymore, Castlewellan, Gortin Glen, Drum Manor, Gosford and Glenariff) and there are also forest scenic drives and many recreational facilities in these and other forests.

Local Footpaths and Open Country County councils in England and Wales are required to prepare definitive maps showing all public rights of way (footpaths and bridleways), which must be kept free of obstruction. 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 used and regarded as such without hindrance for at least 20 years. Public footpaths are maintained by local authorities who must also provide signposts and supervise landowners' duties to repair stiles and gates. Local authorities in Great Britain can create paths, close existing paths no longer needed for public use and divert paths to secure either a shorter route or the efficient use of land. Local planning authorities can also convert minor roads into footpaths or bridleways to improve the amenities of their area.

There is no automatic right of public access to open country, although many landowners permit such access more or less freely. 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.

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 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. The Commons Registration Act 1965 provided for the registration of all commons and village greens. Under the Countryside Act 1968 local authorities can provide facilities for enjoyment on any common land to which the public has access.

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 ministers, providing general information and advice, and commissioning or supporting research. There are some 164 national nature reserves covering nearly 127,500 hectares (over 314,500

acres). Some 3,600 sites of special scientific interest have been scheduled because of their flora, fauna or geological or physiographical features.

About 8,000 hectares (20,000 acres) of Forestry Commission land are managed as areas in which nature conservation is the main object. Local authorities have declared more than 50 nature reserves, and voluntary organisations, which play an important part in protecting wildlife, have established over 1,000 reserves.

In Northern Ireland the Nature Reserves Committee advises on the designation of nature reserves and areas of scientific interest.

Land Reclamation

Derelict land, often concentrated in places associated with nineteenth century industrial development, presents special problems to planners. With central government grants to help to meet the cost of local authority clearance schemes, however, it is improved in a number of ways. Waste land has been turned to farming or forestry use, as well as into sites for industry, housing, schools, roads and recreational areas. Disused excavations have been filled with water and equipped for water sports. Sometimes where removal of waste heaps is not practicable, they have been made more pleasing to the eye by, for example, covering with vegetation.

The Department of the Environment and the Scottish and Welsh Development Agencies provide central advice and information, and in Northern Ireland grants are paid to landowners who restore or improve the appearance of derelict sites

Planning controls to prevent the spread of dereliction require that, when permission is granted 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 height or requiring treatment on completion.

CONTROL OF POLLUTION

Government measures to control environmental pollution, in which industry and voluntary organisations co-operate, are long established, and are seen as complementary to the planning system and the various measures to conserve amenities and the country's heritage.

Administration

Responsibility for the control of pollution is shared by various central government departments, local and water authorities and statutory agencies. Industry co-operates with these authorities and voluntary organisations help to focus public interest on the process of control. 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. The Secretary of State for the Environment has a co-ordinating role concerning pollution matters as a whole, exercised through a Central Directorate on Environmental Pollution within his department. An independent Standing Commission on Energy and the Environment provides the Government with advice on the inter-action of energy policies and the environment.

Specific responsibilities of the Department of the Environment in England include air pollution control, fresh water pollution control, waste disposal, control of civil radioactive wastes (jointly with the Ministry of Agriculture, Fisheries and Food), of oil and chemicals on beaches and of noise other than aircraft noise, traffic noise and noise at work. Most of these responsibilities in

Scotland are exercised by the Scottish Development Department, in Wales by the Welsh Office and in Northern Ireland by the Department of the Environment for Northern Ireland.

The Department of Trade is responsible for the control of oil pollution at sea (other than from offshore operations) and its clearance, and for the control of aircraft noise. The Department of Transport is responsible for policies for the control of traffic noise. The Department of Energy is responsible for the control of pollution arising from the exploration for, and exploitation of oil. The Ministry of Agriculture, Fisheries and Food, the Department of Agriculture and Fisheries for Scotland, the Northern Ireland Departments of Agriculture and the Environment (together with the Health and Safety Executive) are responsible for the control of agricultural chemicals such as pesticides, for the protection of fisheries from pollution and for the prevention of food contamination. The protection of the health of employees at work (see p 333) is the responsibility of the Department of Employment and is controlled by the Factory Inspectorate which forms part of the Health and Safety Executive; in Northern Ireland it is the responsibility of the Department of Manpower Services. Other departments such as the Department of Education and Science, the Department of Health and Social Security and the Scottish Home and Health Department have an interest in health aspects of pollution control.

Local authorities are responsible for matters such as collection and disposal of domestic wastes; control of air pollution from domestic and certain industrial premises and noise abatement measures. Sewerage and sewage treatment and disposal are the responsibilities of 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 National Water Development Authority, the river purification authorities and islands councils in Scotland and the Department of the Environment for Northern Ireland are responsible for control of water pollution.

The European Community has adopted a Community Environment Programme as a result of which a number of measures for Community action are being developed.

The Control of Pollution Act 1974

The Control of Pollution Act 1974, which applies to Great Britain, constitutes the first comprehensive attempt to tackle pollution problems in different (but related) government areas. It extends a wide range of new powers and duties to local and water authorities, increases the existing powers to deal with controlled wastes, air and water pollution and noise, and contains important provisions on the release of information to the public on environmental conditions. In particular the provisions dealing with waste on land institute a new system for the comprehensive planning of regulation of waste disposal operations so as to ensure that disposal is carried out to satisfactory standards and that the best use is made of waste materials. The Act also increases the penalties for a large number of pollution offences. It is being implemented in stages, and most of it is in operation. Similar legislation applies in Northern Ireland.

The Land

The main risks of land pollution lie in the indiscriminate dumping of waste materials on land, careless dispersal of pesticides and chemicals, fall-out of materials from the atmosphere and the deposition of materials from floodwater. The application of sewage sludge on farms, too, involves risks as well as benefits to the land.

The Control of Pollution Act lays a duty on waste disposal authorities (county councils and the Greater London Council in England, for example) to ensure

that there are adequate arrangements to dispose of controlled wastes and to draw up and revise periodically a waste disposal plan. It also establishes a licensing system for all waste disposal sites, treatment plants and storage facilities receiving controlled wastes. In addition it provides for a more intensive control system for certain specially hazardous or difficult wastes.

The Pesticides Safety Precautions Scheme (PSPS) is a scheme through which pesticides are cleared for safety before being marketed. Clearance is not given unless the Government, advised by the Advisory Committee on Pesticides, is satisfied that a product can be used without risk to people, livestock and domestic animals, and with minimum harm to wildlife, provided recommended precautions are taken. The scheme is being extended to include non-agricultural use of pesticides. The British Agrochemical Supply Industry Scheme (BASIS), an independent registration scheme for distributors of crop protection products, ensures that distributors sell only products which have been cleared through the PSPS.

Under the Litter Act 1958 it was made an offence to leave litter on land in the open air to which the public have free access. The Dangerous Litter Act 1971 increased the maximum fine from £10 to £100. Under the Refuse Disposal (Amenity) Act 1978 the deliberate dumping of rubbish carries a similar maximum fine with the possibility of a £200 fine and three months' imprisonment for subsequent offences.

Recycling and Materials Reclamation The Government encourages the reclamation and recycling of waste materials wherever this is practicable and economic in order to reduce imports and 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 collect about 200,000 tonnes of waste paper annually and about 100,000 tonnes of ferrous scrap. Waste disposal authorities are required under the Control of Pollution Act to take full account of opportunities for waste reclamation in drawing up their waste disposal plans. Voluntary organisations also organise collections of waste material.

The Government has set up a Waste Management Advisory Council and launched a National Anti-Waste Programme to co-ordinate policy and promote opportunities for reclamation and recycling through education and advice. Extensive Government-supported research and development in this area is in progress. The Department of the Environment is providing financial and technical help to South Yorkshire and Tyne and Wear County Councils for full-scale prototype plants for the mechanical sorting of household refuse at Doncaster and Byker. The first of these came into operation in 1979, and the second is expected to become operational early in 1980. In addition Britain participates in discussion on waste reclamation and recycling in the European Community, the OECD and the Economic Commission for Europe.

Fresh Water

Discharges of polluting matter into rivers, lakes, estuaries and some coastal waters are controlled by law. The Control of Pollution Act contains a number of provisions that will considerably strengthen existing legislation: for example, part of the Act extends powers to control pollution of all inland water, including specific underground waters, and tidal coastal water up to the three-mile (4·8 km) limit. The main provisions of the Act should have been fully implemented by the end of 1979. 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—some 97 kinds of fish have been identified there since 1964.

More than 90 per cent of the British 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 Pollution

Control of marine pollution from ships is based largely on international conventions drawn up under the auspices of the Inter-Governmental Maritime Consultative Organisation, a United Nations agency with headquarters in London, and implemented for British ships by domestic legislation. The Prevention of Oil Pollution Act 1971, which gave effect to the International Convention for the Prevention of the Pollution of the Sea by Oil 1954, as amended in 1962 and 1969, makes it an offence for ships of any nationality to discharge any oil into British territorial waters and for British registered ships to discharge persistent oil anywhere at sea, except in accordance with very stringent regulations. Further amendments to the convention, made in 1971 but not yet in force, relate to the design of tankers and are aimed at reducing the volume of oil that could escape in the event of an accident. The International Convention for the Prevention of Pollution from Ships 1973 (as modified by the 1978 Protocol) will, when in force, replace the 1954 convention by more stringent requirements and will eventually regulate pollution by chemicals. sewage and garbage as well as by oil.

The Department of Trade has developed a nationwide organisation using the resources of its Coastguard and Marine Survey Services, to deal with oil spills at sea which threaten to cause coastal pollution or are likely to endanger wildlife. If necessary, action is taken to clear the oil by using low toxicity dispersant and spraying equipment. Central government and local authorities have contingency plans under review for dealing with oil and chemical pollution of beaches and in inshore waters. Following several oil tanker disasters off the coasts of Britain and France in 1978, the Government increased expenditure on contingency arrangements. This included the setting up in 1979 of a Marine Pollution Control Unit within the Department to co-ordinate contingency arrangements and take charge of operations to deal with pollution at sea.

The development of the offshore oil industry has brought an increased risk of oil pollution in the North Sea. Offshore operators are required to ensure that oil does not escape into the sea and are also expected to have contingency plans for dealing with oil spills. Not all traces of oil can be removed from water separated from crude oil before its discharge from production platforms into the sea, and these discharges from offshore installations are normally granted exemption from the 1971 Act subject to strict controls laid down by the Department of Energy. The Department of the Environment, the Welsh Office, the Scottish Development Department and the Northern Ireland Department of the Environment have powers to grant exemptions subject to similar controls for discharges from land-based sources.

The loading of wastes for dumping at sea by means of vehicles, ships, aircraft, hovercraft, marine platforms and conveyor belts is controlled by the Ministry of Agriculture, Fisheries and Food, the Welsh Office, the Department of Agriculture and Fisheries for Scotland and the Northern Ireland Department of the Environment through the Dumping at Sea Act 1974 which gave statutory backing to the voluntary arrangements which had operated for several years. 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. The 1974 Act does not however control discharges of liquid effluent from pipelines, which are covered by the Control of Pollution Act, nor discharges incidental to or derived from the normal operation of a ship, aircraft, vehicle, hovercraft or marine structure.

Clean Air

Responsibility for clean air rests primarily with local authorities. Under the provisions of the Clean Air Acts 1956 and 1968 they may declare 'smoke control areas' within which the emission of smoke from chimneys constitutes an offence. Over half the premises in the 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. 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 have been made which prescribe specific limits to the quantities of grit and dust which may be emitted from certain furnaces. Industrial premises that give rise to particularly offensive or dangerous emissions are, in England and Wales, under the control of the Alkali and Clean Air Inspectorate of the Health and Safety Executive. The Inspectorate requires the best practicable means to be used to prevent or abate emissions. Controls are also in force on emissions from motor vehicles, such as the maximum permitted lead content of petrol which was reduced from o.84 grammes per litre in 1973 to 0.45 grammes per litre at the beginning of 1978 (and is to be reduced further to 0.40 grammes from 1 January 1981).

Notable progress has been made towards the achievement of cleaner air and a better environment, especially in the last 20 years or so. Total emissions and average concentration of smoke in the air have fallen by nearly 80 per cent since 1960. The domestic smoke control programme has been particularly important in achieving this result. London no longer experiences the dense smoke-laden 'smogs' of the 1950s and in central London winter sunshine has been increasing since the 1940s when average hours a day were about 40 per cent less than at Kew in outer London; the levels are now virtually the same. Similar improvement has been achieved in other cities including Glasgow and Sheffield. Control measures have reduced urban ground-level concentrations of sulphur dioxide in

Britain by 40 per cent in the last ten years.

Noise

Local authorities enforce noise control and must inspect their areas for noise nuisances and act to secure abatement. The Control of Pollution Act 1974 improved and strengthened local authorities' existing powers and enabled them to set up 'noise abatement zones' within which they can require levels of noise from scheduled buildings to be held constant or reduced, and within which these levels of noise may not be increased without the local authorities permission. The Act contains special provisions to control noise from construction and demolition sites.

Transport is one of the main offenders in noise pollution, and British measures, like those of other countries, aim to tackle the problem, first by reducing noise at source, by insisting that aircraft and motor vehicles should be made quieter, and secondly by protecting people from its effects. As part of this process, grants have been made towards the sound-proofing of some rooms in houses subject to loud aircraft noise. Highway authorities have a duty or power, depending on circumstances, to carry out, or make grants in respect of the insulation of homes which are subject to noise increased by a specified level because of new or

improved roads first opened to traffic after 16 October 1969. Noise insulation may also be provided where construction work for new roads is likely seriously to affect nearby homes.

The control of aircraft noise is provided for in a number of statutes relating to civil aviation. Measures taken to abate noise include the insulation of homes against noise—for which the major airport owners have provided grants—and the progressive introduction of quieter aircraft.

Aircraft landing or taking off in Britain must be 'noise certificated' in accordance with noise standards which have been internationally agreed and are kept under review by the International Civil Aviation Organisation (ICAO). The latest of these became applicable in August 1978. They require noise levels of newly designed subsonic jet aircraft to be significantly lower than those of aircraft meeting the previous standards, given effect in Britain in 1970, and much lower than those of aircraft not required to meet noise certification standards because they were designed before 1969. The ICAO has also applied standards to propeller-driven aircraft, and is examining the possibility of setting standards for civil helicopter noise and for noise from future supersonic transport aircraft.

The use of non-noise-certificated subsonic jets acquired by British operators after September 1978 has been prohibited and the use of all such subsonic jets on the United Kingdom Register of Civil Aircraft is to be prohibited from 1 January 1986.

All these measures are expected to reduce substantially the noise nuisance to people living near British airports.

Radioactivity

In the United Kingdom radiation exposure of the population 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 users of radioactive materials other than those subject to licence under the Nuclear Installations Act (see below) must be registered by the appropriate department, and authorisation is also required for the disposal of radioactive waste, with exemption for very minor uses and disposals. 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 such installation may be constructed or operated without a licence granted by the Executive.

The Government is carrying out a review of the existing arrangements for the control of radioactive waste. Various methods are used for disposing of such waste. Most low-level solid waste is buried; intermediate-level solid waste is mostly stored, with some disposed of at sea; and highly radioactive liquid waste is at present stored in tanks while research proceeds on methods of disposal. One such method under investigation is the 'Harvest' process for converting this waste into a solid insoluble glass which would be contained in stainless steel cylinders and might be buried in stable geological formations. The process was developed by the United Kingdom Atomic Energy Authority which, in collaboration with the Institute of Geological Sciences, is participating in a programme of the European Atomic Energy Community to study different types of formation which might be suitable for radioactive waste disposal.

The National Radiological Protection Board established under the Radiological Protection Act 1970 provides an authoritative point of reference on radiological protection and represents British interests internationally.

The Radioactive Waste Management Advisory Committee advises Government ministers on major issues relating to the development and implementation of a policy for the management of civil radioactive wastes, including the waste management implications of nuclear policy, of the design of nuclear systems, and of research and development; and the environmental aspects of the handling and treatment of wastes.

VOLUNTARY ORGANISATIONS

Voluntary organisations are particularly active in ensuring that proposed changes in the use of land take full account of the interests of the public and considerations of amenity. The National Trust for England, Wales and Northern Ireland, founded in 1895, is the largest private landowner in Britain and has 775,000 members. For the benefit of the public it owns 167,000 hectares (412,000 acres) of land and protects from harmful development a further 30,000 hectares (74,000 acres). It owns 236 historic buildings and large stretches of coastline. Properties in Scotland covering some 33,200 hectares (82,000 acres) are protected by the National Trust for Scotland, an independent body founded in 1931, which has over 82,000 members.

The Town and Country Planning Association, founded in 1899, seeks to improve the qualities of land use and planning and operates a planning aid service for local amenity groups; while the Royal Town Planning Institute encourages high standards in town planning. The Civic Trust, established in 1957, encourages the protection and improvement of the environment, high standards in architecture and planning and has been closely associated with the drafting of conservation legislation. It supports and advises over 1,250 local amenity societies. Associate trusts are linked with the Civic Trust in the north-

east and north-west of England, Scotland and Wales.

Other voluntary societies concerned with amenity in town and country include: the Council for the Protection of Rural England, the Council for the Protection of Rural Wales, the Association for the Protection of Rural Scotland and the Ulster Society for the Preservation of the Countryside; the National Association for Environmental Education; the Keep Britain Tidy Group; the Commons, Open Spaces and Footpaths Preservation Society and the Scottish Rights of Way Society; the Ramblers' Association; the Society for the Protection of Ancient Buildings and the Ancient Monuments Society; the Georgian Group and the Scottish Georgian Society; the Saltire Society (which encourages the preservation of the architectural heritage in Scotland) and the Ulster Architectural Heritage Society; the Victorian Society; the Pilgrim Trust; the Council for British Archaeology; the Historic Churches Preservation Trust; the Council for National Parks; the Prince of Wales's Committee (which promotes environmental improvements in Wales); the Inland Waterways Association; Friends of the Earth; the Conservation Society; the Noise Abatement Society; and the National Society for Clean Air.

Among a large number of voluntary bodies concerned with nature conservation are the Society for the Promotion of Nature Conservation, the Royal Society for the Protection of Birds, the Scottish Wildlife Trust and the Council

for Nature.

The Committee for Environmental Conservation, comprising many of the main voluntary organisations, acts as a liaison body and is concerned with broader questions of amenity than those covered by individual societies.

9 Housing

A central aim of housing policy is a home for all households at a price within their means. Others include a better balance between new building and renovation with social as well as financial costs taken into account; reasonable stability in household housing costs; attention to the needs of people with special problems such as the elderly, the disabled and the handicapped; increased scope for mobility; easier means for people to obtain the type of tenure they want; and the safeguarding of tenants' independence.

Although some households still live in unsatisfactory conditions, the proportion of the total is relatively small, and the Government believes that it no longer makes sense to consider housing problems in national totals; attention and resources are therefore being directed more selectively to the areas, often in inner cities, with the most pressing needs. A system of local strategies and investment programmes has been instituted as a means by which local authorities can, in consultation with local bodies concerned, plan comprehensively for development in both public and private sectors.

Public expenditure provision for housing stood at nearly £5,200 million in 1978-79.

Housing Characteristics

There are over 21 million dwellings, houses being much more common than flats (the ratio is roughly four to one). Nationally the number of dwellings is slightly larger than the number of households, but there continue to be shortages in certain areas and, because of changing social habits, the houses available are not always of the type in demand.

More than two families in every five live in a post-1945 home, but there remain a large number of old dwellings, some of which have been kept in good repair and modernised, but many others of which (particularly in the centres of cities) are unsatisfactory by modern standards.

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 the population. While the number of people has increased by about two-fifths, the number of households has more than doubled. Families are smaller, there has been a substantial reduction in the sharing of homes by different generations of the same family and there has been an increase in the number of one-person households. The *National Dwelling and Housing Survey* (results only for England so far; see Bibliography), showed a fall, from 800,000 to 500,000, in the number of households sharing a dwelling between 1971 and 1977–78, a halving, from 2·8 million to 1·4 million, in the number of households without exclusive use of at least one basic amenity, such as a bath, and a fall of two-thirds, from 219,000 to 73,000, in the number of overcrowded households.

Over half of all dwellings are owned by their occupiers, nearly a third are rented from public housing authorities, and most of the remainder are rented from private landlords. There are variations, however, in the distribution of tenure between different parts of the country; in Scotland more than half the

dwellings are rented from public authorities. Private rented accommodation is generally more common in the central parts of large towns, while owner-

occupation is more frequent in outer suburbs and in country areas.

New house construction is undertaken, on a roughly equal scale, by both public and private sectors, and in addition about 10 per cent of new building is 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. There is very little building of private dwellings to rent.

Administration Responsibility for formulating housing policy and supervising the housing programme in Great Britain is borne by the Secretary of State for the Environment in England and by the Secretaries of State for Scotland and Wales. (For

Northern Ireland see p 189.)

Most of the public housing is provided by 459 local housing authorities, which are responsible for ensuring that the supply of housing in their areas is adequate. The authorities are: in England and Wales (outside London) the district councils; in London, the Greater London Council, 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 Scottish Special Housing Association which supplements building by local authorities in Scotland, and the Development Board for Rural Wales. Subsidies are made available to the authorities to assist them with housing costs, and guidance is given on design and layout.

The construction or structural alteration of housing in both the public and private sectors is subject to the Building Regulations in England (except inner London) and Wales. The regulations, which are made by the Secretary of State for the Environment, have the force of law. They are enforced by the local authorities and are made primarily for the health and safety of people in and around the buildings, although they also include requirements for the conservation of energy. Different systems with the same aims are operated in inner

London, Scotland and Northern Ireland.

Local authorities are involved in many other aspects of housing policy, such as the payment of house renovation grants and the implementation of housing renewal programmes. A growing number are establishing housing advisory centres to provide information on most aspects of housing.

Research and Development

Research into building materials and techniques, as well as into the social, economic and design aspects of housing, is undertaken within the Department of the Environment. It is carried out by the Building Research Establishment of the Department's research directorate as well as by the directorates of economics, statistics and housing development. The Research and Development Group of the Scottish Development Department also undertakes research. Sponsored work is carried out by universities, polytechnics, market research firms and the Office of Population Censuses and Surveys, and local authorities may also have housing research programmes.

The Government is advised on the need for, and application of, research and development by the Construction and Housing Research Advisory Council. Advice on ways of increasing productivity in house-building is also provided by

the National Building Agency.

Home

The number of people owning their own houses has more than doubled in the Ownership last 20 years, and the 11 million owner-occupied dwellings in Britain account for over half of the total housing stock.

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Mortgage Loans

Loans to enable people to buy their own houses are available from various sources, including building societies, insurance companies, industrial and provident societies, local authorities and banks.

Building societies (see also p 356) are by far the largest sources of such funds; their share of the market being over 90 per cent. They do not build houses themselves but lend money upon security by way of a mortgage on the home bought for owner-occupation. They usually advance up to 80 per cent of their valuation of a property but it is possible to borrow up to 100 per cent with the help of an appropriate insurance guarantee. 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. The average price in Britain of all houses bought with a building society mortgage in 1978 was about £15,674. In 1978 the societies advanced some £8,734 million.

Owner-occupiers are entitled to tax relief on their mortgage interest payments arising on up to £25,000 of their mortgages (on one house only) and in 1978-79 this amounted to about £1,110 million. An alternative form of assistance is the option mortgage scheme, designed to help those with smaller incomes. It allows the borrower to receive, instead of tax relief, a subsidy which has the effect of reducing the rate of interest on the loan. Assistance under this scheme in Great Britain amounted in 1978-79 to £148 million. There is an associated guarantee scheme under which mortgage loans of up to 100 per cent of the valuation of a house (not exceeding £14,000) may be made to option borrowers. Other ways of helping people with lower incomes to become owner-occupiers include a scheme which allows those buying homes for the first time, subject to certain conditions, to defer part of their mortgage payments that would normally be due in the early years until later in the mortgage term, and shared ownership schemes, under which the occupant purchases a part share of his or her home, paying rent on the remaining share. From 1 December 1980 a first-time home buyer who has saved under the new home loan scheme (set up by the Home Purchase Assistance and Housing Corporation Guarantee Act 1978) and is buying a home in the lower-price range, will receive a tax-free cash bonus of £40-£110 and a loan of £600, interest free for the first five years and then repayable over the remaining life of the mortgage.

Building

For building in the private sector the National House Building Council sets Standards 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 protection against major structural defects. Two-year protection is also given against faulty workmanship. Most lenders will not grant mortgages on a new house unless it is covered by a Council certificate.

Public Sector Public housing authorities own nearly seven million houses and flats. The number of homes owned by each authority varies widely, several of the larger authorities having a stock of well over 100,000.

Local authorities meet the capital costs of new house construction and of modernisation of their existing stock by raising loans on the open market or by borrowing from the Public Works Loan Board. Current expenditure, including maintenance and management costs and loan interest and repayments, is met from rents, 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) without making a profit. Subsidies for public housing in Great Britain during 1978-79 are expected to

total some £2,000 million (including rent rebates payable to poorer tenants to assist in meeting rents of accommodation suited to their needs). Supplementary subsidies assist local authorities with slum clearance.

In selecting tenants for new or vacant dwellings, local authorities normally give preference to families living in overcrowded or unsatisfactory conditions, but they are free to allocate homes according to their own schemes. Authorities normally establish waiting lists, and some require applicants to fulfil residence qualifications before they are accepted on waiting lists.

Local authorities have a statutory duty to secure that accommodation (not necessarily an authority house) is available for homeless people who have dependent children or are vulnerable on grounds such as age or disability.

Most building is undertaken by private firms under contract although a number of authorities employ direct labour to build houses. Some authorities work in consortia to make the best use of experience and technical information, and to initiate research and development projects.

Dwellings are constructed to meet the needs of different sizes of household. More than a quarter are of the single-bedroom type suitable for smaller households including the elderly, but the majority are designed for families and have two or three bedrooms, one or two living-rooms and a kitchen, bathroom and lavatory.

Sheltered accommodation (with an alarm system and resident warden) is provided for elderly people who need this degree of support. Increasing importance is also being placed on the housing needs of physically handicapped people, and a small but growing proportion of the new housing stock is suitable for them. Also receiving attention are the needs of other 'disadvantaged' groups such as one-parent families, the mentally handicapped, the ex-mentally ill and women who have suffered from violence within the family.

As part of the Government's policy to achieve a higher level of owner occupation, local authorities have been empowered to sell council houses and flats to tenants at discounts ranging from 30 per cent (for tenants of under three years' occupancy) to 50 per cent (for tenants of 20 or more years' occupancy); authorities may also sell unoccupied dwellings to non-tenants at up to 30 per cent discount. In all cases where dwellings are sold at a discount there is a safeguard on resale, which gives a local authority the right to buy back at the sale price if the purchaser wishes to move within a period of five or eight years, depending on the circumstances. The Government intends to introduce legislation which will give all council tenants the right to buy their homes.

Public housing is built to a high minimum standard. In England and Wales, for example, some 98.9 per cent of the new houses built for local authorities in 1977 had central heating and the average floor area of houses to accommodate five people was 90 square metres (964 square feet).

Local authorities are being encouraged to take a broad view of their responsibilities for housing management and to consider the wider social and economic consequences of their housing policies. The aim is for them to develop a comprehensive housing service, taking full account of people's needs and preferences, making the best use of all the resources available in both public and private sectors, and adopting a flexible view of the way the housing stock is used. A high standard of skill and organisation is needed to meet this objective, and emphasis is being given to improved training for all grades of housing staff. The Housing Consultative Council for England considers all major issues of concern to the Secretary of State for the Environment and local authorities in the fulfilment of their housing responsibilities. In Wales the Welsh Housing Consultative Committee undertakes a similar function. A Housing Services Advisory Group,

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composed of central and local government officials, elected councillors and other housing experts, has been set up to advise English local authorities on good professional practice in housing management and maintenance through the production of reports on housing topics. A small Housing Services Advisory Unit, consisting of three professional advisers has also been created within the Department of the Environment to stimulate an exchange of ideas and information on good management practice with local authorities and to provide advice on policy within the Department.

Privately Rented Housing

During the last quarter of a century 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 to about 12 per cent (2.6 million). Major factors have been the increased demand for owneroccupation, the greater availability of public rented housing, and the operation of rent restriction. Privately rented dwellings form a high proportion of the older housing, most landlords being individuals with limited holdings; some rented housing is provided by larger property owners, including property companies.

Most privately rented dwellings are subject to rent restriction. Tenants have a wide degree of security of tenure, and may not be evicted without a court order. Harassment of residential occupiers is a criminal offence. To increase the availability of privately rented property the Government proposes to legislate for a new system of 'shorthold' lettings, under which tenants would have security of tenure for an agreed period, but not for life; existing lettings would not be affected by the new legislation. Tenants with incomes up to average levels are eligible for assistance with their rent under a national scheme of rent allowances which is operated by local authorities and financed mainly by government subsidies.

There are three forms of rent restriction: control, regulation and the fixing of a reasonable rent by a rent tribunal. Controlled rents (which apply to dwellings of low rateable value where the tenant has lived continuously since before 1957) are fixed, and may be increased only to an extent which reflects expenditure by the landlord on improvements and repairs. However, if a controlled dwelling reaches a satisfactory standard of amenity, the landlord may transfer it to the alternative system of rent regulation, which applies generally to privately rented accommodation, other than in the luxury class, except for accommodation where the landlord lives on the same premises. In a regulated tenancy a 'fair rent' is fixed by independent rent officers, at the request of the landlord, the tenant, or both; if the rent officer's decision is objected to by the landlord or the tenant, it is referred to a rent assessment committee. Once fixed, the rent is registered and not normally reviewed for at least three years.

The third form of rent restriction applies to tenants with resident landlords and tenants of a few other types of furnished accommodation who may refer their tenancy agreements to a rent tribunal for determination of a reasonable rent. Tribunals may grant tenants security of tenure for up to six months with a possibility of further periods.

Housing Associations Housing associations extend the choice of housing (which for most people is between owner-occupying or renting from a public authority or a private landlord) by providing an increasing amount of accommodation available for rent 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. In addition to normal family housing, they provide particularly for the special needs of elderly, disabled and single people.

Since the early 1960s the Government has encouraged the growth of these non-profit-making associations which between them own nearly 340,000 dwellings. The National Federation of Housing Associations has 2,000 associations as its members, and the Scottish Federation of Housing Associations covers 140 associations in Scotland.

Rented housing schemes carried out by housing associations qualify for a government grant but only if the association is registered with the Housing Corporation, a statutory body set up by the Government. The Corporation's register contains details of more than 2,700 associations. Rented dwellings owned by housing associations come within the fair rent and rent allowance arrangements.

Alternative forms of tenure on local authority estates and within the housing association sector are being encouraged in order to give occupiers a greater stake in the ownership or management of their homes. The Housing Corporation is engaged in a pilot programme including co-ownership and community

leasehold schemes.

Improving

Modernisation and conversion of sub-standard housing, with the help of grants Older Houses from public funds, has increasingly been encouraged as an alternative to clearing and rebuilding and as a way of preserving established communities and of making more economic use of resources. This policy of improvement rather than redevelopment has been reinforced by the Government's decision to give priority to inner city regeneration.

Renovation grants paid to owners to improve over 2.6 million homes were

approved in Great Britain between 1967 and 1978.

There are four types of renovation grant: improvement grants, for carrying out improvements to a high standard or for conversion into flats; intermediate grants, for the provision of standard amenities and associated repairs; special grants (not available in Scotland) for providing standard amenities in houses of

multiple occupation; and repairs grants.

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 about 1,130) consist of fundamentally sound houses and a stable population. Owners who improve their dwelling may receive a grant of up to 60 per cent of the eligible costs. Housing action areas (about 350) are characterised by particularly poor housing and bad physical conditions combined with social stress. Local authorities have special powers to bring about an improvement in living conditions for the benefit of residents within a five-year period. Grants to owners may range up to 90 per cent of the eligible costs in cases of hardship. In both types of area, grants for repairs may also be made; and government financial aid for environmental improvement, together with a contribution of 90 per cent of each grant, is available to local authorities. Elsewhere, the first three types of renovation grant, covering up to 50 per cent of eligible costs, may be made to owners, local authorities receiving 75 per cent of the grant from the government.

In Scotland, the term 'general improvement area' is not used; 'housing action area' powers are available for areas in which at least half the houses fail to meet prescribed physical standards and there is no time limit on the period within which improvement must be carried out. Outside housing action areas in Scotland local authorities have power to require the improvement of houses below the statutory tolerable standard, or lacking a bathroom, by improvement

orders and grants payable at 75 per cent of eligible costs.

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Clearance

In urban areas of Britain slum clearance and redevelopment have been major features of housing policy. Since the mid-1950s about 3.3 million people have been rehoused in England and Wales as a result of slum clearance programmes. Clearance of large areas of 'irredeemable' slums is now almost at an end and greater emphasis is placed on renewal and modernisation wherever possible. Local authorities receive special financial assistance from the Government.

Housing authorities are obliged to see that other accommodation exists, or can be provided by them, for people displaced by slum clearance. Owners of land compulsorily acquired during slum clearance programmes receive as compensation either the full market value or, if the land consists of unfit houses, a sum based on the value of the cleared site; additional payments are, however, made to most owner-occupiers of unfit houses to bring their compensation up to market value.

> Redevelopment of the slums has presented many problems. Most of the areas were seriously overcrowded; but while they usually lacked social facilities they had the advantage of already being provided with the basic utilities, jobs were usually available in the vicinity and town centre facilities were not far away. The aim in carrying out slum clearance was thus to house as many people as possible on the cleared sites. This was most easily achieved if fairly large areas were cleared and high-rise flats built. The results in many areas are now seen as less than satisfactory in spite of the high standard of many of the homes themselves. The main criticisms of multi-storey flats are that they are inhuman in scale and unsuitable for families with young children because of the lack of convenient play space. The need to build to a reasonably high density in inner city areas still exists, but is now being met by carefully grouped low-rise blocks. including individual houses wherever possible.

Northern Ireland

The Northern Ireland Department of the Environment is responsible for housing policy in Northern Ireland and the Northern Ireland Housing Executive for the provision and management of public authority housing and for dealing with unfit dwellings whether publicly or privately owned.

Northern Ireland has a major problem of unfit and derelict housing, especially in Belfast, and the situation has been made worse by civil disturbance. In view of this several recent changes have been made in housing policy including a greater concentration on maintaining and improving the existing dwelling stock and a major attack on housing problems in Belfast. The concept of housing action areas has been developed to facilitate concerted action in designated areas, A five-year programme for the rehabilitation of Belfast began in 1977. Action has also been taken to stimulate the voluntary housing movement and with the encouragement of the Department in conjunction with the Northern Ireland Federation of Housing Associations, registered housing associations are undertaking a large programme of schemes for groups such as the elderly and disabled and are also playing a significant part in the rehabilitation of older dwellings especially in Belfast.

In the private rented sector the Rent (Northern Ireland) Order 1978 came into operation on 1 October 1978 repealing the Rent Restriction Acts of Northern Ireland and replacing them with a single statute designed to safeguard tenants' rights while providing landlords with sufficient rental income to maintain their property in good condition. Under the Order landlords are empowered to increase the rents of certain properties meeting a specified standard of physical condition to a level comparable with those charged by the Northern Ireland Housing Executive.

Another trend in housing policy is the attempt to widen housing options

available to families, particularly those who wish to own their own homes. The Option Mortgage Scheme is in operation and the Home Loan Scheme for first-time buyers has been extended to Northern Ireland. The concept of shared ownership (see p 185) is being developed in the public sector by the Northern Ireland Housing Executive and in the private sector by a housing association known as the Northern Ireland Co-Ownership Housing Association. The Northern Ireland Housing Executive is continuing with its policy of offering dwellings for sale to existing tenants in areas where housing need has been met.

10 The Churches

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.

Clergy of the established churches of England and Scotland 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 any religious denomination may

be wholly or partly maintained from public funds.

There is no precise or uniform information about the number of church adherents since no inquiries are made about religious beliefs in censuses¹ or other official returns, and each church adopts its own criteria in counting its members. Membership figures in this chapter are therefore approximate.

The Church of England

The established 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 29 dioceses, and York, 14 dioceses. The dioceses are divided into parishes, of which there are some 13,860. The Archbishop of Canterbury is 'Primate of All England', and the Archbishop of York 'Primate of England'. Of the population born and resident in the two provinces (roughly 46 million), about 53 per cent are baptised

into the Church and some 19 per cent are confirmed members.

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, inter-church relations, social questions, recruitment and training for the ministry, church work at home and overseas and the care of church buildings, particularly those of historic and architectural interest.

¹ In Northern Ireland, recent full censuses have contained an optional question about people's religious professions.

The Synod is also concerned with church schools; church colleges of education; theological colleges; and establishments for training women in pastoral work.

The Church has its own courts whose jurisdiction today extends only to

matters of purely ecclesiastical concern.

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.

The Anglican Communion

The Anglican Communion comprises 25 autonomous provinces in Britain and overseas and three regional councils overseas with a total membership of about 67 million. In the British Isles, there are four provinces: the Church of England (established), the Church in Wales, the Episcopal Church in Scotland, and the Church of Ireland.

Every ten years (the last meeting was in 1978), the Lambeth Conference meets for unofficial consultation among all Anglican bishops: presided over by the Archbishop of Canterbury, it 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 which meets every two or three years—is designed to provide consultations within the Anglican Communion and to serve as an instrument of common action. The Council last met in 1979.

The Church of Scotland

The Church of Scotland has a presbyterian form of government. It 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.

All ministers have equal status, each of some 1,850 churches being 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 training for the ministry (to which women may be admitted) has given the Church a high reputation for scholarship and has in turn influenced the standard of education in Scotland. The adult communicant membership of the

Church of Scotland is estimated at over 1 million.

The Free Churches

The phrase 'Free Churches' is commonly used to describe the 'nonconformist' churches of England and Wales (which dissent from certain practices of the established church and, generally speaking, have distinctive convictions regarding organisation and worship) and Protestant churches in other parts of Britain (apart from the established Church of Scotland). Certain other churches and religious associations have links with the main Free Churches.

The Methodist Church, the largest of the Free Churches with nearly 517,000 adult full members, originated in the eighteenth century following the evangelical revival by John Wesley, and is based on a 1932 union of most of the separate

THE CHURCHES

Methodist Churches. The Methodist Churches which did not join the union include the Independent Methodists (5,100 members) and the Wesleyan Reform Union (with some 4,000 members).

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 178,000; in addition there are separate Baptist Unions for Scotland, Wales and Ireland and other Baptist churches.

The United Reformed Church, with some 162,000 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.

Among the other Free Churches are the Presbyterian Church in Ireland (with some 124,000 regular communicants in Northern Ireland); the Presbyterian (or Calvinistic Methodist) Church of Wales, which arose from the revivalist movement led in 1735 by Howell Harris and now numbers about 89,000; 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 Ireland; and the Non-Subscribing Presbyterian Church of Ireland.

Other Protestant denominations include: the Unitarian and Free Christian Churches; the Churches of Christ (known also in the United States of America as Disciples of Christ), which have been an organised community in Britain since early in the 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.

The Religious Society of Friends (Quakers), with about 20,000 members in Britain and over 400 places for worship, came into being in the middle of the seventeenth century under the leadership of George Fox and works 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 83 other countries and has a strength of about 2.5 million. Within Britain it has some 100,000 active members operating from more than 1,000 centres of worship. Believing in a very practical expression of Christian concern, the Salvation Army has 187 centres to help people in need.

There are also a number of other religious organisations with churches or assemblies in Britain, including the Church of Jesus Christ of Latter-Day Saints (the Mormon Church); and the Christian Scientists with some 300 branch churches and societies in the British Isles.

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 6 Roman Catholic provinces in Great Britain, each under an archbishop, 26 episcopal dioceses, and some 3,000 parishes. In Northern Ireland, there are 9 dioceses, some of which have territory partly in the Irish Republic. It is estimated that there are some 5 million adherents (including children) to the Roman Catholic faith in the whole of Britain.

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. Many schools for Catholic children are staffed by members of the religious orders who also undertake other social work such as nursing, child care, and the conduct of homes for old people.

Jewry

Jews first settled in England at the time of the Norman conquest, but the community in Britain dates from 1656; consisting of some 410,000 people, including both Sephardi (originally from Spain and Portugal) and Ashkenazi (from Germany and Eastern Europe), it has become one of the largest groups of Jews in Europe. The community is divided into two schools of thought—the Orthodox, to which about 80 per cent of practising Jews belong; and the Reform, which originated in 1840 and was followed in 1901 by the Liberal Jewish movement. The Chief Rabbi is the head of the largest group (Ashkenazi) within Orthodox Jewry; the Haham is the head of the Sephardi group. Jewish congregations in Britain number about 450. Jewish denominational schools are attended by about one in five Jewish children.

Other Religious Communities Immigrants to Britain from Commonwealth and foreign countries have established centres of worship, especially in London, for their own communities. Among the Christian communities represented are Orthodox, Lutheran and Reformed Churches of various European countries and the Armenian Church.

The principal non-Christian communities in Britain, apart from the Jews, are the Muslims, Buddhists, Hindus and Sikhs. For the many Muslims in Britain there are mosques or Islamic centres in London, Birmingham, Manchester, Cardiff, Glasgow and in many other large cities. The community's headquarters are at the London Central Mosque and Islamic Cultural Centre.

The Buddhist Society, with headquarters in London and centres in most other large towns and many universities, publishes and makes known the principles of Buddhism and encourages their study and practice. It adheres to no one school of Buddhism. There are other centres for Buddhism, and also many centres of eastern philosophy and religion among immigrant communities.

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 in England and Wales. It promotes unity and joint action among the Free Churches and is a channel for communication with central and local government.

The permanent Anglican-Roman Catholic Commission explores points of

possible unity between the two communions.

The Anglican and the main Free Churches in the British Isles also participate in the World Council of Churches (of which the British Council of Churches is an associated national council) which links together some 290 churches in over 80 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 New English Bible, a modern English translation, completed in 1970,

is the result of co-operation among many Christian churches.

The Sharing of Church Buildings Act 1969 enables agreements to be made by two or more churches for the sharing of church buildings.

11 The National Economy

Britain's economy is more dependent on exports than that of any other industrial nation of comparable size. Exports of goods and services represent about one-third of gross domestic product, a higher proportion than in the Federal Republic of Germany or France and considerably higher than in the United States or Japan. Manufacturing industry accounts for about 29 per cent of total domestic

output and services1 for 60 per cent.

Britain ranks fifth in world trade (after the United States, the Federal Republic of Germany, Japan and France), and accounts for 6 per cent of total world trade. It takes around 6 to 7 per cent of the world's exports of primary products (excluding food) and contributes just over 9 per cent to the main manufacturing countries' exports of manufactured goods. It is one of the world's largest importers of agricultural products, raw materials and semi-manufactures, and is among the largest exporters of aerospace products, motor vehicles, electrical equipment, finished textiles, and most types of machinery. It is also a growing oil exporter.

The economy is mixed, with both private and State-owned (nationalised)

industries (see p 218), private industry predominating.

With the discovery and exploitation of North Sea oil and gas, Britain is expected to achieve net self-sufficiency in oil and gas in 1980 with substantial benefits to the balance of payments through the reduction of oil imports. The potential balance of payments effect of British production of oil and gas in 1980 has been estimated at about £6,800 million (1978 prices), rising to nearly £9,000 million by the mid-1980s. Other economic effects of the offshore oil industry include the revenues accruing to the Government through taxation, the new jobs created, and the stimulus provided for the development and sales of highly specialised equipment and services. At constant 1978 prices gross national product arising within the sector is expected to increase from £4,500 million in 1980 to £6,000 million by 1985.

A high level of agricultural productivity enables Britain to provide just over half the food it needs from its own soil, although only 2.7 per cent of the employed labour force are engaged in agriculture—a lower proportion than in

any other major industrial country.

Britain earns overseas currency by exports of (mainly) manufactured goods and by invisible transactions—when earnings on overseas investment, travel, civil aviation, shipping, and financial, banking, insurance and other services are higher than payments for import of these services. It accounts for some 9 per cent of world invisible receipts (excluding government transactions), more than any country except the United States.

The significant contribution made to export earnings by invisibles is in large measure a reflection of Britain's position as a major financial centre. Its banks, insurance underwriters and brokers and other financial institutions provide

¹ Services in this context cover transport, communications, distributive trades, insurance, banking, finance and business services, ownership of dwellings, public administration and defence, public health and education, and other services.

worldwide financial services. The City of London contains perhaps the most

comprehensive and advanced capital market in the world.

The main economic adjustments consequent upon Britain's membership of the European Community are set out in Chapter 3 and other relevant chapters.

ECONOMIC DEVELOPMENT

Earlier History

As a result of the 'Industrial Revolution' during the eighteenth and nineteenth centuries (when a series of inventions led to a complete change in the character of production), Britain emerged as the first great industrial nation and as a pioneer of new methods in transport, communications and technology. It occupied a leading position as world manufacturer, merchant, carrier, banker and investor, and its fast-growing economy supported a rapidly increasing population. In the period from 1870 to 1890 British industry had a clear though declining lead over that of other countries. Between 1890 and 1914, industrial competition from Europe and North America grew, but its effects on Britain's export industries, particularly cotton textiles and coal, were offset by a number of factors including the rise in world trade and the returns on Britain's large overseas investments.

Following the first world war Britain's older industries met increasing competition, for example, in coal and iron and steel from other European countries and in textiles from some eastern countries where labour was cheaper. The difficulties were increased by the world economic depression which began in 1929 and the associated attempts by many countries to reduce imports. The result in Britain, as in many other countries, was heavy unemployment.

After 1932 levels of production and employment rose. The decade saw a strong expansion in the vehicles, electrical, chemical and aircraft industries, while the construction of 3 million houses brought about a large growth in the

building and ancillary industries.

The Second World War and After During the second world war (1939-45) rapid and far-reaching re-orientation of the economy towards the war effort was secured by central planning. The Government involvement in the economy which this implied has remained, in a modified form, a permanent feature of the British economic system.

In spite of generous aid from the United States and Canada, the war ran down British domestic capital by about £3,000 million, through shipping losses, bomb damage, and arrears of industrial maintenance and replacements. Some £1,000 million worth of overseas investments were sold, nearly half in North America, and new external debts of £3,000 million were accumulated, while

exports were greatly reduced.

After the war rationing and other controls were relaxed gradually as civil production expanded and trade recovered. The period after 1945 was one of rising production and, until 1970, a low level of unemployment (generally 2.5 per cent or lower); but economic growth, which averaged 2 to 3 per cent up to 1971, was slower than in most other western European countries. There were also certain persistent economic problems, particularly the periodic difficulties with the balance of payments. In spite of the contribution from invisibles, there were substantial deficits on current account in a number of years.

In the 1960s successive governments sought to deal with these problems in a number of ways, sometimes restraining the growth in home demand and implementing policies designed to hold down rises in incomes and prices. Following the devaluation of sterling in 1967, from \$2.80 to \$2.40=£1, exports

recovered, leading to a substantial surplus on visible trade and a record current account surplus in 1971.

Recent Developments

In 1973, the economy achieved an annual growth rate of about 6 per cent. However, with, among other things, general inflation and the abrupt increase in the prices of commodities in 1972 and 1973, particularly of oil in late 1973, the world economy entered a phase of recession. At the same time, the very large balance of payments surpluses of the oil-producing countries following the rise in oil prices gave rise to a corresponding deficit for the oil-importing countries collectively, which could not quickly be eliminated. Although some recovery from this recession was evident from about 1976, it proved to be weak, especially in Britain.

Economic growth in the industrialised countries continued slowly in 1978: growth in gross national product in the member countries of the Organisation for Economic Co-operation and Development as a whole was probably under 4 per cent. For most countries unemployment remained high by post-1945 standards, while inflation continued to be a constraint on domestic policies. Estimates of world trade in manufactures suggest growth of just over 3 per cent,

compared with an historical trend of about 9 per cent.

Output in Britain rose relatively rapidly in early 1978 but slowed down in the latter half of the year, gross domestic product for the whole year rising by 3 per cent over 1977. Provisional output-based estimates for the first two quarters of 1979 showed that output actually fell in the first quarter, mainly reflecting the loss of output as a result of industrial disputes and severe winter weather. A large part of this output was recouped in the second quarter. The North Sea oil and gas sector was responsible for much of the growth in output in 1978 and this sector is continuing to increase in importance to the economy, especially with the developments in the oil market. By the fourth quarter of 1978 oil and gas production was accounting for 7 per cent of industrial production (at 1975 prices), compared with 4 per cent a year earlier. In 1978 the value of oil and gas sales from the UK Continental Shelf (with gas valued at oil equivalent import prices) plus identifiable balance of payments current account items (net) is estimated to have amounted to between £3,500 million and £3,750 million.

Real incomes increased substantially in Britain in 1978 as gross earnings rose faster than prices. Together with income tax reductions during the year, this meant that real personal disposable income was 8 per cent higher in the second half of 1978 than in the corresponding period of 1977. As a result consumers' spending rose in volume terms by almost 6 per cent over the same period, and this high rate continued into 1979.

Total fixed investment rose by some 2.75 per cent between 1977 and 1978 in real terms, although investment by manufacturing industry alone rose by some 8 per cent. A recent development has been the growth in leasing, and leased assets now represent some 10 per cent of total investment for manufacturing industry.

The volume of exports of goods increased by about 3.5 per cent in 1978, compared with about 8.5 per cent in 1977. Within the 1978 total, exports of fuels increased by 26 per cent, but exports of manufactures rose by only 2 per cent. The volume of imports of goods grew by 5 per cent in the year but, within this, imports of manufactures rose by 13.5 per cent, indicating that much of the rise in consumer demand was met by imports.

In December 1978 unemployment in Britain (seasonally adjusted and excluding school leavers) was some 100,000 below the peak level of November 1977,

having shown a slow but steady decline throughout 1978. Adult unemployment increased in early 1979 as a result of bad weather and transport disputes but then fell back steadily so that by September the level was 57,000 lower than in December 1978.

Economic Policy

In recent years successive Governments have adopted policies to control, on a statutory or voluntary basis, wages or prices or both. These policies have served to reduce inflation for a time, but have failed to achieve a lasting effect. Accordingly, in a radical departure from the approach of its predecessor, the Government elected in May 1979 introduced a Budget aimed at stimulating production, not through the management of market demand but through the provision of incentives to encourage output and innovation within a framework of greater economic freedom for the individual. This it aims to do by controlling inflation through the pursuit of firm monetary and fiscal policies, by reducing direct taxation (see p 345) and by restricting public expenditure. It also intends to pursue more effective competition and fair pricing policies. The Government recognises that these policies will take time to achieve their object: indeed the switch from direct to indirect taxation has had the effect of increasing the retail prices index. However, the Government believes that these policies will in the longer term achieve a lasting reduction in the rate of inflation.

Control of monetary growth is central to the Government's policies for bringing down the rate of inflation. By progressively reducing the public sector borrowing requirement (PSBR) and public expenditure, the Government intends to shift the emphasis of monetary restraint away from the private sector and on to the public sector. In his June 1979 Budget, however, the Chancellor's immediate action included a rise in the minimum lending rate, to bring money supply growth under control. The Government aims to reduce the PSBR from 5·5 per cent of GDP in 1978–79 to under 4·5 per cent in 1979–80 (£8,250 million). Public expenditure in 1980–81 is to be stabilised at some £69,800 million (at 1979 prices), approximately the same as the expected outturn in 1979–80. Increases in planned expenditure on defence, law and order and social security will be offset by reductions in expenditure on other services.

Since 1976 Governments have announced specific objectives for the growth of the monetary aggregates. For the 10 months to mid-April 1980 the Chancellor announced in his June 1979 Budget a target range of 7–11 per cent at an annual rate for the growth of the sterling M3 (which comprises all UK residents' sterling bank deposits, of both public and private sectors, plus notes and coins in circulation with the general public). This target is subject to reassessment after six months, in the light of developments in the economy generally, when it will be rolled forward to cover the succeeding 12-month period.

ECONOMIC MANAGEMENT

The Government's policies are carried out by the main departments with economic responsibilities on a national scale: the Treasury, the Departments of Trade, Industry, Employment, Energy, the Environment, and Transport and the Ministry of Agriculture, Fisheries and Food. Other specialist bodies advise on specific aspects of economic policy and include the National Economic Development Council, which brings together representatives of government, management and trade unions under the chairmanship of the Prime Minister, the Monopolies and Mergers Commission (on action to prevent the abuse of monopoly power, see p 223) and the Office of Manpower Economics, an independent non-statutory body (see p 333).

On matters of major public policy such as the broad economic strategy, and problems such as inflation, 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. For regional economic planning see Chapter 8.

Public Enterprise In Britain's mixed economy, direct State intervention in industry and commerce (as well as in social, cultural and other affairs) has often been effected through special public corporations set up, usually by statute, to deal with a particular activity. Though not part of a government department, the corporations are under varying degrees of public control. The major nationalised industries are the National Coal Board, British Gas, the electricity industry and the British National Oil Corporation; the British Steel Corporation, British Aerospace and British Shipbuilders; the Post Office; British Rail, the National Freight Corporation, the National Bus Company and British Airways. The more recently established nationalised industries include British Shipbuilders, British Aerospace and the British National Oil Corporation through which the Government exercises its participation rights in the exploitation of Britain's offshore oil resources. These industries and services, which together employ about 8 per cent of all employees, are described in their relevant sections. The public sector as a whole employs a little over a quarter of the working population.

The Government intends to reduce the extent of State-ownership of industry and increase competition by selling off some assets, giving opportunities for

employees to participate where appropriate.

NATIONAL INCOME AND EXPENDITURE

The following sections sketch briefly the structure and disposal of Britain's national income in recent years.

Output

In 1978 Britain's gross national product at factor cost (the measure of the total value of goods and services produced at home and net income from abroad) is estimated to have amounted to nearly £143,000 million. After allowing for price changes, the increase over the ten years since 1968 was 23 per cent.

Over a quarter of total output can be attributed to manufacturing industry, rather less than a decade ago. Expanding industry groups in recent years (in relation to the economy as a whole) have been mining and quarrying (reflecting the contribution of North Sea oil and gas), and services including communications, public administration and health and educational services. Table 7 summarises the contribution of each group.

Use of Resources Table 8 shows the distribution of total supplies of goods and services in 1968, 1973 and 1978 at 1975 market prices.

The main trends since 1968 are a fall in the proportion of total available output devoted to personal consumption and a significant rise in the proportion devoted to exports.

Personal Income and Consumers' Expenditure Personal incomes before tax at current prices rose rapidly and fairly steadily from £36,501 million in 1968 to £143,213 million in 1978. Real personal disposable income was nearly 7 per cent higher in 1978 than in 1977.

Consumer expenditure amounted to 67 per cent of total pre-tax income in 1978 compared with 75 per cent in 1968. The difference is accounted for by a

TABLE 7: Gross Domestic Product by Industry^a (at current prices)

	1968		1973		1978	
	£m.	per cent	£m.	per	£m.	per cent
Agriculture, forestry						
and fishing	1,122	3.0	1,967	3.1	3,715	2.6
Mining and quarrying	670	1.8	843	1.3	4,467	3.1
Manufacturing	11,999	31.9	18,832	29.4	40,690	28.6
Construction	2,560	6.8	5,142	8.0	8,610	6.0
Gas, electricity and					,	
water	1,301	3.5	1,910	3.0	4,772	3.4
Transport	2,349	6.3	3,797	5.9	7,677	5.4
Communications	813	2.2	1,618	2.5	4,011	2.8
Distributive trades	4,054	10.8	6,651	10.4	14,687	10.3
Insurance, banking	.,		-,		- 1,007	100
and finance	2,464	6.6	5,291	8.2	11,268	7.9
	_,		0,-/-		11,200	, ,
Ownership of						
dwellings	1,849	4.9	3,572	5.6	8,578	6.0
Public administration						
and defence	2,402	6.4	4,374	6.8	10,197	7.2
Public health and						
educational services	1,929	5.1	3,702	5.8	9,674	6.8
Other services	4,819	12.8	8,170	12.7	18,680	13.2
Adjustment for						
financial services	-1,152	-3.1	-2,712	-4.2	-6,098	-4.3
Residual error	375	1.0	997	1.5	1,071	1.0
~						
Gross domestic product						
at factor cost	37,554	100.0	64,154	100.0	141,999	100.0
Net property income						
from abroad	336		1,260		836	
Gross national product						
at factor cost	37,890		65,414		142,835	

Source: National Income and Expenditure 1979 Edition

TABLE 8: Distribution of Total Supplies of Goods and Services (at 1975 market prices)

	1968°		1973		1978	
	£m.	per	£m.	per	£m.	per
Consumers' expenditure General government	55,880	49.4	65,911	47.9	66,728	46.2
final consumption ^a Gross domestic capital	19,165	17.0	21,426	15.6	23,623	16.4
formation	19,719	17.4	24,154	17.5	21,614	15.0
Private sector ^b	9,815		12,226	8.9	13,687	9.5
Public sector ^b Exports of goods and	9,050		8,885	6.5	6,798	4.7
services	18,542	16.4	26,109	19.0	32,343	22.4
Total final expenditure	113,020	100.0	137,600	100.0	144,308	100.0

Source: National Income and Expenditure 1979 Edition

^a Before provision for depreciation but after deducting stock appreciation.

^a Current expenditure on goods and services plus non-trading capital consumption.

^b Excluding value of physical change in stocks and work in progress (£1,129 million in total in 1978).

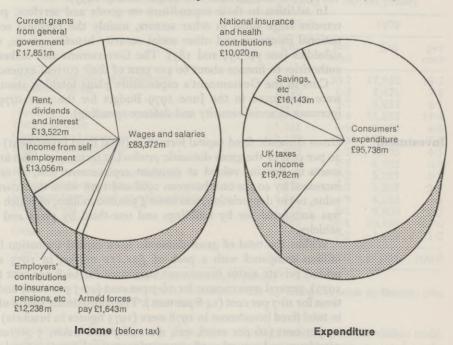
^c Sum of component parts differs from totals owing to the method used to rebase at 1975 prices.

higher incidence of both direct taxation and national insurance contributions and by increased personal saving.

Sources of Income

Income from employment in 1978 totalled £98,156 million and accounted for about 69 per cent of total personal income (a slightly lower percentage than in

Personal income and expenditure 1978 (at current prices)



Note: Figures are estimates (rounded to nearest million) and exclude items under £325 million.

1968). The three other main sources of personal income were self-employment (9 per cent), income from rent, dividends and interest (10 per cent), and grants from general government (12 per cent).

The combined effect of all taxation and transfer payments and benefits in kind is to redistribute income on more egalitarian lines. According to studies by the Central Statistical Office, the effect in 1977 was to raise the share of the poorest fifth of households from 1 per cent of total original income to 9 per cent of all final income. This group contains 12 per cent of the population and consists mainly of retired people, dependent on State pensions. The share of the richest fifth fell from 44 per cent to 35 per cent.

Consumers' Expenditure A rise in the volume of consumers' spending has been accompanied, in Britain as in other advanced industrial countries, by changes in its pattern.

Table 9 shows the amounts and proportions of consumers' expenditure at current prices in 1968 and 1978. Over this period the proportions spent on food, tobacco, and clothing and footwear fell while the proportions spent on alcoholic drink, housing and cars and motorcycles rose. At constant (1975) prices consumers' expenditure increased by almost 5.5 per cent between 1977 and 1978.

Current
Expenditure of
General
Government

Current expenditure on goods and services by the central Government and local authorities rose by about 23 per cent at 1975 market prices over the period 1968 to 1978 when it amounted to about 20 per cent of the gross domestic product (at current prices). The main cause of this increase was the growth over the period of the social services, especially education and the National Health Service. In the same period defence accounted for a declining share of general government expenditure on goods and services (23 per cent in 1978 compared with 32 per cent in 1968 and 48 per cent in 1953).

In addition to their expenditure on goods and services, public authorities transfer large sums to other sectors, mainly the personal sector, by way of national insurance and other social security benefits, grants, and interest and subsidies (see pp 139 and 185). The Government also makes grants to local

authorities to finance about 60 per cent of their current expenditure.

Cuts in the Government's expenditure plans totalling about £4,000 million were announced in the June 1979 Budget for the year 1979-80 (with some increases in social security and defence spending).

Investment

Gross domestic fixed capital formation (total fixed investment) represents about 20 per cent of the gross domestic product at factor cost. The total value of fixed assets in Britain, valued at constant replacement cost, is estimated to have increased by 40 per cent between 1968 and 1978 when their current replacement value, net of depreciation, was some £500,000 million, of which about two-thirds was accounted for by buildings and one-third by plant and machinery, and vehicles.

Within the total of gross domestic fixed capital formation in 1978 (£20,485 million compared with a peak of £21,111 million in 1973 at constant 1975 prices) private sector investment accounted for 66.8 per cent (57.9 per cent in 1973), general government for 16.5 per cent (27.3 per cent) and public corporations for 16.7 per cent (14.8 per cent). The approximate shares of industry groups in total fixed investment in 1978 were (1973 figures in brackets): manufacturing, 19 per cent (16 per cent), gas, electricity and water, 5 per cent (6 per cent), petroleum and natural gas 8 per cent (1 per cent), transport and communications, 9 per cent (13 per cent), distributive trades, 6 per cent (5 per cent), dwellings, 19 per cent (20 per cent), social and other public services, 11 per cent (18 per cent), and other industries, 23 per cent (21 per cent). There is a marked cyclical pattern in the flow of investment by manufacturing industry; it was at a peak in 1970 and 1974, fell in 1975 and 1976 but increased considerably in 1977 and 1978. Among the trends in recent years has been the increase in investment in North Sea oil and gas equipment which reached a peak in 1976.

THE EXTERNAL POSITION

Overseas Trade and Payments In the years following devaluation in 1967 exports of goods and services increased rapidly in real terms. Helped by a record surplus on current transactions of £1,150 million in 1971, and by massive capital inflows, the reserves stood at the high level of just over £2,740 million by the end of May 1972, after the repayment of all official short- and medium-term debt.

In 1972 the trade balance began to deteriorate. The marked worsening of Britain's visible trade balance in 1973 and 1974 was much influenced by the increases in world commodity prices, especially oil prices. By 1974 the terms of trade, which were also affected by a fall in the sterling exchange rate, were 23 per cent lower than in 1972. This was partly offset by a growing volume of exports relative to imports. Between 1973 and 1977 the volume of exports

increased by about 22 per cent while the volume of imports decreased by about I per cent. The improved competitive position of British exports, resulting from the floating of the pound in June 1972, contributed to this, while imports were held down in part by the low level of domestic demand. In 1975 and 1976 the deficit on current account was reduced substantially.

There was a marked improvement in 1977, largely as a result of growing

TABLE 9: Changes in Pattern of Consumers' Spending (at current prices)

	1968	26.1	1978	
	£m.	per cent	£m.	per cent
Food (household expenditure)	5,696	20.7	17,952	18.7
Alcoholic drink	1,870	6.8	7,471	7.8
Tobacco	1,578	5.7	3,933	4.1
Housing (rent, rates, repairs, etc.)	3,397	12.4	13,855	14.4
Fuel and light	1,341	4.9	4,650	4.8
Clothing and footwear	2,375	8.6	7,366	7.7
Cars and motorcycles	875	3.2	4,100	4.3
Other durable goods	1,242	4.5	4,723	4.9
Running costs of motor vehicles	1,418	5.2	5,227	5.5
Other travel expenditure	872	3.2	3,207	3.3
Catering (meals and accommodation)	1,346	4.9	4,233	4.4
Other goods	2,639	9.6	9,909	10.3
Other services	2,767	10.1	10,593	11.0
Other items ^a	65	0.2	-1,133	-1.2
TOTAL	27,481	100.0	96,086	100.0
	27,701	100.0	90,000	100.0

Source: National Income and Expenditure 1979 Edition

production of North Sea oil. This led to a further reduction in the visible trade deficit in 1978. There were surpluses on current account in both 1977 and 1978. For details of overseas trade and payments see Chapter 19.

and External Debt

Exchange Rates In 1971, a general international realignment of exchange rates was agreed at a meeting held in the Smithsonian Institute in Washington, in which all the main currencies were in effect revalued against the dollar. (The rates of exchange fixed in that agreement are called Smithsonian parities.) As part of this realignment, the sterling rate for the dollar moved up by just over $8\frac{1}{2}$ per cent, the new middle rate being \$2.60571 compared with the old par value of \$2.40. In June 1972 sterling was allowed to float. Sterling came under severe pressure in 1976. Increased confidence in sterling throughout 1977 was shown by rises in the official reserves to record levels and by upwards pressure on the exchange rate. In October 1977 the Bank of England's intervention policy was changed and the pound allowed to appreciate on the foreign exchange markets. For the next year the sterling-dollar exchange rate fluctuated within the range of fire \$1.79 to about \$2, and has since risen fairly steadily. At the beginning of September 1979 the effective rate was 71.5 (December 1971 = 100) and the market rate $f_{1} = 2.25 .

Britain incurred large overseas debts to finance balance of payments deficits in the years 1973-76. In consequence total official foreign borrowing outstanding rose to \$25,200 million by the end of 1977 (compared with some \$5,000 million at the end of 1972, largely accounted for by long-term post-war debts). By the

a Consumers' expenditure abroad, less expenditure by foreign tourists in Britain, plus income in kind not included elsewhere.

end of 1977, however, the improvement in the external position enabled policy to be directed towards reducing the total debt outstanding and the concentration of debt due to be repaid in 1979–84. This has been done by a combination of early repayments of debt and taking out new borrowing to refinance existing debt due to mature during the period. During 1978 the Government and the public sector repaid \$4,600 million of overseas debt (\$3,600 million ahead of schedule), including \$2,000 million to the International Monetary Fund. Further early repayments to the IMF in early 1979 effectively extinguished Britain's debt to the IMF, apart from the oil facility of some \$1,200 million which was drawn in 1976 and is being repaid in 16 equal instalments over the period 1979–83.

At the end of March 1979 the reserves were officially revalued to bring their published value more closely in line with their market worth by valuing non-dollar reserves on a market-related basis. Revaluation increased the value of the reserves to \$22,000 million at the end of March. At the end of August the reserves

stood at \$23,305 million.

The European Community established a European Monetary System in March 1979 (see p 74), one of the main elements of which is an exchange rate and foreign exchange market intervention mechanism between the currencies of the member countries. Britain has participated in the system as a whole from the outset and has swapped 20 per cent of its gold and dollar reserve in exchange for European Currency Units (ECUs). The Government is considering the question of Britain's participation in the exchange rate arrangements.

International Monetary Developments A second set of amendments to the Articles of Agreement of the International Monetary Fund (IMF) entered into force on 1 April 1978. (The first amendments were made in 1969 when the Special Drawing Right—SDR—was established.) They bring the articles up to date and provide for necessary flexibility. The amendments were drawn up under the guidance of the Interim

Committee, which succeeded the Committee of Twenty in 1974.

Members undertake a general obligation to collaborate with the IMF and with other members in order to ensure orderly exchange arrangements and to promote a stable system of exchange rates. Under the new provisions the Fund will be able to determine that, in accordance with specified criteria, international economic conditions permit the introduction of a system based on stable but adjustable par values. Each member will then be able, though not bound, to establish a par value. The amendments provided for a gradual reduction in the role of gold in the international monetary system. The function of gold as the unit of value of the SDR has been eliminated, the official price has been abolished and members are free to deal in gold in the market and among themselves without reference to any official price, and obligatory payments in gold by members to the Fund and by the Fund to members have been abrogated. The IMF's gold holdings are being reduced; one-sixth is being returned to members, and a further sixth is being auctioned (the final auctions being in May 1980), the major proportion of the proceeds from the auctions being disbursed through a trust fund, set up to provide medium-term balance of payments support to the poorest developing countries. Changes have been made in the role of the SDR in order to enhance its status as an international reserve asset. The amendment also provides for changes in the organisation of the Fund and in its financial operations.

The IMF set up borrowing arrangements (known as the oil facility) in 1974 and on a larger and more liberal scale in 1975, through which countries were able

to draw on funds lent mainly by the oil-producers. The facility was fully drawn

and creditors will be repaid by 1983.

An extended facility for medium-term assistance to members with special balance of payments problems caused by structural economic changes was also introduced in 1974. A supplementary financing facility entered into force in February 1979, to provide financial assistance to members whose payments imbalances were large in relation to their economies and to their quotas in the Fund.

The entry into force of the Second Amendment of the IMF's articles on I April 1978 enabled the implementation of increases under the Sixth General Review of Quotas. As a result, total Fund quotas were raised from SDR 20,000 million to SDR 39,000 million.

12 The Framework of Industry

The production industries (mining and quarrying, manufacturing, construction, and gas, electricity and water), together with the distributive trades and transport and communications, account for some 60 per cent of Britain's gross domestic product (see Table 7 on p 200) and for about 55 per cent of total employment. Financial and business services, professional and scientific services (excluding public health and education services) and the various service trades (such as catering, entertainment, and personal and household services) contribute a further 21 per cent of gross domestic product.

This chapter describes some of the general features of industrial activity, such as the forms of enterprise and trends in production, productivity and investment, and the geographical distribution of industry. It also describes government measures to stimulate or, where necessary, regulate industrial activity. The chapters following cover the main areas of industrial and commercial activity.

ORGANISATION AND PRODUCTION

Structure

The forms of industrial organisation and the pattern of ownership and control are varied. Personal, corporate, co-operative and public enterprise all assume a number of different forms, and all are important in the economy.

Limited liability companies are the commonest form of corporate enterprise and may be either public (which usually means that shares in them can be bought and sold on a stock exchange) or private. Public companies (of which there were 16,092 in Britain at the end of 1978) tend to be large, while the great majority of private companies (685,800 at the end of 1978) are small. British company law is being reviewed in the light of European Community legislation.

Most of the energy, transport and communications industries are in public sector ownership. Most manufacturing (with the exceptions of steel, aerospace and shipbuilding) is in the hands of private enterprise, as are the construction and distributive industries. (See also p 199.)

The largest organisations in terms of numbers employed are public sector corporations such as the Post Office (401,000) and the National Coal Board (303,000) and companies such as BL, formerly British Leyland, (195,000), General Electric Company (192,000) and Imperial Chemical Industries (154,000). The largest companies in terms of capital employed (net assets) are British Petroleum (over £5,500 million) and Shell Transport and Trading (£5,000 million). Altogether more than 70 companies registered in Britain each have net assets over £250 million; in terms of annual sales four of the top 20 industrial groups in Europe are British.

Merging and regrouping have continued as the effort to reduce overheads has intensified and, in many branches of industry, profitable operation has become

¹ Apart from the buying and selling of shares, the main difference between a public and private company is that there are regulations governing the number of shareholders that each may have. Legislation is expected to be enacted by 1980 defining public and private companies in a different way (mainly on the basis of asset size) in accordance with a European Community directive.

dependent on concentration and economies of scale. Larger units of control have been established in almost all the leading industries and in some a small number of big companies and their subsidiaries are responsible for a great proportion of total production. Examples are oil refining, non-ferrous metal smelting, motor vehicles and aircraft, heavy electrical engineering, electronics, machine tools, brewing, textiles, basic chemicals, tobacco and magazine publishing. Shares in these companies are, however, usually distributed among many holders or are held by insurance companies or pension funds representing a broad cross-section of the community, and it is rare for a few holders to have a controlling interest other than in the case of private companies.

Alongside these large organisations are many hundreds of thousands of small firms playing an essential part in the economy.

Industrial Association

Voluntary associations are formed by private enterprises for a number of different purposes, including the provision of common services, the exchange of information and representation of their members' point of view; the regulation of trading practices; and negotiation with trade unions on wages and conditions of work. These associations cover, with varying completeness, most of British industry. Trade associations, concerned mainly with representation to the Government, the provision of common services and the regulation of trading practices, are normally composed of firms manufacturing (and/or retailing) a particular product or group of products. Employers' organisations which deal with employment matters usually consist of firms engaged in the same type of operation or manufacturing process. In an industrial sector concerned wholly with an allied group of products, a single association may undertake all the required functions. The national employers' organisations are usually concerned with negotiation of wages and conditions of work (see p 329).

The central body representing British business and industry nationally is the Confederation of British Industry (CBI), recognised by the Government as a channel for consultation between government departments and representatives of both the private and the public sector employers as a whole. The CBI membership consists of nearly 4,500 parent companies and between 11,000 and 12,000 subsidiaries and about 300 employers' organisations and trade and commercial associations and the majority of the nationalised industries. 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 the public and also internationally (see p 329). CBI representatives sit on the National Economic Development Council, the Manpower Services Commission, the Health and Safety Commission, the Advisory, Conciliation and Arbitration Service and other official advisory committees and voluntary bodies concerned with matters affecting industry.

In matters of common concern the CBI often acts jointly with the chambers of commerce. These are open to all kinds of producers and traders and exist to promote the interests of local, regional and national industry and commerce. Most chambers provide export facilities, including the sponsorship of outward trade missions and visits. The Association of British Chambers of Commerce, founded in 1860, is the co-ordinating body to which about 85 local chambers are affiliated, together with 21 British Chambers of Commerce operating in Europe and elsewhere. These chambers have a membership of about 50,000 firms. In Scotland there is an additional central organisation, the Association of Scottish Chambers of Commerce, and in Northern Ireland the Northern Ireland Chamber of Commerce and Industry, to which local chambers are affiliated.

Other voluntary associations include industrial development associations for

particular areas or regions, which are sponsored by trade associations, individual firms and local authorities. Four of these bodies (the North of England Development Council, the North West Industrial Development Association, the Yorkshire and Humberside Development Association and the Devon and Cornwall Development Bureau) receive government grants, while the Scottish Council for Development and the Development Corporation for Wales receive grants from the Scottish and Welsh development agencies respectively.

Production

Though industrial production in general has been affected by the world recession in industry, it has risen over the depressed levels of 1975 (see Table 10), as measured by the index of industrial production. Mining and quarrying output has risen sharply owing to increased production of North Sea oil and gas. Growth of manufacturing output has been more gradual; the 1978 level represents an increase in output of more than 60 per cent over the previous 20 years. The index of output in individual sectors of manufacturing is shown on p 228.

TABLE 10: Index of Output 1973-78 (1975=100)

Industry Group	1973	1974	1975	1976	1977	1978
Production Industries						
Mining and quarrying	110.1	89.9	100	125.8	187.7	232.4
Manufacturing	109.2	107.4	100	102.2	103.8	104.4
Construction	118.2	105.8	100	98.6	98.2	105.7
Gas, electricity, water	99.3	99.2	100	102.9	107.0	110.3
Total production industries	110.1	105.7	100	102.5	106.5	110.4
Transport and communications	101.0	101.0	100	99.0	101.0	104.0
Distributive trades	106.0	103.0	100	101.0	99.0	104.0

Source: Monthly Digest of Statistics

Productivity

The improvement of productivity, which by international standards has shown a relatively slow rate of growth in Britain, is recognised as being of prime importance for the economy. Productivity, as measured by output per head, increased by 12.6 per cent in all production industries between 1975 and 1978 (see Table 11). In manufacturing the increase was 6.4 per cent and in mining and quarrying 139 per cent. Both the long-term and the short-term growth of productivity are influenced by such factors as the rate of capital investment, management, advances in products, machinery processes and methods of work, sales promotion and labour. Over the last decade the size of the labour force employed in industry has fallen steadily.

The improvement of productivity rests mainly with the management and the workforce in individual enterprises. Support for their efforts is provided by the Department of Industry. It assists the introduction of advanced machinery and techniques into industry, provides technical advisory services and sponsors the Computer-Aided Design Centre and the National Computing Centre. It is concerned directly with research into such factors as productivity measurement techniques, group technology and production engineering. The Department of Employment advises firms on aspects of productivity connected with manpower utilisation, job satisfaction and industrial relations. Many educational establishments also provide advice and assistance.

Within industry, employers' organisations often provide technical assistance and support schemes of vocational education and training, as do many trade unions. The British Council of Productivity Associations is one of many bodies, both public and private, concerned with various aspects of productivity. The Council provides information and advisory services to industry through a national network of 45 local associations.

TABLE 11: Index of Output per head 1973-78 (1975=100)

	Total	C		oduction istries	Manufa indus	
	employed labour force	Gross domestic product per head	Employ- ment	Output per head	Employ- ment	Output per head
1973	100.4	103.4	104.7	104.6	104.5	103.6
1974	100.7	101.2	104.4	100.7	104.7	101.8
1975	100	100	100	100	100	100
1976	99.5	102.6	97.6	104.5	97	104.6
1977	99.8	104.9	97.9	108.1	97.8	105.1
1978	100.2	107.6	97.4	112.6	97.4	106.4

Source: Monthly Digest of Statistics

Investment

Productivity is particularly dependent on the quantity and efficiency of the capital assets which the labour force has at its disposal. Details of investment in the period 1973–78 are contained in Table 12. Investment in manufacturing industries is described in more detail on p 227.

TABLE 12: Gross Domestic Fixed Capital Formation 1973-78 (1975 prices)

f. million

					~
	Mining and quarrying ^a	Manu- facturing	Gas, electricity and water	Transport and communica- tions	Distributive trades
1973 1974 1975 1976 1977 1978	457 880 1,549 2,105 2,003 1,986	3,440 3,782 3,522 3,341 3,637 3,853	1,188 1,196 1,242 1,205 1,015 995	2,677 2,438 2,337 2,008 2,024 1,799	1,154 1,191 1,034 990 1,161 1,194

Source: National Income and Expenditure 1968-78

Part of the investment in plant and machinery is associated with the introduction of new techniques and equipment. The process of automation (see below) is changing the pattern and organisation of many industries and has brought substantial increases in production and efficiency. Much investment, however, still consists of replacements, additions and improvements of a more traditional kind. Industrial technologies of plant maintenance, materials handling, lubrication and corrosion protection, well developed in Britain, make possible large savings in costs.

Automation

In Britain, as in other industrialised countries, automation has been steadily extended to a wide range of industrial and commercial activities. Extensive use of automation is to be found across the whole range of production industries, including metal manufacture, the petroleum and chemical industries, engineering, food, drink and tobacco manufacture, printing and publishing, and power transmission, and in service industries such as transport, posts and

a Including extraction of petroleum and natural gas.

telecommunications, retailing, wholesale distribution and business and financial services.

The growth of digital techniques, including the use of computers, has greatly extended the range for automatic operations; it is now possible for an entire production process to be controlled automatically, and for information to be provided rapidly for managerial, commercial and technical purposes. Britain has many advanced applications of computer control in operation in both the public and private sectors of industry, and is among the world's leading nations in the provision of 'software' services and systems (that is, the preparation of instructions for computer operations).

The scope of electronic controls has been extended still further by the development of micro-electronics, and in particular the microprocessor, a term commonly used to refer to a miniature wafer or 'chip' of silicon about 5mm (0·2 inches) square, on which are placed electronic circuits equivalent to those found in the central processing unit of a computer. The importance of this development has been widely recognised in Britain, partly through government initiatives, including a microprocessor awareness campaign aimed at industrialists and trade unions. In addition financial support has been provided for the micro-electronics industry, and a scheme to support applications of micro-electronics has been established. British companies are also improving the performance of operations which are already automated by developing more comprehensive and powerful control systems.

Management Education

In Britain, as elsewhere, it is recognised that managers require special skills and training. The British Institute of Management (BIM), which is playing an increasingly representative role for the management and administrative professions, provides a wide range of information services and has a particular interest in management education and training. The Institute of Directors also provides information and other services to directors of all types of company. The Industrial Society, whose membership includes trade unions as well as employers and their associations, works to promote better use of human resources; it advises members and conducts conferences and courses.

A large proportion of management education is provided by polytechnics and many of the colleges of further education throughout Britain; 12 regional centres of management education have been established in England and Wales through the association of polytechnics and colleges which have high reputations for management studies. Universities also make an important contribution, especially the full-time postgraduate programmes at the business schools of London and Manchester Universities. Training courses for higher management are offered by several colleges including the Administrative Staff College, Henleyon-Thames, and Ashridge College of Management, Berkhamsted. The Council of Industry for Management Education, jointly sponsored by the CBI, the BIM and the Foundation for Management Education, works to foster the development of business and management education. Many firms provide general management courses for senior executives or systems of informal training. There are also a number of bodies concerned with specialised branches of management, for example, the Institute of Personnel Management, the Institution of Works Managers, the Institute of Administrative Management, the Institute of Supervisory Management, the Institute of Marketing, the Institute of Chartered Secretaries and Administrators and the Institute of Purchasing and Supply.

The large number of professional people working as management consultants indicates the concern for improved management performance in Britain. Such consultancy services are being increasingly used by overseas clients.

Design

Design is an important factor in improving the quality and competitiveness of manufactured goods. Improvement of the design of British goods is the concern of the government-sponsored Design Council and its separate Scottish Committee, while the Computer-Aided Design Centre (see p 381) also provides assistance to individual firms.

At the Council's Design Centres in London and Glasgow there are permanent displays of well-designed modern British goods, together with special exhibitions illustrating new design developments. There is a third, smaller showroom in Cardiff. All the products displayed are chosen from the Council's Design Index, a record of some 7,000 current British products, chosen by independent committees for their high standards of design, safety and performance. The Council's services include advice on design matters, the organisation of product displays at overseas trade fairs, conferences and seminars on design, help for design education and the publication of a range of material. It provides annual Design Council Awards for manufacturers of consumer and engineering products and for medical equipment and motor vehicles.

Other bodies concerned with industrial design include the Royal Society of Arts (see p 385), the Society of Industrial Artists and Designers, which is the representative professional body in Great Britain of industrial designers, and the Design and Industries Association, a voluntary association of industrial companies, designers, and others interested in the promotion of good design in industry. The British Craft Centre and the Scottish Craft Centre are both grantaided and work to improve craft design by, for example, organising regular exhibitions and other events.

Industrial Property

There exists a substantial body of legislation designed to secure the rights of the originators of inventions relating to manufacture, new industrial designs and trade marks. These matters are administered respectively by the Patents Office, the Design Registry and the Trade Marks Registry, while governmental responsibility is exercised by the Department of Trade. It is also open to British residents to apply for protection under international agreements such as the European Patent Convention and the Patent Co-operation Treaty, both of which came into effect in 1978. International protection for patents, designs and trade marks is available under the International Convention for the Protection of Industrial Property.

Standards

The British Standards Institution (BSI) is a voluntary non-profit-making body incorporated by Royal Charter, funded in part by sale of standards, by subscription and by government grant. It prepares and promulgates standards which, variously, specify dimensions, performance and safety criteria, testing methods and codes of practice for a large range of products and processes in most fields of production. Voluntary acceptance of such standards by manufacturers, buyers and sellers reduces unnecessary variety and simplifies the specification of requirements. BSI is governed by an executive board which includes representatives of the main organisations of employers and workers, professional institutions, consumers and the larger government departments.

The British Calibration Service (BCS) was established in 1966 in response to the growth in demand for industrial calibration services, which was beginning to exceed the capacity of the National Physical Laboratory (see p 380). The BCS is an organisation of over 80 laboratories, belonging to industry, universities and the Government, which offer 'authenticated calibration traceable to national standards', a phrase which refers to the fact that all these laboratories make measurements with instruments which are calibrated directly by the National

Physical Laboratory (NPL), Britain's highest calibration authority, or against secondary standards which are themselves calibrated by NPL. BCS laboratories issue calibration certificates for electrical, mechanical, optical, pressure, flow and thermal measurements; the range covers those essential to quality, efficiency and safety in manufacturing and process industries. The BCS has provided a model which other countries have followed.

Location

The following is a summary of how British industry is distributed through the eight standard regions of England and Wales, Scotland and Northern Ireland.

South East Region London is Britain's capital and main communication centre, and is one of the world's most important financial and tourist centres. Lying at the head of ocean navigation on the Thames estuary it is one of the world's largest cities and largest ports, though much deep-sea-going traffic has moved down-river to Tilbury docks. It is the main centre in Britain of printing and the manufacture of ladies' clothing, materials for the arts, precision instruments, jewellery, and many other specialised products. Small firms predominate in many of these industries and the average size of manufacturing firms (particularly in the central area) is well below the national average. London is also important, especially in its outer ring, for light engineering, chemicals and consumer goods and has some heavy engineering plants and a number of leading research establishments. There has been in recent years, however, a considerable drop in employment and population in London.

Towards the periphery of Greater London and in the surrounding Outer Metropolitan Area, industry, particularly the electronics and consumer goods industries, has expanded greatly; some of the largest aircraft plants are in these areas, for example at Weybridge and Hatfield, as well as two of the four main motor vehicle manufacturers at Dagenham, Luton and Dunstable. There are other major motor vehicle manufacturing plants at Cowley, Oxford, some 50 miles north-west of London. High technology industries are well represented in Hertfordshire, and Chelmsford is an important centre for the electronics industry. Along the lower Thames and Medway estuaries there are large oil refineries as well as some smaller shipyards, engineering works and major concentrations of the paper and pulp and cement industries. There are centres of manufacturing industry at Crawley, Basingstoke, Slough and Reading, in the Medway towns and the Aldershot–Farnborough area. Heathrow and Gatwick airports are of major importance and are large employers.

A great part of the Channel coast eastwards from Southampton consists of built-up areas, many of which are partly residential areas for people working in London. Holiday resorts fringe the coast. Portsmouth is a naval port with some shipbuilding and general manufacturing. Southampton is one of Britain's leading ports for both passengers and freight; its industries include ship repairing, oil refining, cable-making, electronics and synthetic rubber. Dover, Folkestone and Newhaven are ferry ports. Brighton, apart from being an important holiday, residential and conference centre, is a university town and has

important manufacturing plant.

South West

Though famous for its tourism, leisure industries and agriculture, the south-west of England has a busy manufacturing sector. Bristol, the region's administrative and commercial centre, is a leading port and the largest industrial city, having tobacco, packaging materials, printing, aerospace, chocolate and metal manufacture as well as a wide range of engineering and other industries; there are extensive modern docks at Avonmouth, an industrialised suburb with

important basic chemicals and non-ferrous metal plants. Plymouth, with the naval dockyard and electrical and other industries, is an important manufacturing centre. The towns of Gloucester, Poole, Christehureh, Cheltenham and Bath are major producers of machinery, instrumentation and other engineering products. Swindon has vehicle, electrical and electronic engineering. Chemical and engineering products are made at Yeovil, Taunton and Bridgwater. Clothing and other textile products and footwear are made at several centres. In the Camborne, Redruth, Falmouth and St. Austell areas of Cornwall there is china clay and tin mining, and machinery manufacture, ship repairing and other forms of engineering.

East Anglia

Although the smallest of the regions East Anglia has been rapidly growing in terms of both population and employment. A major contribution to this growth was made by a scheme under which nine towns absorbed an overspill of population and industry from London. The area is one of the most productive agricultural regions in the world and this has provided a firm base for the growth of the food processing industry, which is concerned mainly with canning, and more recently freezing local produce. Cambridge is a major centre of research-based industry; Ipswich and Peterborough are noted for diesel engines, agricultural machinery and engineering generally and Norwich for footwear and food manufacture. Cambridge, Ipswich and Norwich have become increasingly important as centres for service industries. The east coast ports of Great Yarmouth and Lowestoft are important bases for companies associated with natural gas exploitation in the North Sea.

West Midlands

This is the only landlocked region and it has a greater dependency on manufacturing industry than any other region. However, more than three-quarters of the land is still used for agriculture and includes some areas of great natural beauty, particularly in the south and west. The main concentration of industry is in the West Midlands metropolitan county which includes the districts of Birmingham, Coventry, Dudley, Sandwell, Solihull, Walsall and Wolverhampton. The economy is largely dependent upon the metal-using industries and in particular on motor vehicle manufacture. Other notable industries are mechanical and electrical engineering, machine tools, castings, tubes, locks, jewellery, domestic metalware and rubber manufactures. The metropolitan county also contains the National Exhibition Centre, which is one of the largest and most modern exhibition complexes in the world.

In north Staffordshire, a smaller conurbation centred upon Stoke-on-Trent is the centre of the British pottery and china industry and the region's major coalmining area. Other industries are rubber and electrical products. Coalmining is also important in the Cannock Chase and north Warwickshire areas.

Other important centres include Stafford, with heavy electrical and other engineering; Worcester, mechanical engineering and pottery; Burton-on-Trent, brewing and rubber; Kidderminster, carpets; and Rugby, electrical engineering. Stratford-upon-Avon, the birthplace of William Shakespeare, is an international tourist centre.

The two major new towns, Telford and Redditch, have large metal-based industries.

East Midlands

Although some major industries are heavily concentrated in the East Midlands (over 60 per cent of Britain's hosiery and knitwear, 40 per cent of its footwear and more than 20 per cent of its coal) industry is well diversified. North Nottinghamshire and Derbyshire are traditional coalmining areas where productivity

rates are high. In the northern part of the region engineering is also important. In Nottingham a high proportion of employment is in pharmaceuticals, electronics, tobacco and bicycle manufacture. Nottingham lace is famous throughout the world, but textiles and clothing are of more importance. Derby is primarily an engineering town with aero-engines, rail rolling stock, boilers and castings among a wide range of engineering products. The production of man-made fibres is also of considerable importance. Agriculture is significant in Lincolnshire as well as food processing and engineering, much of which produces agricultural and constructional equipment. Lincoln has a substantial engineering industry. Engineering is also a major industry in Leicestershire, much of it supplying other local industries such as textiles and footwear. Electrical engineering is of especial importance in Loughborough. Northamptonshire is famous for high quality footwear. In recent years light engineering, much of it related to the motor and electronics industries, has expanded considerably.

North West

The North West comprises the metropolitan counties of Greater Manchester and Merseyside and the counties of Lancashire and Cheshire. The Department of Industry's administration of this region extends also into parts of Cumbria and Derbyshire. The region is one of the most highly industrialised in Britain. Manchester is Britain's second most important commercial and financial centre and an important port. It is one of the chief centres for electrical and heavy engineering and for the production of a wide range of goods including computers, electronic equipment, petrochemicals, clothing, dye-stuffs and pharmaceuticals. Manchester's traditional role as the centre for the Lancashire textile industry is only a small part of its present-day activities.

The textile towns, while adapting to the decline of traditional textiles and to increasing use of man-made fibres and moving into new textile products, such as carpets, have for the most part seen engineering outgrow the textile industry. The largest towns, Bolton, Stockport, Oldham, Blackburn, Preston, Rochdale, Burnley and Bury, are diversified with such industries as paper-making, textile and electrical machinery, light engineering and consumer durables, plastics, foods, chemicals, nuclear process plant, electronics, aircraft and heavy commercial vehicles.

The Manchester Ship Canal, which carries a substantial volume of export traffic, links Manchester and Merseyside. It passes through Warrington, with its new town, Widnes, Runcorn with the chemical industry, and Ellesmere Port with its oil refinery installations, before reaching the Mersey estuary. St. Helens, to the north of the canal, is famous for glass manufacture. Liverpool, with its modernised dock system, is one of Britain's leading seaports and, after London, the largest centre for processing and converting imported foodstuffs and raw materials (grain milling, oils, fats and tobacco, sugar refining and rubber products). The centre of economic activity in Merseyside is still its port, but its industrial strength has moved from older industries closely related to the port to the newer industries including motor vehicles, electrical engineering, heavy industrial plant and chemicals.

To the north of this industrial belt lie Blackpool and Lancaster with light industries and chemicals and to the south, the Cheshire plain with agriculture, while a variety of industries such as salt, chemicals, motor vehicles, pharmaceuticals and rail engineering are located among the smaller towns.

The countryside lies close to most towns and the region contains some of Britain's most fertile farmland. There is a large tourist industry on the coast and in historic towns, such as Chester and the four National Parks on or near its boundaries. There are major airports at Liverpool and Manchester, a highly

developed rail system and one of the most advanced motorway networks in Britain, providing good access throughout the region, and to the rest of the country and continental Europe through the east coast ports.

Yorkshire and Humberside Though some parts of Yorkshire and Humberside are heavily industrialised, more than four-fifths of the region is open country.

The region's industrial structure is diverse. About 70 per cent of Britain's worsted and woollen industry is located in West Yorkshire. Bradford is the commercial centre of the wool trade. In addition there are strong sectors of engineering, printing, textile machinery and carpets. The metropolitan district of Leeds is an important commercial centre and also has a variety of industries including men's clothing and various engineering industries. In the south, the steel centre based on Sheffield and Rotherham is noted for the manufacture of high quality steels, tools and cutlery. Yorkshire's coalfields are particularly important and production is to be extended to the Selby area, where major new reserves have been discovered. Doncaster, with tractor and nylon manufacturing, and Barnsley are the largest towns on the coalfield where dependence on steel and coal has been reduced by the introduction of new industries in and around the major towns.

North Yorkshire is mainly agricultural but York, a leading tourist attraction, is also noted for chocolate and confectionery manufacture. It is an important railway centre, and has substantial railway workshops.

Kingston upon Hull is the principal industrial town in Humberside, which is a major centre for maritime trade with ports at Grimsby, Immingham and Goole in addition to Hull. Besides being important fishing ports, Hull and Grimsby contain specialised food processing and cold storage facilities. The Humber ports are strategically situated for direct access to Western Europe. The British Steel Corporation's plant at Scunthorpe is one of Britain's largest steel producers. Close by are chemical, fertiliser, oil refining, and food processing plants. The north bank of the Humber contains a large proportion of Britain's caravan manufacturing industry.

Northern

The greater part of this region (the metropolitan county of Tyne and Wear and the counties of Northumberland, Durham, Cleveland and Cumbria) is an area of mountains, lakes and moorland. The tourist industry, already strong in the Lake District, is developing in other areas. Industrial activity and the bulk of the population is concentrated in the eastern coastal strip stretching from the coalfields north of the River Tyne southwards to the River Tees, and to a lesser extent, on the western coastal strip of Cumbria.

The region is relatively more dependent than other parts of England on the long-established heavy industries, notably coalmining, iron and steel manufacture, shipbuilding and ship-repairing and chemicals (the complex of chemical plants on both banks of the Tees is probably the most extensive in Europe). Europe's largest steelmaking complex is being developed in the Teesside area. New industries, however, with a broader technological base, have been successfully attracted to the region and the industrial structure is becoming more diversified. Manufacture of electrical plant is a major industry.

Other industries include electric components, plastics, domestic appliances, pharmaceuticals, machine tools, ropes, paint, glass, clothing and scientific instruments as well as mining machinery, rolling mill plant and earth-moving equipment. An aluminium smelter is operating on the Northumberland coast. Atomic energy is important, with two nuclear power stations and other installations in Cumbria, and a further nuclear power station at an advanced stage

of construction at Hartlepool. Considerable investment is taking place in the coalmining industry to exploit large coal reserves below the sea bed off the Northumberland and Durham coasts and to boost open-cast coal production. The region is also involved in the North Sea oil programme. The new oil terminal at Teesside has a potential capacity of one million barrels a day of North Sea oil. A major new reservoir at Kielder will, when completed, provide water supplies for industry on Tyneside and Teesside.

Wales

Some two-thirds of the population (which totals 2.8 million) live in industrial south Wales. This area has a diverse range of modern manufacturing industries, including mechanical and electrical engineering, motor vehicle components, plastics, chemicals and textiles. Though coalmining has declined substantially, the south Wales coalfield still produces virtually all Britain's anthracite and much of its steam and other specialised coals. Steel, the other traditional industry of south Wales, is less dominant in employment terms than formerly but still supplies all of Britain's tinplate and much of its sheet steel. Cardiff, Newport and Swansea are the largest urban centres and, with Barry and Port Talbot, are also the major ports of the region. This latter has one of the largest steelmaking plants in Britain and a deep water harbour for importing iron ore. Milford Haven is one of the finest natural deep water harbours in the world and has developed as Britain's major oil-importing port with four oil refineries and a link with a fifth at Llandarcy.

The other main industrial area is in north-east Wales. Coalmining has now contracted in importance but steel finishing, chemicals, man-made fibres and aircraft construction remain significant sources of employment despite some shedding of labour in recent years. A range of new lighter industry has been introduced in the post-war years, particularly around Wrexham. The remainder of Wales is predominantly rural with agriculture, forestry and tourism the traditional basis of the economy, but here too manufacturing firms have been successfully introduced in many towns, and one or two very large scale undertakings such as an aluminium plant at Holyhead, Anglesey, have been established.

Scotland

About three-quarters of Scotland's population of 5.2 million and most of the industrial activity is concentrated in the central lowlands between the Firth of Clyde and the Firth of Forth. The principal cities in this area are Glasgow, a major commercial centre, and Edinburgh, Scotland's capital, an administrative, financial and cultural centre. There is, in addition, a wide variety of manufacturing industries. Clydeside, which includes Glasgow, is a major shipbuilding and marine engineering centre; it produces a great variety of general engineering products, which include modules, pumps and other products for the oil industry. Clydeside is also an important centre for food, drink and tobacco manufactures, carpets and printing and publishing. The steel industry, sited mainly in Central Strathclyde, is being modernised. There are important coalmining works in the Strathclyde, Central, Lothian and Fife regions. The electronics equipment industry is represented in Strathclyde, Fife and Dundee, as well as in Edinburgh, where this and other modern industries are expanding alongside the traditional engineering, printing and publishing and brewing industries. Large-scale plants producing cars in Linwood, near Paisley, and commercial vehicles in West Lothian and the Scotstoun district of Glasgow, are well established, while heavy earth-moving equipment and tracked vehicles are produced in Uddingston and Airdrie. The chemical industry is concentrated in Ayrshire and at Grangemouth, where there is also a major oil refinery. The Firth of Clyde provides central Scotland with valuable deep water facilities.

North-east Scotland is now the centre of the offshore oil industry and a wide variety of oil-related projects have been established. Aberdeen, one of two main industrial cities outside the central belt, has additionally become the chief servicing and administrative centre for the oil industry. In June 1978 between 56,000 and 66,000 people were employed in Scotland as a whole in work directly or indirectly related to oil. However, the older industries in the north-east (whisky distilling, paper manufacture and food and fish processing) continue to flourish.

Elsewhere outside the central belt there is considerable industrial concentration in and around Dundee, where the traditional manufacture, jute, has been supplemented by office machinery, clocks and watches, tyres and electronic products. Numerous smaller towns outside the central lowlands have also attracted light industry in recent years.

Much of the rest of Scotland is mountainous and therefore sparsely populated. In the Highlands and Islands, the main industries include high quality tweed and knitwear, papermaking and aluminium smelting and there are significant resources of hydro-electric power. Nuclear power is also generated. The development of North Sea oil has led to very substantial oil-related activities including oil platform production yards. The oil terminal at Sullom Voe, Shetland, which became operational in 1978, is the largest in Europe. In the Borders and southwest of Scotland, the wool, cloth and knitwear industries are important, together with food processing and chemicals manufacture. Tourism is important throughout Scotland and there are extensive holiday and recreational facilities.

Northern Ireland

Although the area of Northern Ireland is relatively small there is substantial and growing industrialisation, particularly in and around Belfast, the capital city, and Londonderry. Britain's largest single shipyard is in Belfast; other well-established activities include the manufacture of aircraft, textile machinery and a wide range of other engineering products, tobacco and clothing. Northern Ireland has also long been an important centre for textiles. The textile industry is extensively diversified and Northern Ireland is one of the most important areas in Europe for man-made fibre production, providing over a quarter of Britain's output. There has also been extensive development in vehicle components, oil-well equipment, electronic instruments, telecommunication equipment, carpets and synthetic rubber.

THE GOVERNMENT AND INDUSTRY

While attempting to create favourable conditions for industrial activity generally, the Government also seeks to correct regional imbalances through schemes of assistance to areas with serious structural unemployment problems. The Government can influence industrial activity in a number of ways—by exhortation, through fiscal and monetary policy, through the level of public expenditure, by inducements, through the placing of government contracts, through the policies of publicly owned enterprises, by the provision of services, information and advice, and through regulatory legislation such as that relating to land use or to monopolies and restrictive trading practices.

The departments chiefly responsible for the Government's relations with industry are the Department of Industry (responsible for manufacturing and for industrial research and design), the Department of Energy, the Department of Trade (aviation, shipping, tourism, printing and publishing and the distributive and service industries), the Department of Transport (inland transport), the Department of the Environment (construction and water supply), and

the appropriate departments of the Scottish, Welsh and Northern Ireland Offices.

The Government also has close relations with industry through the National Economic Development Council (see p 198), subcommittees of which bring together representatives of the Government, managements and trade unions to make recommendations on certain industrial sectors and on various aspects of industry.

Public Enterprise

Direct state participation in industry is mainly effected through public corporations sponsored by government departments and responsible for particular sectors of industrial activity. Such corporations are responsible for most of Britain's energy and transport sectors and for several within manufacturing; their activities are described in the relevant chapters.

The managing boards and staffs of the nationalised industries are not generally civil servants and although accountable to Parliament for their actions in a variety of ways, it is they and not the ministers of the sponsoring departments who are responsible for management.

The extent to which the responsible minister has power over the working of the boards which have been set up to run the nationalised industries varies from industry to industry, but two features are common to almost all of them. First, the minister appoints (and may dismiss) the chairman and members of each board, and, secondly, he has power to give general directions as to how the industry should be run, but does not interfere in day-to-day management. It is usually also laid down that the board shall give to the minister any information, statistics and financial accounts which he may require. In practice, as the responsible minister is kept fully informed and major policy decisions are reached in consultation with him, there is very seldom occasion for him to issue a general directive. Indeed, the Government's policy is to keep ministerial intervention to a minimum and to encourage the nationalised industries to behave as far as possible as commercial enterprises.

The minister also has financial powers and responsibilities. The usual statutory requirement is that the board is required to conduct its business so that receipts at least balance outgoings over a period. However, financial targets have been agreed by the Government for certain industries and targets for the remaining industries are to be set as soon as possible. The main form of target, usually set for 3–5 years, is a real return before interest on average net assets employed. The Government is also discussing with the industries the development of a more direct way of relating the opportunity cost of capital to financial performance. The responsible minister is usually empowered, subject to Treasury approval, to say what shall be done with any surplus revenues which may accrue. As regards finance for capital expenditure, the present system is that finance which cannot be found from internal sources is provided mainly by interest-bearing loans from the Exchequer and by borrowing from abroad. Other sources of finance include grants and Public Dividend Capital on which dividends are paid to the Government.

It is usual for the minister responsible for each nationalised industry to be required by statute to take steps to see that the interests of the industry's customers are protected. This is done for certain of the industries (see p 225) by the establishment of representative consumers' councils to consider complaints and suggestions, and to advise the board or the minister on the changes they think desirable.

Government policy towards the nationalised industries is subject to the approval of Parliament. Opportunities for parliamentary discussion are afforded

by debates, including debates on their annual reports and accounts, and by answers to parliamentary questions, which, in principle, are admissible only if concerned with policy rather than details of administration. Provision is also made for the examination of the affairs of the nationalised industries within the parliamentary committee system.

National Enterprise Board

The National Enterprise Board (NEB) is a public corporation which acts as a state holding company and also has certain powers to assist in the development of high technology companies and to provide investment funds for firms, particularly small firms, in areas of high unemployment in England, principally the assisted areas.

Development Agencies

The Scottish, Welsh and Northern Ireland Development Agencies promote industrial development within their regions by providing investment funds and promoting new ventures, often in association with established companies. The Scottish and Welsh agencies also have responsibilities for factory building and land reclamation (see p 220) and for small firms (see p 222).

of Investment

Encouragement Britain has a generous system of national incentives for industrial development. Under the Finance Act 1972 incentives to encourage capital expenditure in plant and machinery take the form of a system of free depreciation enabling the whole of such expenditure to be written off against profits for tax purposes in the year in which it is incurred; there is in addition a 54 per cent initial allowance on new industrial buildings and structures and an annual writing down allowance of 4 per cent thereafter.

Direct financial assistance, in the form of grants and loans, is available in a number of ways. In addition to regional development assistance (see below), aid may be provided throughout Britain under the Industry Acts 1972 and 1975 where it is judged to be in the national interest. High technology developments in industry are eligible for support under the Science and Technology Act 1965. Direct investment from overseas is also encouraged, and overseas firms are offered the same facilities and incentives as those applying to British-owned companies.

Regional Development

Economic imbalance between different parts of the country is due partly to the steady decline over the years of older industries, such as coalmining and shipbuilding, causing a high level of unemployment in certain regions and such adverse factors as poor amenities, derelict buildings and land and net outward migration. In addition, the newer and expanding industries have tended to develop mostly in the Midlands and the South East, and unemployment has remained a persistent problem in Scotland, Wales, Northern Ireland and some parts of England, particularly the North and Merseyside. The ending of regional imbalance has been an objective of successive Governments. Financial and other aid to areas of high unemployment began in the 1930s and has been expanded considerably over the years.

Assisted Areas

In parts of Britain designated as 'assisted areas' incentives are offered by the Government to encourage industrial development and the growth of office and other service employment. There are three categories of assisted area: special development areas, where the economic situation and consistently high rates of unemployment give rise to the most urgent need for assistance; development areas with similar but rather less severe problems; and the intermediate area, where some assistance is necessary but where the need is relatively less acute than in the other types of area. Until August 1980 the assisted areas cover the whole of Scotland and Wales, and in England the Northern, North West and Yorkshire and Humberside regions; parts of the South West and East Midlands regions; and Oswestry in the West Midlands. There will, however, be substantial reductions in these areas, beginning in August 1980, in accordance with the Government's policy of concentrating help on the areas of greatest need. Northern Ireland is covered by separate legislation; the incentives available are outlined on p 221.

Incentives for Industry

Under the Industry Act 1972 regional development grants are available in special development and development areas towards the costs of plant, machinery, buildings and works provided on premises used wholly or mainly for specified manufacturing activities. Grants are also available in the intermediate areas towards the costs of buildings and works provided before August 1980. These grants are not limited to projects creating employment, and are thus available to help with improvements and modernisation. In addition they are not treated as reducing the capital expenditure which qualifies for tax allowances.

The Act also provides for selective financial assistance for projects which are likely to provide, maintain or safeguard employment in any part of the assisted areas. Assistance may be provided in a number of forms, the usual ones for employment-creating projects being loans at concessionary rates of

interest, grants, and service industry grants.

Other forms of assistance available include the provision of modern factories for rent or purchase, free use of government training services, and grants to assist the transfer of key workers to posts in the assisted areas. Firms in the development and special development areas are given preferential treatment when tendering for contracts placed by government departments and nationalised industries.

Infrastructure

Special measures to improve the infrastructure in the assisted areas include provisions under the Local Employment Act 1972 for grants towards the improvement of basic services (such as transport, power and water facilities) and towards the acquisition and clearance of derelict land (see p 176).

Administrative Arrangements

Broadly speaking, responsibility for regional industrial development is exercised in England through the Department of Industry and in Scotland and Wales through the Scottish and Welsh Offices respectively. An important exception, however, is the regional development grant scheme, which is operated throughout Great Britain by the Department of Industry.

In England the regional offices of the Department of Industry in the main assisted areas (the North, North West and Yorkshire and Humberside offices) can handle applications for loans of up to £2 million under the selective financial assistance scheme without reference to the Department's headquarters. The Secretary of State for Industry has access to advice from the Industrial Development Advisory Board, a statutory body composed of prominent members of the industrial and financial community, which makes recommendations on industrial opportunities and on applications for selective financial assistance. Non-statutory industrial development boards have also been established for the North, North West, South West and Yorkshire and Humberside regions.

In Scotland and Wales, day-to-day work is carried out by the Scottish Economic Planning Department and by the Industry Department of the Welsh Office. Statutory Scottish and Welsh Industrial Development Advisory Boards advise the respective Secretaries of State for Scotland and Wales. The Scottish and Welsh Development Agencies are responsible for the provision of

factories for rent or purchase and are also concerned with the reclamation of derelict land.

Northern Ireland Under separate legislation (the Industries Development Acts 1966 and 1971, as amended in 1976) the Northern Ireland Department of Commerce offers a full range of incentives comparable to those available in the assisted areas of Great Britain.

> All firms establishing factories in Northern Ireland, without regard to the number of jobs created, are eligible for capital grants at the rate of 30 per cent of the cost of new buildings, machinery and equipment; for grants towards training and free use of government training services; for grants towards the cost of transferring key workers; and for the derating of industrial buildings by 75 per cent. The capital grants, like regional development grants in Great Britain, are not treated as reducing the capital expenditure which qualifies for tax allowances.

> Projects which are especially attractive because of the number of jobs created can obtain special benefits which include industrial development grants of up to 50 per cent of the cost of new buildings, machinery and equipment (as an alternative to capital grants); contributions towards setting-up costs; grants of up to 100 per cent of the cost of transferring plant and machinery; modern factories for rent or purchase; and loans, loan guarantees and interest relief grants.

Grants of up to 50 per cent are available for research and development pro-

jects (up to a maximum of £250,000 for any one project).

Assistance is also available to firms in the service sector which have a genuine choice of location within Britain and which create additional net employment. Projects serving primarily local needs are not assisted. The forms of aid available to the manufacturing sector may also be offered to service sector projects.

The Northern Ireland Development Agency may also assist financially with

industrial development projects.

Controls on Industrial Location

The Government also influences the location of industry by requiring industrial development certificates before planning permission can be sought for the building of new factories (or for extensions to existing ones) above prescribed limits outside the assisted areas of Great Britain. Certificates are not required in Northern Ireland. However, since 1977 the Government has been encouraging industrial development in deprived inner-city areas (see p 171), whether or not these are in the assisted areas.

European Regional Development Fund

The European Regional Development Fund assists regions of the European Community suffering from problems of a preponderance of agriculture, industrial change and structural under-employment. In particular payments are made from the fund in respect of approved industrial and infrastructure projects in the assisted areas. Britain's share of the fund in the period 1975-78 was about £250 million.

European Investment Bank

Under a scheme introduced in 1978, loans are available from the European Investment Bank to firms in the development areas, special development areas and Northern Ireland. The Government is provisionally guaranteeing borrowers against losses due to exchange rate movements.

European Coal and Steel Community

Under a scheme introduced in 1979 loans are available from the European Coal and Steel Community through the Industrial and Commercial Finance Corporation (see p 354) for companies in those parts of the assisted areas affected by redundancies in the coal and steel industries. The Government is providing guarantees to borrowers, as under the European Investment Bank scheme.

Rural Industries and Small Firms Encouragement for the development of rural industries in England is provided under the aegis of the Development Commission set up in 1909. Through the agency of the Council for Small Industries in Rural Areas (CoSIRA), the commission provides managerial and technical advice, training facilities and a credit service to small manufacturing and service industries in rural areas. Loans and advice are also provided for small tourism enterprises in the rural parts of the assisted areas and in the Commission's special investment areas. In addition the commission provides factory premises in rural areas and lends support for pioneering and experimental schemes bearing on the rural economy, for voluntary bodies aiming to enrich social and cultural life in the countryside, and for surveys and other work in rural areas.

In Scotland and Wales these services are provided by the Scottish and Welsh Development Agencies. Separate bodies, however, cater for particular rural areas. In Scotland the Highlands and Islands Development Board, set up by Act of Parliament in 1965, provides assistance to the Highland region, and surrounding islands, and to parts of the Strathclyde region. It provides grants and loans to industrial and commercial enterprises, builds factories, and has powers to acquire land and set up businesses. The Development Board for Rural Wales has the general function of promoting and undertaking measures for economic and social development in the county of Powys and the districts of Meirionnydd and Ceredigion. It has a particular responsibility for new towns in those areas and can acquire land, carry out building and provide basic services. Within its area the board owns and manages government estates and factories and also acts as agent for the Welsh Development Agency in the provision of investment finance for small firms.

The Department of Industry has a separate division which is the focal point for the formation of policy towards small firms. In association with the Scottish and Welsh Offices, the division operates a chain of Small Firms Centres throughout Great Britain, which work in co-operation with local business organisations and are linked to a central information bank in London. Measures to assist small firms include tax concessions (see p 346), a scheme to encourage collaboration between small firms, a small firms counselling service, and experimental schemes to provide premises and new sources of venture capital for small businesses. A small firms employment subsidy (see p 322) is available to small manufacturing firms in the special development and development areas.

In Northern Ireland the Local Enterprise Development Unit, established to promote the development of smaller industries, provides grants, loans, premises and management advice to new and expanding companies.

Tourism

Government assistance for tourism is provided under the Development of Tourism Act 1969. The Act established four independent but government-financed statutory bodies—the British Tourist Authority, which is responsible for the overseas promotion of tourism in Britain and has a general responsibility for tourism within Great Britain, and the English, Scottish and Wales Tourist Boards which are responsible for encouraging the development and improvement of facilities and amenities for tourists in their respective countries, and for tourist promotional work and publicity within them. (In Scotland, however, the Highlands and Islands Development Board exercises these responsibilities within its area—see above). The Act enables the tourist boards to give financial assistance to selected tourist projects in the development areas. Government

policy is to encourage growth in tourism in hitherto unexploited areas (particularly in the development areas) while sustaining the industry in recognised tourist centres. The Northern Ireland Tourist Board, established under separate legislation, has a function broadly similar to that of the other British tourist boards. Financial assistance to tourism projects is available from the Northern Ireland Department of Commerce.

In 1978 there were 12.6 million visits by people from overseas to Britain, 6.2 million of which were made by residents of other member countries of the European Community.

COMPETITION POLICY AND CONSUMER PROTECTION

The Government is concerned with competition policy and the control of restrictive practices. An increasingly important part of government policy in recent years has also been the encouragement of fair trading, with the particular aim of helping consumers and safeguarding their rights. The Minister of State for Consumer Affairs, who is answerable to the Secretary of State for Trade, 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, is concerned with the conduct of trade and industry in Britain.

Competition Policy

Competition policy has led to the development of machinery for scrutinising and regulating monopolies, mergers and restrictive trade practices and of powers to regulate any structural changes or uncompetitive practices which operate against the public interest. The Director General of Fair Trading administers both the Fair Trading Act 1973, which regulates monopolies and mergers, and the Restrictive Trade Practices Act 1976, which regulates restrictive trading agreements.

A Bill was introduced in July 1979 to strengthen the powers of the Director General of Fair Trading and the Monopolies and Mergers Commission to deal with practices which limit competition in the public and private sectors. It would allow the Director General to conduct a preliminary investigation of practices, other than registrable restrictive agreements (see p 224), which might be regarded as anti-competitive. If the Director General found that an anti-competitive practice existed he could decide to refer it to the Monopolies and Mergers Commission to establish whether or not it operated against the public interest. On an adverse finding by the Commission the Secretary of State for Trade would have powers to take remedial action. The Bill would empower the Secretary of State to refer to the Commission questions on the efficiency, costs, service to consumers or possible abuse of a monopoly situation of particular named bodies in the public sector.

Monopolies and Mergers

The Secretary of State for Trade and the Director General of Fair Trading can refer monopolies for investigation by the Monopolies and Mergers Commission. The legislation defines a monopoly as a situation where at least a quarter of a particular kind of goods or service is supplied by or to a single person, or two or more people acting in a common manner. Local monopolies and arrangements which prevent, restrict or distort competition, and monopolies in public sector industries can also be referred to the Commission. If the Commission finds that a monopoly operates against the public interest, the Secretary of

State for Trade has powers to make orders and otherwise to remedy or prevent the harm which the Commission considers may exist. It is more usual, however, for the Director General to 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 if it would result in or intensify a monopoly or if the total value of gross assets taken over exceeds £5 million. There are special provisions relating to newspaper and certain other mergers.

Restrictive Trade Practices Under the Restrictive Trade Practices Act 1976 restrictive trading agreements have to be registered with the Director General of Fair Trading. Broadly, an agreement is registrable if two or more parties to it engaged in business in Britain in the supply of goods or services accept some limitation on their freedom to make their own decisions about prices or conditions of sale. Failure to register an agreement means that the restrictions are void and the parties are liable to legal proceedings. Having placed an agreement on the register, the Director General has the duty of referring 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, many agreements do not need to be referred to the Court because, for example, the parties choose 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. The European Commission may also grant exemption or authorisation.

European Community

The objective of the competition policy of the European Community is to promote free and fair competition in trade between member countries. The Community's rules of competition, which are set out in the Treaty of Rome, apply to industrial and commercial practices likely to affect trade and prevent, restrict or distort competition in the Community. Agreements which fall within the rules must be notified to the European Commission, which has its own Competition Department; the Commission has limited powers to exempt agreements which, though restrictive of competition between member countries, benefit the Community in defined ways.

Consumer Protection The Fair Trading Act 1973 provides machinery (headed by the Director General of Fair Trading) for the continuous review of consumer affairs and for action to meet new problems as they arise, including powers to deal with trading practices which unfairly affect consumers' interests, and to deal with persistent offenders under existing law. Other legislation to safeguard the consumer's economic interests deals principally with the description, quality and performance of goods, credit facilities and pricing information. It includes the Trade Descriptions Acts 1968 and 1972, the Supply of Goods (Implied Terms) Act 1973, the Unfair Contract Terms Act 1977 and the Consumer Credit Act 1974.

The other major area of legislation is concerned with the prevention of the sale of dangerous or harmful consumer goods. The principal laws here are the Consumer Protection Acts 1961 and 1971, and the Consumer Safety Act 1978, which empower the Government to make regulations to ensure the safety of

any class of goods and to prohibit the supply of any goods which are deemed to be unsafe.

Provision of consumer information and advice is an important function of those in local and central Government, and of several independent organisations, concerned with consumer protection. The local outlets are the Citizens Advice Bureaux (see p 146) and the Consumer Advice Centres.

The independent, non-statutory National Consumer Council (and associated councils for Scotland, Wales and Northern Ireland), which also receives government finance, ensures that the consumer's view is made known to those in Government and industry whose decisions affect consumers.

Consumer councils for the energy and rail nationalised industries and for the Post Office investigate questions of concern to the consumer, while some trade associations in industry and commerce have established codes of practice designed to protect the consumer. In addition several private organisations work to further consumer interests. The largest is the Consumers' Association, funded by the subscriptions of its membership of over 60,000. 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 magazine Which? or its satellite publications. The association also provides an advice service on subscription. Consultancy work on European legislation is undertaken by the association on behalf of the Department of Trade. Local consumer groups, such as the National Federation of Consumer Groups, also promote consumers' interests and provide information and advice. The main British organisations interested in consumer affairs come together under the Consumers in the European Community Group (UK), to discuss and represent their interests in European Community policies.

13 Manufacturing and Service Industries

Manufacturing plays a vital role in the economy. It accounts for some 28 per cent of gross domestic product; about 32 per cent of the employed labour force is engaged in manufacturing; and around 80 per cent of visible exports consists of manufactured or semi-manufactured goods.

The manufacturing industries are described by sector in this chapter, together with the construction industry and the distributive and service trades.

MANUFACTURING

Most manufacturing is carried out by private enterprise. The greater parts of the iron and steel, shipbuilding and aerospace industries are in public ownership (see p 218); products from the state-controlled sector also include a small range of chemicals from the plants of the British Steel Corporation, locomotives and rolling-stock built in the workshops of British Railways, military equipment and supplies made in establishments of the defence services, and fissile materials and radioactive isotopes. The Government has shareholdings in various companies, principally British Petroleum Ltd. Some of these shareholdings are controlled through the National Enterprise Board (see p 219). It is the Government's general policy to reduce the extent of State ownership of industry.

The most recent complete analysis of the size distribution of establishments and enterprises in manufacturing industry, and of the degree of concentration, is contained in the *Report on the Censuses of Production 1974 and 1975*. This shows that some 68 per cent (70,790) of the 104,089 establishments in manufacturing industry had fewer than 20 employees each and accounted for 7 per cent of total employment; 30,784 establishments had between 20 and 499 employees and accounted for some 38 per cent of the total labour force; 1,868 establishments, each with between 500 and 1,499 employees, were responsible for 21 per cent of employment; and over one-third was in the hands of the 647 establishments each with 1,500 or more employees. About 56 per cent of the largest establishments were in the engineering, and metal and vehicle manufacturing industries. An enterprise, as defined in the census, normally consists of either a single establishment or of two or more establishments under common ownership. In the private sector of British manufacturing industry in 1975 38 per cent of all employment was accounted for by the largest 100 enterprises.

Output and Investment

The figures for manufacturing output in Tables 13 and 14 show the relative size of the sectors of manufacturing and their growth rates. Expansion between 1975 and 1978 has been evident in those industries using advanced technologies such as electronics, instrument engineering, most sectors of the chemical industry and paper, printing and publishing. A major stimulus has been provided by the various needs of the offshore oil and gas industries. In other long-established

industries (for example, shipbuilding and marine engineering and electrical engineering) extensive re-organisation, re-equipment and modernisation are being undertaken to meet changing economic conditions.

TABLE 13: Manufacturing Industry: Net Output 1975-77

		£ milli	on	Percent of tota	0	per head	£
Industry Group	1975	1976	1977	1977	1975	1976	1977
Food, drink and tobacco Coal and petroleum	4,772	5,828	6,752	12.9	6,166	7,655	8,683
products Chemicals and allied	1,024	906	795	1.5	28,180	25,753	22,914
industries	3,343	4,377	5,283	10.1	8,328	10,842	12,905
Metal manufacture Mechanical engineering	2,352 4,746	2,904 5,442	3,017 6,632	5·7 12·6	4,853 5,121	6,177 5,934	6,404 7,046
Instrument engineering Electrical engineering	632	773 3,928	951 4,921	1·8 9·4	3,998 4,479	5,021 5,562	5,893 6,612
Shipbuilding and marine engineering	630	754	919	1.7	3,554	4,223	5,213
Vehicles Metal goods not	3,473	4,226	5,314	10.1	4,413	5,504	6,720
elsewhere specified Textiles	2,260 1,944	2,735 2,344	3,243 2,574	6·2 4·9	4,249 3,648	5,239 4,526	6,107 4,944
Leather, leather goods and fur Clothing and footwear	160 1,105	186 1,216	206 1,484	0·4 2·8	3,784 2,578	4,397 2,990	4,952 3,597
Bricks, pottery, glass, cement, etc. Timber, furniture, etc.	1,519 1,239	1,833 1,465	2,178 1,717	4·1 3·3	5,738 4,560	7,091 5,426	8,301 6,381
Paper, printing and publishing Other manufacturing	2,878	3,552	4,260	8.1	5,101	6,433	7,665
industries	1,531	1,965	2,288	4.4	4,511	5,744	6,425
All manufacturing industries	36,948	44,434	52,534	100.0	4,948	6,083	7,046

Source: Census of Production Reports: 1975, 1976, 1977 (1977 provisional results) Differences between totals and the sums of their constituent parts are due to rounding.

Investment in manufacturing tends to reflect the level of demand in the economy as a whole, with some time lag between the start of an increase in output and the implementation of investment plans. There is thus a marked cyclical pattern in the flow of investment by manufacturing industry, and since

1965 there have been three discernible cycles.

Total manufacturing investment in 1978 at current prices was £5,841 million, apportioned as follows: food, drink and tobacco £815 million, coal and petroleum products £189 million, chemicals £1,097 million, metal manufacture £568 million, engineering, shipbuilding and metal goods £1,380 million, vehicles £579 million, textiles, leather and clothing £257 million, paper, printing and publishing £358 million and other manufacturing industries £598 million. Analysed by type of asset, investment was divided into £853 million for new building work, £451 million for vehicles and £4,538 million for plant and machinery. The growing practice of leasing rather than purchasing new capital equipment may mean that the level of re-equipping is actually higher than these figures indicate. In the tables in the following sections, relating to the main sectors of manufacturing industry in 1978, employment statistics, taken from

TABLE 14: Index of Manufacturing Production 1973-78 (1975=100)

				,	,	
Industry Group	1973	1974	1975	1976	1977	1978
Food, drink and tobacco	103.2	102.5	100	102.7	103.9	106.0
Coal and petroleum products	120.6	115.9	100	105.7	102.7	101.4
Chemical industries	105.8	109.8	100	112.2	116.2	117.5
Metal manufacture	125.1	114.6	100	106.9	102.0	100.7
Mechanical engineering	97.2	101.3	100	95.1	93.2	92.7
Instrument engineering	92.4	98.7	100	96.6	98.7	105.4
Electrical engineering	101.3	104.5	100	98.5	102.7	108.1
Shipbuilding and marine				-		
engineering	95.4	98.9	100	96.5	93.3	86.4
Vehicles	113.3	108.9	100	97.0	100.9	98.6
Metal goods not elsewhere				,,,	100 /	,,,,
specified	110.1	108.7	100	98.8	104.0	102.9
Textiles	117.1	105.9	100	103.0	100.9	99.3
Leather, leather goods and fur	107.1	98.7	100	102.3	97.1	97.0
Clothing and footwear	102.1	100.2	100	97.1	103.2	105.3
Bricks, pottery, glass, cement, etc.		107.2	100	101.0	99.8	101.1
Timber, furniture, etc.	118.9	102.1	100	103.9	97.6	102.4
Paper, printing and publishing	115.7	115.5	100	102.5	106.9	109.1
Other manufacturing	110.2	106.8	100	109.0	115.4	118.6
		1000	100	1070	113 T	110.0

Source: Monthly Digest of Statistics

the Department of Employment Gazette, refer to numbers in Great Britain in December 1978. Sales figures are compiled by the Department of Industry from returns made by firms in industry. Export figures come from Business Monitor M10: Overseas Trade Analysed in Terms of Industries. Unless otherwise stated, export and manufacturers' sales figures include parts. (The tables contain a selection of leading activities within each sector and are not comprehensive.)

METAL MANUFACTURE

NI V-	Manufacturers' Employment Sales Exports '000s £, million £, million				
iron and steel products	266	5,560	1,052		
iron castings	74	1,004	50		
non-ferrous metals	114	2,688	708		

Iron and Steel

Most of the early developments in iron and steel production originated in Britain, today the world's eighth largest steel-producing nation. The Iron and Steel Act 1967 brought together into public ownership 14 major steel companies and created the British Steel Corporation (BSC). BSC currently produces over 82 per cent of Britain's crude steel and is the largest steel undertaking in Europe. It employs some 190,000 people, of whom 167,500 are involved in iron and steel manufacturing and 22,500 in other activities, such as constructional engineering and chemicals. The remaining (private sector) companies are represented by the British Independent Steel Producers' Association whose members employ some 68,000 people and account for over a third of the value of the industry's turnover. The private sector is particularly strong in the manufacture of alloy and stainless steels and of finished products for the engineering industry. The main steel producing areas are Yorkshire and Humberside (34 per cent of crude steel output in 1978), Wales (30 per cent), the Northern region (14 per cent), Scotland (8 per cent) and the West Midlands (7 per cent).

About 75 per cent of British steel producers' deliveries of finished steel products are used by home industry and the remainder for direct export, the major markets for which are the rest of the European Community and the United States. A large part of the steel used by industry in Britain is also subsequently exported as part of other finished products. The BSC is a member of the European Nuclear Steelmaking Club, established to define a strategy for the application of nuclear energy to steelmaking.

BSC has invested heavily in modernising its production capacity. Its development strategy includes the replacement of open-hearth steelmaking by basic oxygen steelmaking (for bulk production) and the electric arc process (for more specialised tasks) and the concentration of bulk steelmaking at five main sites (Port Talbot and Llanwern in Wales, Ravenscraig near Glasgow, Lackenby in Cleveland, and Scunthorpe) which have good access to deep water for iron ore imports. In 1978 BSC began to reduce capacity, to move more into line with the level of world demand, by deferring a number of planned new steelmaking developments and closing a number of old steelworks, in advance of the dates previously agreed.

Iron and Steel Castings

In the production of iron and steel castings, a few large firms are responsible for more than a quarter of total output while fewer, more highly developed units are replacing some of the numerous small foundries. The main users of iron castings which are essential components for a wide range of industries are the motor vehicle industry, the general engineering industry, the manufacturers of pressure pipes and fittings, the building and associated industries and the steel industry. Research for the industry is conducted by the British Cast Iron Research Association and the Steel Castings Research and Trade Association.

Non-ferrous Metals

Britain's non-ferrous metal processing and fabricating industry is one of the largest in Europe. Its major products are aluminium (both virgin and secondary metal), secondary refined copper, lead and primary zinc. Tin mining in Cornwall supplies about 25 per cent of Britain's tin requirements (see p 272) but otherwise British metal smelting and refining industries are based on imported ores and concentrates except for substantial secondary production from scrap metal. Britain is also a major producer of the newer specialised metals including uranium, zirconium and beryllium for the nuclear energy industry, niobium for aircraft production and selenium, silicon, germanium and tantalum for electronic apparatus. Titanium and titanium alloys are also produced and used in aircraft production, power generation and North Sea oil production, where their lightness, resistance to stress, flexibility and resistance to oxidisation are especially valued. Nearly half the industry is situated in the Midlands. Other centres include south Wales, London, Tyneside and Avonmouth, where a zinc smelter of some 100,000 tonnes capacity operates. Three large-scale aluminium smelters provide almost 85 per cent of Britain's requirements for primary aluminium. The large non-ferrous metals fabricating industry uses large quantities of imported refined metals such as copper, lead, zinc and aluminium. A wide range of semi-manufactures is produced in these metals and their alloys, and, particularly in aluminium, firms are engaged in smelting, casting and fabrication by rolling, extrusion and drawing; advanced techniques of powder metallurgy and pressure die-castings are also employed. In recent years considerable progress has been made in the development of 'superplastic' alloys, which are more ductile and elastic than conventional alloys.

Scientific and technological research for the industry is conducted by the Warren Spring Laboratory of the Department of Industry and by the British Non-Ferrous (BNF) Metals Technology Centre.

The main products exported, including alloys and semi-finished products, are copper, nickel, aluminium, lead, tin and zinc. Exports of aluminium and aluminium alloys reached £184 million in 1978 while exports in the same year of copper, brass and other copper alloys also reached £184 million. Exports of silver, platinum and other metals of the platinum group totalled over £240 million in 1978. The major export markets for the whole industry are the United States and the Federal Republic of Germany.

MECHANICAL ENGINEERING

	Employment '000s	Ianúfacturers' Sales £ million	Exports £ million
metal-working machine tools	64	716	340
industrial plant and steelwork	155	1,905	596
industrial engines	30	577	293
oumps, valves and compressors	84	1,132	495
textile machinery construction and earth-moving	23	285	200
equipment	43	863	795
mechanical handling equipment agricultural machinery	61	1,059	365
(except tractors)	28	291	141
office machinery	23	138	153

The mechanical engineering industry comprises a group of industries manufacturing all types of machinery, machine tools, industrial engines, mechanical handling equipment, construction equipment and industrial plant. About half the industry's production is for the home market. The major customers for the heavy equipment sectors are the nationalised fuel industries, the chemical industry and the British Steel Corporation. A wide range of equipment is supplied to the building and construction industry. Demand for other types of equipment comes from all the production industries in Britain.

Machine Tools

Britain was the birthplace of the machine tool industry and many of the more advanced types of metal-working machine tools are produced in Britain. Almost all machine tools produced are purchased by the engineering, vehicles and metal goods industries. Seven large groups account for about 35 per cent of machine tool sales and exports.

The most important types of metal cutting machine tools are milling, grinding and turning machines. Manual control for many of these tools is being replaced by automatic control and Britain is an important producer of numerically controlled machine tools, including machining centres. The largest export markets for the industry in 1978 were the rest of the European Community, the United States and Poland. The Machine Tool Trades Association represents most of the industry and is responsible for the international machine tool exhibition held in Britain every four years, the next being due in 1980. The Machine Tool Industry Research Association carries out research into design and performance of tools and into production methods.

Manufacturing Plant and Machinery

British industry manufactures almost every type of industrial (including process) plant and steelwork (for nuclear power station construction see Chapter 14). Of particular importance are fabricated 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), sintering plant, metallurgical furnaces and plant, lime and cement kilns, nuclear

reactors, water and sewage treatment plant and fabricated steelwork for bridges. buildings and industrial installations. The industrial plant industry comprises both equipment manufacturers and contractors responsible for the design, engineering, construction and commissioning of complete plants for process industries. British manufacturers have contributed to major advances in process technology and British contractors are carrying out major plant projects in many overseas countries. Gas turbine engines for industry, in particular for power generation in the fuel industries, are another thriving section of the industry, where exports have done well in recent years. Three large firms are pre-eminent in the manufacture of industrial engines, including those derived from aero-engines. Industrial pumps, valves and compressors are vital components in many industrial processes, particularly in the chemicals, oil and electric power industries: over half the production of all types of such equipment is exported. The fluid power industry makes oil hydraulic and pneumatic equipment for operating machinery and construction and other equipment. There are many new areas where these powerful and flexible systems may be used.

Machines and accessories for the manufacture and processing of yarns and fabrics from all types of natural and man-made fibres are produced by the textile machinery industry in Britain, which is noted for the range, scale and versatility of its operations. British inventions have remained the foundation of many textile processes in use internationally and progress has been made in developing automation in the industry. In 1978 70 per cent of the industry's total sales were to export markets. Research and development is carried out by the large firms and the four research associations connected with the textile industry.

Machinery for food and drink preparation, processing and sterilisation is another important sector. Refrigerating machinery (excluding domestic equipment) is used for food and drink processing, but the industry also covers plant for ships and vehicles and equipment for conserving drinks, food and ice-cream for the distributive and catering industries.

Construction and Mining Equipment

Almost the whole range of plant required by the construction industry is produced, including excavating, earth-moving and road-making equipment, pile drivers and quarry crushing and screening plant. Overseas sales of construction equipment and mining machinery and equipment, including coal cutting and coal face loading machinery, are increasing. Mechanical handling equipment is used not only for construction and related activities but throughout industry generally. It extends from individual units and accessories to complete operating systems, the main products being cranes and bridge transporters, lifts, escalators, conveyors, elevators, hoists and powered industrial trucks including forklift trucks. Electronic control and completely automated handling systems are widely available.

Agricultural Machinery Britain produces a wide range of equipment for general and special use, including many special purpose machines such as hop-picking machines, fruit harvesters and improved root harvesters (for tractors see p 234). Mechanisation is extensively used in the arable farming and dairy farming sectors. Much of the new machinery is designed for use in a variety of conditions to meet the needs of overseas farmers. A large-scale annual exhibition of the industry's products is the Royal Smithfield Show and Agricultural Machinery Exhibition held in London in December. The main trade association for the industry is the Agricultural Engineers Association.

Office Machinery

The industry covers a wide range of products including duplicators, photocopiers, typewriters, word processors, microfilm, dictation and mail-room equipment, and accounting machines and cash registers. A large proportion of the industry is owned by multi-national companies, and is likely to continue to be so, as the rapidly advancing technologies involved require a heavy commitment to research and development. In particular, the incorporation of microelectronics into office products is certain to increase. The industry is strong in microfilm readers/printers, duplicators and office offset litho and rapid high volume photocopiers.

Other Machinery

The other major products of the mechanical engineering industry include printing, bookbinding and paper goods machinery, space heating, ventilating and air-conditioning equipment, packaging and bottling machinery, portable power tools and miscellaneous non-electrical machinery, such as boot and shoe-making machinery, laundry equipment, automatic vending machines, plastic working machinery and other types of specialised equipment.

General Mechanical Engineering

Alongside the firms manufacturing the products of the mechanical engineering industry are enterprises which supply parts and components and undertake general sub-contracting, fabricating and repair work. Particularly important is the production of ball, roller, needle and other bearings, about 25 per cent of which is for the motor vehicle industry, and of other components, such as industrial fasteners, precision fasteners and chains, gears and dropforgings.

INSTRUMENT ENGINEERING

	Employment	Manufacturers' Sales £ million	Exports £ million
scientific and industrial instruments	s 99	1,110	515
photographic equipment	11	233	245
watches and clocks	12	110	65
surgical instruments and appliances	s 27	231	126

Instrument engineering is a particularly important sector of the engineering industry. Electronic techniques are widely used, particularly in the industrial instrument sector, which comprises industrial and process measuring and control instruments and equipment, optical instruments, electrical measuring and testing instruments, analytical instruments and a diverse group of others. The chemicals, power, petroleum and iron and steel industries account for about 80 per cent of process control applications, the largest sector of the industry and one which is expanding. Major advances have been made in automatic testing equipment and analytical instruments for medical diagnosis and pollution control. The industry is served mainly by five trade associations—the Scientific Instrument Manufacturers Association, the Control and Automation Manufacturers Association, the British Industrial Measuring and Control Apparatus Manufacturers Association, the Electronic Engineering Association and the British Photographic Manufacturers Association. The Sira Institute Ltd. conducts research on behalf of the industry.

Photographic equipment includes photographic and cinematographic cameras, projectors and document copying machines. Other sectors of the instrument industry are concerned with watches, clocks and time recorders and with surgical instruments and appliances and related products.

ELECTRICAL AND ELECTRONIC ENGINEERING

	Employment '000s		Exports £ million	
electrical machinery	134	1,596	777	
insulated wires and cables	43	644	158	
electrical domestic appliances	63	790	185	
electronic equipment:				
telecommunications	65	590	98	
components	130	1,098	571	
consumer goods	48	681	185	
computers	47	743	629	
capital goods	96	1,136	424	

The electrical engineering industry is engaged in the manufacture and installation of a wide variety of equipment, which includes all types of generating, transmission and distribution equipment, motors, telecommunications and broadcasting equipment and domestic electrical appliances. The electronics industry, which makes a vital contribution to the efficiency of many branches of the country's economy, has become one of the most important sectors of British industry.

Leading representative organisations are the British Electrical and Allied Manufacturers' Association, the Association of Manufacturers of Domestic Appliances and the Electronic Engineering Association, a member of the Conference of the Electronics Industry which brings together the six principal trade associations for the electronics industry. Research is carried out by ERA Technology Ltd. (formerly the Electrical Research Association).

Electrical Engineering

The main product categories are power equipment (generators, motors, converters, transformers and rectifiers) and switchgear, starting and control gear.

The industry produces cables and wires for the distribution of electric power, for telecommunication networks and other purposes; its products include submarine cables and cables insulated by a great variety of materials. Optical fibres (hair-thin strands of pure glass) have been developed, which have much greater capacity than the copper wiring used in telecommunications networks. Four major groups are responsible for more than half the industry's output and for a large proportion of the world's submarine cable requirements.

A few large firms also dominate the market for other electrical goods, including domestic appliances. Domestic equipment includes heating and cooking equipment, washing machines and dryers, refrigerators, vacuum cleaners, irons and electric kettles. Other major sectors are electrical equipment for motor vehicles and aircraft, electric lamps and light fittings, and batteries and accumulators.

Electronic Equipment

The British electronics industry is one of the largest and most comprehensive in the world and British scientists and companies have made important contributions to electronics technology. Because the applications of electronics technology are continuing to multiply rapidly, an exact definition of the industry must be arbitrary, but the sectors included are radar and navigational aids, telecommunications equipment, security systems, components, consumer goods, computers and communication and other capital equipment, as well as electronic process control and industrial instrumentation (see p 232).

The dependence of the telecommunications industry on electronic techniques is increasing as new switching systems are introduced (see p 316). The main products are switching and transmission equipment for telephone, telex and

telegraph systems and subscribers' apparatus such as telephones, private automatic branch exchanges, teleprinters and facsimile systems. The Post Office is the main customer in the home market, which is largely supplied by four companies, and carries out research and development work in co-operation with companies.

The components sector manufactures the whole range of active and passive electronic components, including integrated circuits (in which many circuits are placed on a tiny chip of semiconductor raw material—see also p 210), mainly for the electronics equipment industry. Though the market is dominated by United States manufacturers, some joint ventures with British firms are developing.

The major consumer goods produced are radio and television sets, music centres and high-fidelity audio equipment. In the audio field, British manufacturers have a reputation for high-quality goods but are less strong in the mass market. Equipment is also being manufactured for reception of Britain's

'Prestel' and 'teletext' services (see pp 314 and 419).

In the computer sector, 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 micro-computers for use in control and automation systems and for home and office use, are produced. Essential to the sector is the 'software' industry, in which Britain is especially strong, which produces programs and associated services and complements the hardware industry, enabling the systems manufacturers to provide complete solutions to meet the requirements of users.

An expanding sector of the industry is that which covers the manufacture of radio communication equipment, radar and radio navigational aids for ships and aircraft, alarms and signalling equipment, public broadcasting equipment and other capital goods. An important development in this sector has been the X-ray scanner systems for brain diagnosis and whole body examination manufactured by Electric and Musical Industries. British equipment is used extensively overseas, for defence, civil aviation, shipping, health, educational and other purposes.

VEHICLES, AIRCRAFT AND SHIPS

	Manufacturers'			
	Employment '000s	Sales £, million	Exports £ million	
cars and commercial vehicles	475	7,705	2,853	
wheeled tractors	33	790	721	
notor cycles and pedal cycles	14	139	93	
ailway vehicles and equipment	44	216	81	
erospace	197	1,738	1,518	
shipbuilding and marine engineering	ıg 173	1,006	391	

Motor Vehicles

The motor vehicle industry comprises the manufacture of cars and commercial vehicles, caravans and trailers, and parts and components. Output of cars and commercial vehicles is dominated by four large groups: BL Ltd., in which there is a majority public shareholding, Ford, Talbot—formerly Chrysler UK—and Vauxhall, which account for over 99 per cent of car production and some 98 per cent of commercial vehicle output; the remainder is in the hands of smaller, specialist producers of cars, heavy commercial vehicles, buses and coaches. Although there is a balance of trade deficit in cars this is outweighed by a surplus in commercial vehicles and component parts; in 1978 the motor vehicle

industry as a whole contributed about £210 million to the British balance of

payments.

The principal trade association for the industry is the Society of Motor Manufacturers and Traders which holds a biennial motor industry show at the National Exhibition Centre, Birmingham.

Wheeled Tractors

Agricultural tractors account for the bulk of wheeled tractors produced; Britain is the third largest producer of four-wheeled agricultural tractors in the world and a leading exporter. Production is dominated by two large firms, with three others responsible for most of the remainder.

Motor and Pedal Cycles Though in recent years the motor cycle industry has contracted and the domestic market is largely supplied by imports, the market for pedal cycles has doubled in the last decade and is mainly supplied by British firms. TI Raleigh is the largest maker and exporter of bicycles in the world.

Railway Equipment British Rail's requirements of locomotives and rolling stock are largely met by its own workshops; it also supplies equipment and provides consultancy services to many overseas countries. The private sector, which builds trains for London Transport and rapid-transit networks, as well as railway equipment for export (including components, traction and control gear, signalling, heating and ventilation systems and track equipment), undertakes electrification and other major works overseas.

Aerospace

Britain's aerospace industry is the largest and most comprehensive in Western Europe and second only to that of the United States in the Western world. The products of the industry include civil and military aircraft, helicopters, aero-engines, guided weapons, hovercraft and space vehicles, supported by a comprehensive range of aircraft and airfield equipment and systems. The nationalised corporation British Aerospace (BAe) and the publicly owned companies Short Brothers and Rolls-Royce are responsible for the greater part of aircraft, guided weapon and aero-engine manufacture in Britain. BAe, which acquired the assets and manufacturing capacity of the British Aircraft Corporation, Hawker Siddeley Aviation, Hawker Siddeley Dynamics and Scottish Aviation, is the largest of the aircraft and guided weapons manufacturers. Proposals have been announced to introduce private shareholdings into BAe (see also p 206), while maintaining the present structure of the industry. Rolls-Royce, which is one of the world's three leading aero-engine manufacturers, is responsible for almost the entire output of aero-engines.

The private sector is composed of a number of aircraft companies, including Westland Aircraft and its subsidiary, Westland Helicopters, which specialises in helicopter design and manufacture, together with nearly all of the aviation

equipment sector.

Production of BAe includes such civil aircraft as the HS748 feederliner, the HS125 business jet, and the BAC One-Eleven airliner; while the new BAe 146 feederliner and Jetstream 31 transport aircraft are under development. BAe is a full partner in the European consortium Airbus Industrie; it is continuing to manufacture the wings for the A300 Airbus and will design and manufacture the wings for the A310 derivative. Short Brothers, which is based in Belfast, produces the Skyvan, the 330 commuter airliner, airframe components and missiles. Military aeroplanes include the unique Harrier vertical/short take-off and landing aircraft (which has achieved substantial sales to the United States), the Hawk advanced trainer aircraft, the Anglo-French Jaguar

tactical fighter/operational trainer and the Tornado multi-role combat aircraft, a collaborative venture by Britain, the Federal Republic of Germany and Italy. Westland Helicopters manufacture the successful Sea King and are the British partners in the Anglo-French collaborative programmes on the Puma, Gazelle and Lynx helicopters which are being produced for the armed forces of Britain, France and other countries.

The industry is also a major producer of guided weapons which include a number of export successes, in particular the Rapier ground-to-air missile. Collaborative guided weapon projects between Britain and its NATO partners

are also becoming of increasing importance.

Rolls-Royce aero-engines in production include the collaboratively-produced RB199 for the Tornado, the RB211 civil engine and its more powerful derivative the RB211-524, the Pegasus vectored-thrust engine for the Harrier and the Gem helicopter engine. Another RB211 derivative, the -535, is under development and is the lead engine for the new Boeing 757 airliner. Industrial versions of aero-engines such as the RB211 and the Olympus (developed for Concorde) are being produced for use in oil and gas transmission and as stand-by power generators while versions for marine use, in particular of the Olympus and the Tyne, are being used to power a new generation of warships for the Royal Navy and many overseas navies.

The aviation equipment manufacturers provide a wide range of systems essential to the design of engines and aircraft, including engine and flight controls, electrical generation, mechanical and hydraulic power systems, cabin furnishings and flight deck information displays, which are sold both in domestic and overseas markets. They also supply equipment for ground operation including that needed for radar and air traffic control, ground power suppliers and flight simulators, to airports and airlines throughout the world.

The space sector's main effort is directed towards the programmes of the European Space Agency (ESA, see p 389), although sales of sub-systems are made world-wide. Ariel VI, the most recent national satellite launched in June 1979 (see p 390), was built for the Science Research Council. Through the ESA, BAe's Dynamics Group has acted as prime contractor for the OTS experimental communications satellite and the GEOS scientific satellites. Manufacture of the operational European Communications Satellites (ECS) for the European telecommunications satellite organisation EUTELSAT, and the maritime satellites (MARECS) expected to be used operationally by the international maritime satellite organisation INMARSAT, is in hand. Ground stations are being constructed for the Post Office (see p 315).

The industry is thus extensively involved in the manufacture of space systems and in scientific research in other European collaborative programmes. It carries out an extensive programme of research and development on airframes, aeroengines and equipment, including avionics, while considerable research is also

undertaken by universities and Government research establishments.

Aerospace production and exports, which are fairly evenly divided between aircraft, engines and equipment (including avionics), have made considerable progress over the past few years and now stand at record levels. The principal destinations for exports are the United States and countries with which Britain is involved in collaborative ventures such as France and the Federal Republic of Germany.

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. Major suppliers of avionics equipment are also members of the Electronic Engineering Association.

Shipbuilding and Marine Engineering Britain has a long-established tradition of shipbuilding and accounts for about 3.5 per cent of world output. Naval shipbuilding and the construction of vessels and structures connected with offshore oil production are important sectors of the industry. In merchant shipbuilding the SD14 general cargo series has been especially successful. Programmes of modernisation and reorganisation have taken place in most of the major shipyards, including the construction of several covered-berth ship 'factories'. British yards include some which are among the most modern and efficient in the world. Employment in the industry continues to contract, however, as a result of an over-capacity in world shipping.

Nineteen of the principal shipbuilding companies, five companies manufacturing slow-speed marine diesel engines and three training companies and their subsidiaries were taken into public ownership in 1977 under a public corporation, British Shipbuilders. Also in public ownership is the Belfast firm, Harland and Wolff, which is administered by the Northern Ireland Office. Together British Shipbuilders and Harland and Wolff account for 99 per cent of output in both merchant and naval shipbuilding, for all slow-speed marine diesel engines and for some 50 per cent of turnover in ship-repairing. The public sector also includes a number of companies engaged in general engineering work connected with the marine industries.

Following a review in 1979 of the prospects for the merchant shipbuilding activities of British Shipbuilders the Government concluded that, given the world shipbuilding recession and the need for the corporation to achieve viability, further contraction within the industry would be inevitable.

A number of yards in the private sector build smaller vessels, including patrol boats, fishing and harbour craft, supply vessels, tugs, cargo ships, small tankers, ferries, pleasure boats and yachts.

About 35 per cent of the output of British yards is exported. Most private sector companies in the shipbuilding and ship-repairing industries are represented by the Shiprepairers and Shipbuilders Independent Association. Research into shipbuilding and marine engineering is undertaken by the British Ship Research Association.

METAL PRODUCTS

-10	Employment '000s	Manufacturers' Sales £ million	Exports	
engineers' small tools and gauges	62	544	117	
cutlery (including razor blades)	12	140	66	
hand tools and implements	19	184	96	
bolts, nuts, screws, rivets, etc.	34	375	65	
wire and wire manufactures	36	864	133	
cans and metal boxes	30	662	41	

A range of metal products other than those described in previous sections are produced by a group of industries made up of a very large number of firms. One of the main groups, in which small firms predominate, manufactures engineers' small tools and gauges, which include jigs and fixtures, press tools and moulds, hard metal-tipped tools and other metal cutting tools. Another group manufactures cutlery and tableware (including safety razors and blades). Although there are many small firms in the industry, seven relatively large concerns are responsible for over half of output.

A wide variety of domestic utensils, such as saucepans, buckets and dustbins, made mainly from aluminium and wrought steel, are produced by the hollow-ware industry, together with industrial hollow-ware, such as kegs, drums

and barrels. The manufacture of hand tools, including files, saws, hammers, axes and spades, is a long-established industry. About half of its total production is for export. Jewellery, gold and silver ware and the refining of precious metals is an industry in which British craftsmen are world famous; five relatively large firms are responsible for about 60 per cent of total output. Other main groups of metal goods are bolts, nuts and screws, cans and metal boxes, metal furniture, metal windows, metallic closures, metal small-ware such as needles and pins, safes, locks and keys, domestic gas appliances and drop forgings.

CHEMICALS

	Employment '000s		Exports £ million
general chemicals	137	4,290	2,014
pharmaceuticals	74	1,585	617
plastics and synthetics	51	1,757	658
fertilisers	11	522	58
dyestuffs and pigments	22	382	212
paint	27	679	114
coilet preparations, soap and			
detergents	41	1,221	301

The chemicals industry is one of the most successful industries in Britain as well as being its third largest industrial sector. The industry is also the second largest in Europe and its exports of £4,485 million in 1978 (accounting for 12 per cent of total British exports) placed Britain among the top five chemical exporting nations. The industry is undertaking a substantial investment programme, despite continuing uncertainties over the price and availability of raw materials. The largest British chemicals group, Imperial Chemical Industries, is the fifth largest chemicals company in the world, accounting for some 25 per cent of production in Britain. A further 40 per cent is in the hands of 20 other large-and medium-sized companies. The industry as a whole is represented by the Chemical Industries Association. Research and development work is financed by the companies themselves. The rest of the European Community and the United States are the major export markets.

General Chemicals

About a quarter of the output of the general chemicals industry consists of a limited number of relatively simple inorganic chemicals, such as sulphuric acid and metallic and non-metallic oxides, serving as basic materials for industry. Substantial quantities of inorganic chemicals are used in the manufacture of fertilisers, detergents, paint, glass, metals and other products.

Organic chemicals include the heavy organics produced in bulk and the speciality intermediate products. About three-quarters of the output of organic chemicals is made up of petroleum-based chemicals. The most important products (by weight) are ethylene, propylene and benzene. The main uses of organic chemicals are in solvents, plastics and synthetic resins, synthetic rubber, man-made fibres and detergents, and as intermediate chemicals in the manufacture of many other products.

Outside the inorganic and organic sectors is a wide range of general chemicals formulated for specific uses. Radioisotopes are produced by The Radiochemical Centre Ltd.; over half the centre's production is for export.

Pharmaceuticals

The whole range of medicines is produced in Britain, where many of the basic products were discovered and developed. These include antibiotics, sul-

phonamides, anti-malarial drugs, anti-histamine products, anaesthetics, vaccine sera and naturally occurring drugs. Manufacturers in Britain are among the world's leading producers and exporters of preparations for the treatment of human and animal diseases. This sector is one of the major growth areas of the chemical industry.

Plastics and Synthetics

Many of the basic discoveries in plastics, including polyethylene, were made in Britain. Plastics manufacture is one of the fast growing sections of industry and one third of total production is exported. Expansion in recent years has mainly been in thermoplastic materials, of which the most important are polyethylene (used in coverings and packaging—notably for foodstuffs), polyvinyl chloride (known as PVC and used for a wide range of industrial purposes and consumer goods), polystyrene (a material used for toys, light mouldings and many consumer goods) and polypropylene (which can be fabricated as mouldings, films and fibres). A new group of plastics materials reinforced with carbon fibres is also in commercial production in Britain; 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, for example, vehicle manufacture. Styrene-butadiene and polybutadiene rubbers used for tyres, high styrene rubbers for shoe soles and flooring, and nitrile rubbers for use where oil resistance is required, are also in large-scale production, together with neoprene rubber.

Fertilisers and Crop Protection

The development of chemical fertilisers owes much to the pioneer work of British scientists. Production is dominated by three firms, with a number of firms marketing compound fertilisers from the principal constituents—nitrogen, phosphorus and potassium—and is almost entirely for the domestic market. The use of ammonium nitrate, ammonium phosphate and urea is resulting in more concentrated fertilisers. Notable discoveries and developments by the British crop protection industry include the insecticidal property of BHC (benzene hexachloride), the first selective hormone weed-killer, MCPA, and *Gramoxone*, a non-residual general herbicide. Herbicides are the largest category of sales of pesticides and allied products.

Paint

Britain is a major producer of paints, varnishes and allied products. In recent years many improved techniques have been introduced into the paint and varnish industry, including new ranges of synthetic resins and pigments, non-drip, quick-drying paints and paints needing only one application.

Toilet Preparations, Soap and Detergents

These industries include besides soap, detergents and toilet preparations, cosmetics and perfumes. Many of the firms in the toiletries industry are owned or financed by United States companies but there are a number of long-established British perfume and soap makers. Both sectors are significant exporters.

Other Chemical Products

There is a varied group of chemical products which account for about 10 per cent of the industry's net output. It includes formulated adhesives, printing ink, colours and dyestuffs, photographic chemical materials and floor and furniture polishes.

TEXTILES AND CLOTHING

The historical branches of the industry, based on the natural fibres of cotton and wool, linen and jute, have retained their separate identities but the boundaries between them are becoming blurred with the increasing use of man-made fibres. The growth of man-made fibres has stimulated the development of new

	Employment	Exports £ million	
man-made fibres	30	632	304
cotton \ linen	83	1,154	375
wool	77	1,151	382
hosiery and knitwear	113	1,164	229
carpets	32	638	168
jute	8 ^	91	17
clothing	289	2,419	470

processes and new types of yarn and cloth and has strongly influenced the structure of the industry. A small number of large multi-fibre, multi-process groups have emerged, although in many sectors there is still a preponderance of small firms engaged in just one or two operations.

Research for the industry is provided by the Shirley Institute (cotton, silk and man-made fibres), the Lambeg Industrial Research Association, WIRA (the Wool Industries Research Association) and HATRA (the Hosiery and Allied Trades Research Association). The Department of Industry sponsors research and development both for these research associations and also directly within the industry.

Man-made Fibres

Much of the early development of man-made fibres took place in Britain and continuing extensive research has produced a wide variety of types with their own special characteristics. The two main types are still those first developed—the cellulosic fibres, such as rayon, and the synthetic fibres, such as nylon and polyester, made wholly by chemical processes. Acrylic fibres, including *Courtelle* (a British discovery), *Acrilan* and *Orlon* are important products, as are the elastomeric or spandex fibres which have inherent properties of stretch and recovery, anti-static synthetic yarns embedded with carbon and various fire-resistant yarns. More recently there has been a greater use of the polyolefins (polypropylene and polyethylene) in the carpet and carpet backing and packaging fields and still more recently in household textiles and clothing. Output in the man-made fibre industry is concentrated in the hands of a few large firms and has expanded rapidly in recent years.

Cotton

During the nineteenth century cotton was Britain's chief consumer goods industry and cotton piece goods its largest export. Low-cost competition has cut progressively into British markets and made necessary extensive reorganisation, modernisation and the introduction of new techniques. Production includes single and double cotton yarn, spun man-made fibre and mixture yarn, woven cotton cloth and man-made fibre and mixture cloth. The largest markets for cotton fabrics in 1978 were the rest of the European Community, the United States, Finland, Togo, South Africa, Zaire and Australia.

Linen

The linen industry is centred in Northern Ireland, where the lighter types of fabrics for apparel, furnishings and household textiles are produced. The heavy-weight canvas for sailcloth, tents, awnings and tarpaulins is mainly produced in Scotland.

Wool

The wool textile industry, of importance to Britain since medieval times, 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 to prepare it for spinning. The largest markets for woollen and worsted fabrics are Japan, the United States and the rest of the European Community.

Hosiery and Knitwear

The hosiery and knitwear industry comprises more than 1,000 firms, situated mainly in the East Midlands and Scotland, of which most are small to medium in size. The industry produces fabrics, outerwear, underwear, tights, socks, stockings, gloves and accessories.

Carpets

Some 70 per cent of the output of the carpet and rug industry is made up of tufted carpets, in the production of which the pile, usually with a high manmade fibre content, is inserted into a pre-woven backing. Woven carpets, such as Axminster and Wilton, account for most of the remainder of sales. There is a higher wool content in woven types, although they too are making more use of man-made fibres. The high quality and variety of design make Britain the leading producer of woven carpets.

Jute

Jute products are manufactured in the Dundee area. Jute yarn and the manmade 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. New uses for jute, for example, as a plastics reinforcement and for decorative wall coverings, are also being considered.

Other Textile **Industries**

British textile firms manufacture a wide variety of other goods, including lace, narrow fabrics and household textiles, such as blankets, sheets, towels and tablecloths. Rope, twine, nets and netting are manufactured by the cordage industry, which is one of the largest in Europe. A recent development by British manufacturers is the production of non-woven fabric by the melded process, in which the conventional weaving and knitting stages are omitted.

Clothing

The British clothing industry is one of the largest in Europe; it is highly labour intensive and dominated by small firms, with about 6,000 firms accounting for only 4 per cent of Britain's total employment in manufacturing. The negotiation of the Multi-Fibre Arrangement of the General Agreement on Tariffs and Trade (see p 365) has encouraged investment and exports increased substantially in 1977 and 1978. The Clothing Export Council, which represents a major part of the industry, co-ordinates its promotional activities.

LEATHER AND **FOOTWEAR**

	Manufacturers'			
	Employment '000s	Sales Ex		
leather and leather goods	36	483	126	
footwear	74	709	105	

Leather tanning and leather goods manufacturing is another long-established industry in Britain. All types of leather (including heavy types for industrial use) and leather goods are produced. Collective research is carried out by the British Leather Manufacturers' Research Association.

Footwear

The British footwear industry is largely made up of small firms. After being severely affected by the recession and by increasing imports, the industry has more than half of the domestic market.

FOOD, DRINK AND TOBACCO

	Manufacturer Employment Sales '000s £ million		
bread, bakery products,			
biscuits, flour confectionery	153	1,876	84
chocolate and sugar confectionery	73	1,286	221
bacon curing		,	
meat products	102	2,399	195
fish products		,	
milk and milk products	56	2,726	235
drinks	129	4,597	847
tobacco	31	3,225	193
fruit and vegetable products	59	1,192	120

Britain is one of the world's leading manufacturers of food and drink products.

Bakery **Products**

About two-thirds of the bread in Britain is manufactured in large mechanised bakeries, most of which use a process developed by the industry's principal research organisation, the Flour Milling and Baking Research Association, and now widely used in other countries. Two groups are predominant. In smaller bakeries production of cakes and other flour confectionery is usually allied to bread production. Biscuits and related products are a major sector of the industry and have gained a world-wide reputation. Another sector is grain milling and the production of various specialised flours and meal.

Confectionery

The cocoa, chocolate and sugar confectionery industry is composed of a small number of very large manufacturers and many medium-sized and small firms. A substantial proportion of total world exports of chocolate and sugar confectionery are supplied by Britain.

Bacon Curing, Meat and Fish **Products**

The industry comprises the curing of bacon and ham, the canning and preserving of meat and fish, the manufacture of sausages and pies and the preparation of extracts and pastes. In addition to the output of quick-frozen fish, small quantities are also canned.

and Other **Products**

Fruit, Vegetable Fruit and vegetable products include canned, frozen and dried fruit and vegetables, jam, marmalade, pickles and sauces. Other products of the food processing industry include sugar, sugar preparations and honey, dairy products and eggs, vegetable and animal oils and fats, coffee, cocoa, tea and spices and cereal preparations.

Beverages

Of prime importance among the alcoholic beverages produced in Britain, and in the food and drink industry as a whole, is whisky. Scotch whisky accounts for almost all whisky production in Britain. About four-fifths of annual sales are to overseas buyers; the United States imports nearly a third of the distilled alcoholic beverages exported from Britain. The rest of the European Community and Japan are the other largest markets. Production of gin in Britain has risen steadily since the early 1950s. One company accounts for a large proportion of output. Some of the larger manufacturers also own distilleries abroad.

In the brewing and malting industry there are seven major brewery groups whose products are sold nationally and about 80 smaller enterprises who mainly supply locally, or regionally. Firms have introduced new production methods, including continuous brewing processes, and automated batch production plants are well established. 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. In recent years the popularity of lager has increased considerably.

Three major groups account for much of the cider and perry produced in Britain. The industry is based mainly in Devon, Somerset and Hereford and Worcester. Imported grape and fruit juices are used in the production of most of the made wine. A much smaller, though expanding viticultural industry produces wine from grapes grown in vineyards, mostly in southern England.

The soft drinks industry has expanded markedly in the last decade. There are some very large firms among about 20 producing brands which are marketed on a national scale, while other firms supply regional markets. There is some specialisation among firms in the production of various types, such as carbonated drinks, cola-based drinks, squashes and cordials, tonic waters and 'mixers', fruit juices and health drinks.

Tobacco

The British tobacco industry manufactures almost all the cigarettes and tobacco goods sold in Britain. It is made up of four major companies and a number of smaller ones, and specialises in the production of high-quality cigarettes made from flue-cured tobacco. Exports, mainly of cigarettes, are shipped to many overseas countries including Belgium, Saudi Arabia and the Netherlands. Britain imports raw tobacco in large amounts from the United States, India and Canada.

BRICKS, CEMENT, POTTERY AND GLASS

Е	Employment '000s	Manufacturers' Sales £ million	Exports £, million
bricks, fireclay and refractory goods	40	574	82
cement	14	410	33
pottery	61	477	174
glass	69	878	185

Bricks, Fireclay and Refractory Goods

Firms in the industry manufacture such items as bricks, roofing tiles, chimney pots, fireclay ware and heat-resisting products, including furnace and kiln linings. Brickmaking is one of Britain's oldest industries, but most manufacture is now based on highly mechanised systems. One company, the London Brick Company, supplies about 40 per cent of total brick deliveries. Refractory goods include firebricks, silica bricks, magnesite bricks, chrome-magnesite bricks and alumina bricks.

Cement

The cement industry is chiefly concerned with the manufacture of Portland cement for the home market. Invented by Joseph Aspdin and patented in 1824, this material and the methods of its production have been the subject of continuous technical improvement and intensive research. One new variation, glass-reinforced cement composites, consists of ordinary Portland cement and sand combined with an alkali-resistant glass fibre. The capacity of the industry as a whole has been substantially expanded in recent years.

Pottery

The pottery industry, centred largely in Staffordshire, supplies almost all home needs for domestic and industrial pottery. It uses largely indigenous clay from Cornwall and Devon. There has been considerable re-equipment in the industry; kilns fired by gas or electricity have replaced all the coal-fired kilns, and new decorating techniques and automatic and semi-automatic machinery, such as automatic glazing machines, have been introduced. Domestic pottery, including china, earthenware and stoneware, accounts for two-thirds of the industry's output; the other main divisions are glazed tiles, sanitary ware and electrical ware, and such specialised industrial products as acid-proof stoneware, porous ceramics and laboratory porcelain. Production of tableware is concentrated in two major groups. Britain is the world's principal manufacturer of fine bone china, much of which is exported; famous makes include Wedgwood, Spode, Royal Worcester, Royal Doulton, Minton, Coalport and Royal Crown Derby.

Glass

Britain's glass industry is one of the biggest in the world. Glass containers form the largest part of the industry; another major section is devoted to the manufacture of flat glass in its various forms, chiefly 'float' glass, a process developed in Britain and licensed to glassmakers throughout the world. The use of glass for internal decoration and as a finish for internal and external walls has greatly increased in recent years. Large quantities of safety glass are produced for the motor and other industries. Other products include tubular glass, mirrors, lamp and bulb glass, scientific and medical glassware, glass fibres, and all types of glass containers (mostly made automatically). A traditional product is hand-made lead crystal glassware of very high quality. Collective research is undertaken by the British Glass Industry Research Association, and much research work is also carried out by the Department of Ceramics, Glasses and Polymers of Sheffield University.

PAPER, PRINTING AND PUBLISHING

	Employment '000s	Manufacturers' Sales £ million	Exports £ million
paper and board	62	1,357	223
converted products	140	2,568	202
printing and publishing	339	3,038	358

Paper and Board Manufacture and Conversion The British paper and board industry is one of the largest in Europe. The larger British groups hold considerable interests abroad, including pulp and paper producing mills in the United States, Canada, other parts of the Commonwealth and Europe. In recent years paper production has concentrated on printing and writing papers and boards and speciality grades. There has also been a significant trend towards waste-based packaging grades, in order to reduce the industry's reliance on imported woodpulp supplies. Domestically produced woodpulp represents only a small percentage of raw material supplies and the use of recycled waste paper is increasing; together they currently provide nearly 60 per cent of the industry's needs. The Government's Paper and Board Industry Scheme has assisted the increased use of both recycled paper and board and of home-produced woodpulp. The main types of paper and board produced are printing and writing papers and board, packaging board, wrapping papers, newsprint, household tissues and industrial and special purpose papers.

The packaging and converting industries manufacture a variety of converted products, including cardboard boxes, cartons, fibreboard packaging and business

stationery products.

Printing and Publishing

The printing and publishing industries produce a wide range of products, including national and provincial newspapers, periodicals, books, business stationery and greeting cards. Mergers have led to the formation of large groups in the newspaper, magazine and book publishing sectors, but general printing, engraving, bookbinding and a large part of publishing remain essentially industries of small firms. Production processes include high-speed printing equipment, including electronic engraving, advanced processes of photographic reproduction and computer typesetting. Security printers (of, for example, banknotes and postage stamps) have a high reputation and are important exporters.

The most important overseas markets for printed matter are the United States, the Irish Republic and Australia.

OTHER MANUFACTUR-

	Manufacturers Employment Sales '000s £ million		Exports £ million	
rubber and rubber manufactures	108	1,579	398	
furniture (wooden), bedding, etc.	100	1,643	174	
brushes	9	85	15	
timber	89	1,281	66	
plastics products, floorcoverings etc	. 136	2,106	228	
toys, games, sports equipment	43	484	184	

Rubber

Tyres and tubes represent nearly half the output of the industry, but firms make a variety of other goods, the most important being vehicle components and accessories, conveyor belting, cables, hose, latex foam products and rubber footwear, gloves and clothing. Rubber is also used for inflatable liferafts, containers for fuel and other industrial liquids and seals for storage tanks and other products where there are problems of air exclusion and vapour suppression. One of the largest tyre groups in Europe, Dunlop-Pirelli Union, resulted from a merger in 1971 of Britain's leading rubber and tyre company and its Italian equivalent. Tyre manufacturers include several subsidiaries of United States and other overseas companies. The industry's consumption of rubber includes natural, synthetic and recycled rubber.

Furniture, Brushes and Timber

Numerous enterprises manufacture furniture in Britain (including domestic, office, school and other furniture) with a few large firms predominating. In recent years the industry has experienced a sharp increase in demand from overseas. Exports have risen from £69.3 million in 1975 to £174 million in 1978. The industry comprises wooden, metal and plastic furniture, upholstery, bedding and soft furnishings. A Development Council for the industry has existed since 1949. Scientific research and technical and other information services are provided by the Furniture Industry Research Association.

The brush industry is located throughout Britain and includes highly mechanised establishments as well as small craft units.

Domestic production of timber has been steadily increasing but the timber industries are mainly dependent on imported supplies. A large proportion of timber sales are dependent on the construction industry. Chipboard is the fastest growing sector of the industry; other important sectors are hardwood and plywood.

Plastics Products

In addition to the plastics components and accessories supplied to many different industries, the plastics products industry manufactures a wide range of building

materials, such as pipes, sheeting for roofs, sanitary ware, tanks and other products. It also supplies flexible foams, used in the vehicle, furniture and other industries; rigid foams; packaging products, including bottles, containers and bags; domestic and industrial hollow-ware; many kinds of household goods; vinyl and other floorcoverings; and leathercloth.

Toys, Games and Sports Equipment The industry manufactures toys, games, sports equipment and children's carriages. There are about 600 toy and games makers in Britain but some 20 companies dominate the market. The greatest expansion has been in the field of craft and hobby kits. British diecast toys and model construction kits are well known overseas; about a third of the output of toys and games is for export. The Federal Republic of Germany, France and the United States are the major markets for toys while the United States and the European Community are the main markets for sports equipment.

CONSTRUCTION

The construction industry, which accounted for about 6 per cent of gross domestic product in 1978, includes firms engaged on the design, construction, alteration, repair and maintenance of buildings, highways, airfields, drainage and sewerage systems, docks, harbours and canals, sea defence works, offshore structures, electrical wiring, heating and other installation work, and structural work connected with thermal and hydroelectric power stations and telecommunications. About 1.2 million people are employed in construction, accounting for nearly 6 per cent of total employment. There are also about 500,000 self-employed. About 20 per cent of construction workers are employed by local authorities. In 1978 repair and maintenance accounted for 34 per cent of the value of construction output in Great Britain.

Structure

Construction work is carried out both by private contractors and by public authorities which employ their own labour. In 1978 about 88 per cent of the work was done by private firms. Although there were about 63,000 firms employing two or more people 93 per cent of them employed fewer than 25 people.

Public authorities as a whole employed about 225,000 operatives but a very large proportion of these were engaged on repair and maintenance work for

local authorities.

Some 44 per cent of operatives were occupied on building maintenance, valued at about £5,477 million annually. The total labour force includes about 68,000 trainees, training under the industry's apprenticeship schemes. The

normal apprenticeship period is three years.

Some 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 functions of the latter, acting on behalf of a client, embrace advice on the feasibility of projects, the drawing up of plans and the supervision of the construction work by the contractor.

The Property Services Agency (PSA), which is an integral part of the Department of the Environment (see p 45), is responsible for the construction programmes undertaken directly by the Government, including work for the armed forces both in Britain and overseas. In 1977–78 the PSA spent £395 million on design and construction. The Department of the Environment is responsible fo

the sponsorship of the construction industry. Among other things, this involves consultation with the industry through the National Consultative Council for the Building and Civil Engineering Industries and less formal contacts. The Department is also responsible for co-ordinating research and development in construction throughout Government and seeks to influence techniques and methods within the industry.

Output

The value of the work done in Britain in 1978 amounted to £16,147 million of which £4,212 million represented new housing and £6,457 million other new work; repair and maintenance accounted for the remaining £5,477 million.

Housing

During 1978 a total of 264,200 dwellings were started in Great Britain. Starts in the public sector were 107,200 and those for private owners 157,000. In the course of the same year 279,400 dwellings were completed, of which 130,600 were in the public sector and 148,700 in the private sector. Industrialised building methods employing prefabricated components are used in some of the work.

The National Building Agency is an independent advisory body, managed by a board of directors appointed by the Secretaries of State for the Environment and for Scotland and Wales. Its main function is to encourage the adoption of advanced methods of house building, and to provide technical advice and services to government departments, local authorities and other clients.

The Association of Building Centres represents the interests of the 12 building centres throughout Britain most of which provide both a comprehensive permanent exhibition and information services on building materials and products, building services and techniques.

Civil Engineering Projects Among important construction projects in hand in Britain in 1979 were conventional and nuclear power stations (see p 265), offshore production platforms and onshore terminals for North Sea oil, hospitals, large-scale housing developments, and roads, tunnels and bridges, including the new bridge being built across the river Humber (see p 295), and the Thames Barrier which will form part of London's flood defences.

Overseas Construction Total overseas earnings of all sectors of the construction industry in 1977–78 were estimated at about £2,600 million, some £440 million more than in the previous 12 months. British contractors earned £330 million from overseas customers and a further £60 million from overseas branches and subsidiaries. The related professions (consulting engineers, architects and surveyors) had earnings of £380 million, while exports of building materials, plant and machinery accounted for some £1,800 million.

In 1977-78 British construction firms carried out work overseas valued at £1,609 million, an increase of £330 million over the previous year. New con-

tracts worth f,1,922 million were won overseas in 1977-78.

The Government and the construction industry are represented on the Exports Standing Committee of the National Consultative Council for the Building and Civil Engineering Industries.

Research

Within the Department of the Environment, the Building Research Establishment (BRE) is concerned with all aspects of construction research. In addition, the Building Research Advisory Service of the BRE provides technical advice over a wide range of contruction problems. An Agrément Board tests and certifies building products and methods.

The construction industry is served by several of the industrial research

associations, while the major construction firms have research departments working on plant, materials and methods. Other bodies concerned with research include the universities and colleges of technology. The larger producers of primary building materials do some research into production methods and new developments.

DISTRIBUTIVE AND SERVICE TRADES

Internal trade can be divided into two broad categories: trade in raw materials, capital goods and intermediate products (for example, packaging materials) and trade in consumer goods, including the network of distributive trades by which home-produced or imported goods reach the consumer. (For the pattern of consumers' expenditure, see p 201.)

In Great Britain in 1978 there were about 2.7 million employees in the distributive trades (in retailing, in particular, a large number of owners of businesses and other family workers were also engaged). The distributive trades accounted for about 10 per cent of British national income in 1978, retailing contributing a little more than wholesaling.

While some of the trade in consumer goods passes through wholesalers to retailers, sales are also made directly to consumers through producers' own selling organisations (including their own retail outlets and mail order businesses) and other sales are made directly by producers to retailers.

Closely connected with the distributive trades are those which offer a service directly to the public, notably catering and hotel trades, laundries and dry cleaners, garage and motor repair trades, hairdressers and shoe repairers.

The main source of official information on the distributive trades is the series of annual sample inquiries, introduced in 1976, to replace the former large-scale periodic inquiries. For retailing, sample inquiries for 1976 and 1977 have been completed. Similar sample inquiries for the wholesale trades for 1978 and 1979 are being undertaken. In Northern Ireland a census of distribution was taken in respect of 1975, the results of which suggest that the level of turnover was about 2.5 per cent of that in Great Britain. In the following sections figures derived from the inquiries are for Great Britain only.

For the service trades annual inquiries into capital expenditure and stocks are continuing and are being extended into trades not covered formerly, such as business services and hairdressing.

WHOLESALE TRADES The main areas in which wholesalers are dominant are groceries and provisions, petroleum products and ores and metals. The book value of stocks held by wholesalers and dealers at the end of 1978 was £7,185 million; gross domestic fixed capital formation in wholesale distribution amounted to £243 million in 1978.

Methods of wholesale distribution vary according to the type of merchandise handled. Fish, for example, is auctioned at the ports to port wholesalers (who may sell to inland wholesalers at the main distribution centres) or, increasingly, is sold by contract to fryers and processors, or direct to retailers. Fruit and vegetables may be sold (or sent on a commission basis) to primary wholesalers, who dispose of the produce either to secondary wholesalers or direct to retailers; alternatively, the grower may deal direct with retailers or may sell his crop, under contract, to a food-processing company for canning or freezing. The sale of some agricultural products such as milk, hops and potatoes, is regulated by statutory marketing boards.

London's wholesale markets play a leading part in the distribution of food-

stuffs. Every year Covent Garden market handles over 1 million tons of fruit and vegetables, and about 160,000 tons of carcase meat and 50,000 tons of poultry pass through Smithfield market; Billingsgate is the principal distributing centre for fish.

The co-operative movement in Britain has established its own wholesale organisation to serve the needs of retail societies. The turnover of the Cooperative Wholesale Society (CWS), whose membership is restricted to incorporated organisations, amounted to over £1,500 million in 1978.

There were some 500 'cash and carry' depots in Britain in 1978; total sales by the cash and carry members of the National Federation of Wholesale Grocers and Provision Merchants amounted to about £1,300 million. By bulk purchasing and limiting their expenditure on premises and credit and delivery facilities they can offer large discounts to their customers.

RETAIL TRADES Retailing in Britain may be classified under three main forms of organisation: large multiple retailers with ten or more outlets, small multiple retailers with between two and nine outlets and single outlet retailers. All three forms are represented in two other important groups of retailers: mixed retail businesses, which include mail order houses, and retail co-operative societies.

> Large multiple retailers have tended to by-pass wholesalers by having their own buying and distributive organisations. In the grocery trade many wholesalers have responded by forming voluntary organisations with small retailers. The retailers buy all they can from one wholesaler for an overall discount, with incentives given for volume of business and continuity. (The main voluntary groups are VG, with some 3,300 stores and about 2 per cent of the market in groceries, Spar, Mace and Wavy Line.) This has helped to preserve the existence of retail outlets for the wholesaler and has given small retailers the advantage of bulk buying and co-ordinated distribution without significant loss of independence.

Outlets and Turnover

There was a considerable fall in the number of retail outlets in the 1970s, a trend not matched by the volume of sales. Between 1971 and 1976 total turnover of the retail trades (including purchase tax in 1971 and value added tax in 1976) more than doubled. After allowance was made for price changes the volume of sales rose by 7 per cent. Retail turnover rose by a further 14 per cent in current prices during 1977. In terms of volume, however, this represented a fall of 2 per cent.

Over 2.4 million people were engaged in retailing in 1977.

Form of Organisation

In 1977 there were more than 231,000 retailers with just one outlet, accounting for 60 per cent of all retail outlets (compared with 338,000, accounting for 66 per cent in 1971). Turnover (including value added tax) totalled £12,731 million in 1977 (£7,076 million, including purchase tax, in 1971). Single outlet retailers accounted for 33 per cent of total retail turnover in 1977 (42 per cent in 1971).

Multiple retailers had just over 31,000 businesses and some 156,000 outlets in 1977 (over 30,000 businesses and nearly 172,000 outlets in 1971). Turnover (including value added tax) totalled over £26,000 million in 1977 (nearly £10,000 million, including purchase tax, in 1971).

In 1977, 930,000 people were engaged in single outlet retail businesses and 1,512,000 in multiple retailers.

Mixed **Businesses**

The steady diversification of some large multiple retailers, who had previously operated specialist businesses such as food supermarkets, into other commodity

TABLE 15: Retail Trades by Kind of Business, 1971 and 1977

Kind of business ^a	1971 Number of outlets	Turnover £ million	1977 Number of outlets	Turnover £ million
Grocers and general food retailers	102,974	3,787	65,567	7,851
Other food retailers (including off-licences) Confectioners, tobacconists,	97,560	2,549	74,848	4,941
newsagents Clothing, footwear and	52,982	1,298	50,544	3,119
textile retailers	91,289	1,915	65,298	3,595
Household goods retailers	75,562	2,345	62,343	5,440
Other non-food retailers	68,728	1,327	52,221	3,245
Mixed retail businesses	20,723	3,728	16,767	10,865
Total	509,818	16,949	387,588	39,056

Source: Trade and Industry

groups, including clothing and durable goods, has increased their similarity to the traditional department store. Since 1976 the term 'department store' has been replaced in official classifications by 'mixed businesses'. These are retailers with less than 80 per cent of their sales in any one of the specialist kinds of business mentioned in Table 15 (the first two categories being counted as one).

In 1977 there were 411 mixed businesses (other than general mail order houses and credit traders calling on customers) and their turnover was over £9,200 million, almost a quarter of total retail trade. Of these, 182 were large multiples, 107 were small multiples and 122 had a single outlet.

Retail Co-operative Societies Retail co-operative societies are voluntary organisations controlled by their members. Membership is open to anyone paying a small deposit on a minimum share, which entitles the member to an equal voice with other members in the society. There are about 10·25 million members. Share investment by individual members is limited to £5,000 (less in some instances) and only a low rate of interest is normally paid on the shares. The trading surplus was traditionally paid to members in the form of a dividend in proportion to the value of their purchases. Many societies, accounting for over four-fifths of total co-operative sales, have included dividend stamps redeemable for cash, other goods or credit to a store account, at different redemption rates.

Total sales of retail co-operative societies in 1978 were £2,900 million, amounting to about 7 per cent of total retail trade. There were 247 societies at the end of 1978; amalgamations are rapidly reducing the number (in 1958 the total was 1,015). The largest single society is Co-operative Retail Services Limited, which in 1978 had nearly 1,000 retail outlets and a turnover of £415 million.

Each independent society has a financial holding in the Co-operative Whole-sale Society (CWS), which distributes retail food and non-food products to retail co-operative societies on competitive terms. Societies are encouraged to buy from the CWS, which supplies about two-thirds of their total needs. Retail societies and the CWS are members of the Co-operative Union, as are other co-operative bodies such as the Co-operative Insurance Society, the Co-operative Press and the National Co-operative Chemists.

a Excluding traders below the threshold for value added tax (an annual turnover of over £10,000).

Methods of Retailing

Keen competition in the retail sector encourages continual innovation in methods of selling. Price competition has intensified since 1977 and has largely replaced the use of trading stamps as a method of sales promotion. The traditional method of service by shop proprietors and assistants has largely given way to self-service. Shopping has been made more flexible by such developments as mail order, mobile shops and automatic vending machines.

Supermarkets

Supermarkets are self-service shops with a minimum selling area of 2,000 square feet (186 square metres). According to estimates of the Institute of Grocery Distribution there were 6,190 supermarkets in 1977 with sales of £5,097 million. Their share of total retail grocery sales was about 53 per cent.

Superstores and Hypermarkets

The number of very large stores, generally known as superstores or hypermarkets, is increasing. These are defined as single-level, self-service stores offering a wide range of food and non-food merchandise, with at least 25,000 square feet (2,322 square metres) of net selling space for superstores and 50,000 square feet (4,644 square metres) for hypermarkets. At the end of 1978 there were 178 superstores and 45 hypermarkets trading or planned (having received planning permission). The Department of the Environment issues guidance to local authorities on the siting of these stores.

Discount Stores

By reducing overheads on store amenities and customer services, discount stores are able to sell goods at low prices. They have expanded their sales in recent years of such items as electrical goods, furniture and do-it-vourself supplies.

Mail Order

In 1977 the turnover of general mail order houses was almost £1,500 million, accounting for nearly 4 per cent of total retail sales.

Direct Selling

The 33 members of the Direct Sales and Service Association are manufacturing and importing companies which sell their products directly to consumers. Their sales (including value added tax) amounted to some £240 million in 1978 and accounted for 85 per cent of direct sales (other than sales of food or sales by mail order).

Instalment Credit

The rapid growth of sales of household and durable consumer goods, such as cars, furniture, washing machines, freezers and television sets, has been greatly helped by instalment credit, including hire purchase. Total new credit extended by finance houses and retailers in Great Britain in 1978 amounted to £5,515 million, 26 per cent more than in 1977; equal amounts were advanced by finance houses and by retailers. New credit extended in 1978 by finance houses operating in Northern Ireland amounted to £108 million.

Credit Cards

Credit cards, widely used in Britain, enable users to have their signatures accepted on bills in participating shops, hotels and restaurants. The issuers, which include banks, then meet the bills and recover the money from the card-holder through a single account presented periodically. Retail groups have also begun to issue credit cards; these bear the name of the group and are for use only in its stores.

SERVICE TRADES About 2:3 million people in Great Britain were employed in trades offering a service directly to the public in 1978. They included laundries and dry cleaners, hairdressers and shoe repairers. In recent years there has been a rapid growth of establishments offering services such as photocopying and printing and also shops, selling 'fast food', to be eaten on the premises or to be taken away. In April 1979 there were 492 members of the British Antique Dealers Association; nearly 4,000 travel agents belonged to the Association of British Travel Agents at the end of 1978; and there were about 60,000 public houses in Great Britain in 1977. The number of branches of building societies (see p 356) has grown rapidly in recent years.

Advertising

Some £1,800 million was spent by advertisers in Britain in 1978, equal to 1.3 per cent of gross national product and 1.9 per cent of consumers' expenditure. This compared with £1,500 million spent in 1977 according to the Advertising Association. Advertising in the press rose by 22 per cent to £1,236 million and advertising on television rose by 21 per cent to £482 million. Most of the advertising is planned by agencies, which, in some cases, also provide marketing, consumer research and other services; their representative organisation is the Institute of Practitioners in Advertising. The trade association for the whole industry, including agencies, advertisers and media owners, is the Advertising Association. It was responsible for the setting up of the Advertising Standards Authority, an independent body whose objective is the promotion and enforcement of the highest standards of advertising, in particular through the British Code of Advertising Practice.

Public Relations

Industry and commerce pay great attention to improving public understanding of their work and objectives. Many have their own public relations advisers and staff, while consultancy firms provide general services and assistance for special public relations activities. The Institute of Public Relations, founded in 1948, is the largest professional public relations organisation in Europe, with some 2,500 members in commerce, industry, public relations consultancies, national associations, and central and local government.

Presentation of Goods

The expansion of self-service shops, the spread of branded and standardised products, and developments in partly prepared foods, such as ready-washed vegetables and ready-made cake mixes, have all been major factors in the changes which have taken place in packaging methods. Packaging products of paper and board remain the most extensively used. Other important materials are tinplate, plastics and glass. New uses have been found for tinplate, especially in the canning of soft drinks and beer. The use of plastics continues to develop, particularly polyethylene film and film products and low-density polyethylene bottles used as an alternative to the traditional glass bottle.

14 Energy and Natural Resources

Britain has the largest energy resources of any country in the European Community. The development of oilfields in the British sector of the North Sea has reduced the quantity of crude oil imported and by 1980 Britain should be producing an amount equivalent to its total crude oil requirements. Minerals as a whole make an important contribution to the economy. The approximate value of minerals produced in 1977 was £6,026 million, of which coal accounted for 44 per cent, crude oil 36 per cent and natural gas 5 per cent. Over the past ten years the production of fuel minerals has increased. The output of non-fuel minerals rose until 1973, but since then there has been a fall in output, particularly of the major construction materials.

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.

Ownership of Mineral Rights

Apart from gold, silver, oil, natural gas (which are owned by the Crown), coal and some minerals associated with coal, all minerals in Great Britain are privately owned. On the United Kingdom Continental Shelf (UKCS) 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 National Coal Board. Normally, ownership of minerals runs with the ownership of the land surface but in some areas, particularly where mining has taken place, these rights have become separated. Mining and quarrying, apart from coal, are usually carried out by privately owned companies.

ENERGY

Four main primary sources of energy—petroleum, coal, natural gas and nuclear power—are used in Britain, together with some water power; secondary sources produced from these are electricity, coke and very small quantities of town gas. About three-quarters of all primary energy consumed comes from indigenous sources and this proportion is increasing as Britain's offshore oil production rises rapidly. Considerable reserves of oil and gas discovered offshore in the United Kingdom Continental Shelf should enable Britain to be virtually self-sufficient for a number of years from 1980. Coal and nuclear power have an increasingly important role in Britain's primary energy supply, particularly in the long term. Reserves of coal, Britain's richest natural resource, are sufficient to enable production to continue for about 300 years at current rates of extraction and a major capital investment programme is in progress. Nuclear power provided about 13 per cent of electricity available through the public supply system in 1978 and the proportion will grow as further nuclear power stations now under construction, or planned, are brought into service.

Publicly owned bodies are responsible for the output and supply of most of the energy industries, although privately owned companies predominate in offshore oil and gas production and oil refining. The publicly owned fuel and power industries in Britain employ in total some 600,000 people, 2.3 per cent of the working population; their annual turnover is about £12,600 million and capital investment about £1,800 million. 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.

Britain takes an active part in the work of the International Energy Agency (a body with 20 member countries attached to the Organisation for Economic Co-operation and Development) which is engaged on a programme of international co-operation to deal with world energy problems. In addition, Britain is co-operating fully in the development of the European Community's energy policy, a basic objective of which is to reduce dependence on imported energy supplies. Because of worldwide concern over possible future oil shortages, Britain, in common with other industrial countries, is seeking to conserve energy and to reduce oil consumption.

ENERGY CONSUMPTION

In 1978 inland primary energy consumption amounted to 339.8 million tonnes of coal equivalent, slightly higher than in 1977, but below the peak consumption recorded in 1973 (see Table 16). Petroleum accounted for 41 per cent of primary consumption, coal 35.3 per cent, natural gas 19.2 per cent, nuclear power 3.9 per cent and hydro-electric power o.6 per cent. Energy consumption by final users in 1978 amounted to 59,191 million therms on a 'heat supplied' basis. Industrial users consumed about 38 per cent, domestic users 26 per cent, transport 23 per cent, public services 6 per cent and agriculture 1 per cent.

TABLE 16: Inland Energy Consumption (in terms of primary sources)

million tonnes coal equivalent

1968	1973	1976	1977	1978
129-4	164.2	134-2	136.6	139.3
167.3	133.0	122.0	122.7	119.9
4.8	44.2	58.8	62.8	65.1
10.3	10.1	12.9	14.3	13.4
1.9	2.0	1.9	2.0	2.1
313.7	353.5	329.8	338-4	339.8
	129·4 167·3 4·8 10·3 1·9	129·4 164·2 167·3 133·0 4·8 44·2 10·3 10·1 1·9 2·0	129·4 164·2 134·2 167·3 133·0 122·0 4·8 44·2 58·8 10·3 10·1 12·9 1·9 2·0 1·9	129·4 164·2 134·2 136·6 167·3 133·0 122·0 122·7 4·8 44·2 58·8 62·8 10·3 10·1 12·9 14·3 1·9 2·0 1·9 2·0

Source: Department of Energy

ENERGY CONSERVATION

The role of the Government in energy conservation is to set a good example in its use of energy, and to guide and stimulate consumers to use energy more efficiently. Britain's continuing energy conservation programme involves a combination of advisory, financial and mandatory measures aimed at all energy-using sectors. The Secretary of State for Energy is advised by an independent Advisory Council on Energy Conservation, while studies on energy conservation and alternative sources of energy are undertaken by a number of organisations, notably the Energy Technology Support Unit of the Department of Energy at Harwell (Oxfordshire) and the National Engineering Laboratory of the Department of Industry.

¹ I therm = 105,506 kilojoules.

Conservation Measures

Since 1973 a wide range of measures designed to encourage energy saving has been introduced. Conservation measures contributed to energy savings estimated at around $f_{3,000}$ million in the five years to the end of 1978.

Several schemes to assist industry and commerce to adopt energy conservation measures are in operation. These include grants for insulation and boiler replacement, subsidies for consultants' surveys, energy audits in selected industries and financial assistance for demonstration projects. Firms have been encouraged to appoint energy managers (of whom there are some 3,000) to draw up and administer energy conservation measures in factories and offices. Many firms have achieved significant economies through measures such as better use of heating and lighting, improved operational and maintenance techniques, and the installation of draught-proofing and additional insulation. A number of measures to improve insulation in houses have been introduced including a programme to bring public sector housing up to a basic minimum standard of insulation. In addition, grants have been made available to private householders under the Homes Insulation Act 1978 towards the installation of basic insulation in uninsulated houses. Other conservation measures have included a maximum limit of 20° Centigrade on heating levels in commercial and industrial buildings; publication of official fuel consumption figures for new cars, so that potential purchasers can assess the petrol usage of different models; and a major government publicity campaign to promote the efficient use of energy.

OFFSHORE OIL AND GAS

The total value of the substantial oil and gas reserves discovered in the United Kingdom Continental Shelf is estimated at about £300,000 million. It is one of the world's most attractive offshore areas for oil and gas, the average success rate for exploration drilling comparing very favourably with other offshore areas. Seismic prospecting began in the early 1960s and full-scale exploration activities in 1964. Six rounds of production licensing have been held and the Government has announced its intention of holding a seventh round. The total area covered by production licences is some 59,000 square kilometres (22,800 square miles) out of a total designated area of about 624,600 square kilometres (241,200 square miles), over which Britain has exercised its rights to explore and exploit the seabed and subsoil.

Large-scale investment is taking place in offshore exploration and development, estimated at £2,300 million in 1978. By the end of 1978, 810 exploration or appraisal wells and 486 production wells had been drilled or begun; of these 62 and 96 respectively were drilled in 1978.

Offshore Supplies

The Department of Energy's Offshore Supplies Office seeks to ensure that British industry can compete effectively for orders for offshore equipment by helping firms to identify the needs of offshore operators, assisting operators to identify British suppliers of offshore equipment and services, and promoting new ventures to increase British involvement in the industry. British companies increased their share of the offshore market, worth £1,574 million in 1978, from between 25 and 30 per cent in 1973 to 66 per cent in 1978 and are increasingly involved in supplying other offshore markets.

OIL

During most of the twentieth century Britain has been almost wholly dependent for its oil supplies on imports, the only indigenous supplies coming from a small number of land-based oilfields. However, the discovery of oil offshore in the UKCS has transformed the position and Britain is obtaining a growing proportion of its oil supplies from offshore fields. The first discovery of oil in the

UKCS was made in 1969 and the first oil was brought ashore in 1975. Output is increasing rapidly (see Table 17) and Britain is now producing about 1.7 million barrels (235,000 tonnes) a day. Large-scale benefits to Britain, in the form of increasing exports and of imports saved, are being realised. (For estimates of the growing economic benefits of North Sea oil revenues see p 195.)

North Sea Fields

Twelve fields in the UKCS are producing oil: Brent and Forties, two of the largest offshore oilfields in the world; Argyll; Auk; Beryl; Claymore; Dunlin; Heather; Montrose; Ninian; Piper and Thistle. A further 12 fields are under development, while more than 40 further significant finds that have been made may prove to be commercial 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 257 km/h (160 mph) and waves of 30 metres (100 feet).

Britain's primary oil production, including condensates and petroleum gases, amounted to 54 million tonnes in 1978, about 40 per cent more than in 1977, and was equivalent to nearly three-fifths of Britain's oil requirements for energy and non-energy purposes and for international marine bunkers. Production is expected to continue to rise rapidly, reaching between 70 million and 80 million tonnes in 1979 and between 85 and 105 million tonnes in 1980. Remaining proven reserves of oil in the UKCS amount to nearly 1,400 million tonnes while the total remaining reserves of the UKCS could be as high as 4,300 million tonnes.

TABLE 17: Oil Statistics

				million tonnes	
1968	1973	1976	1977	1978	
0.1	0.1	0.1	0.1	0.1	
_	0.4	12.0	38.1	53.9	
77.0	106.0	90.3	86.3	89.2	
79.2	99.8	81.6	82.8	84.1	
0.4	2.8	3.3	15.3	23.1	
14·2°	17.1	16.6	15.2	14.3	
82.6b	113.3	87.0	68.6	65.9	
22·5°	22.6	16.0	16.3	17.6	
	$0.1 \over 77.0 $ $79.2 $ $0.4^{b} $ $14.2^{c} $ $82.6^{b} $	$ \begin{array}{cccc} 0.1 & 0.1 \\ & 0.4 \\ 77.0 & 106.0 \end{array} $ $ 79.2 & 99.8 \\ 0.4b & 2.8 \\ 14.2c & 17.1 \\ 82.6b & 113.3 $	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0.1 0.1 0.1 0.1 $ 0.4$ 12.0 38.1 77.0 106.0 90.3 86.3 79.2 99.8 81.6 82.8 $0.4b$ 2.8 3.3 15.3 $14.2c$ 17.1 16.6 15.2 $82.6b$ 113.3 87.0 68.6	

Source: Department of Energy

Government Control

The Petroleum and Submarine Pipe-lines Act 1975 provides for controls over exploration, development, installation of pipelines and refining capacity, and over the rate of depletion to ensure that offshore oil is used at the rate which secures the greatest long-term benefit for Britain.

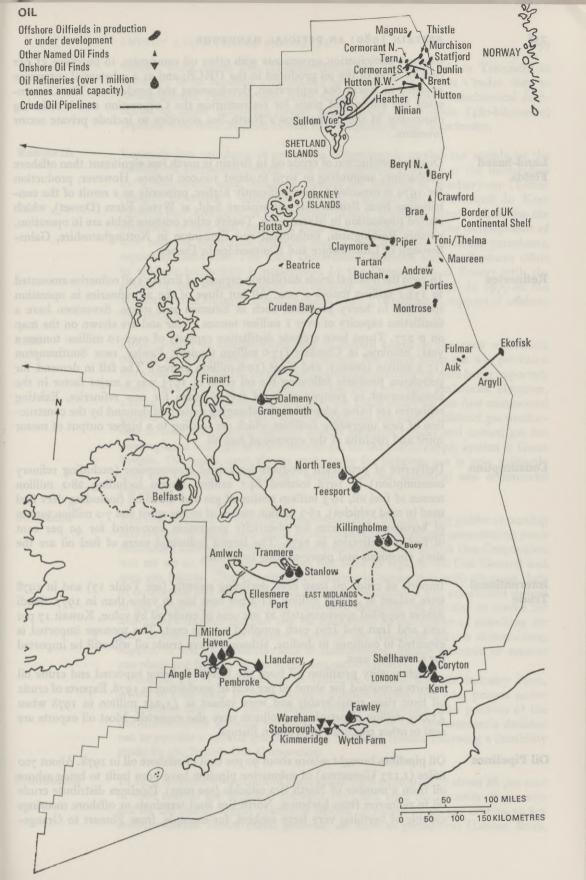
The British National Oil Corporation

The British National Oil Corporation is a public corporation established in 1976 under the Petroleum and Submarine Pipe-lines Act 1975. It is engaged in two main activities: as an oil trader on a large scale, mainly as a result of its right,

a Crude oil plus condensates and petroleum gases derived at onshore treatment plants.

^b Includes process oils.

^c Excludes process oils.



through participation agreements with other oil companies, to purchase 51 per cent of most of the oil produced in the UKCS; and as a substantial enterprise engaged in North Sea exploration, development and production. The Government has announced plans for restructuring the Corporation and broadening ownership in the Corporation's North Sea activities to include private sector investors.

Land-based Fields

Onshore production of crude oil in Britain is much less significant than offshore production, amounting in 1978 to about 100,000 tonnes. However, production for 1979 is expected to be significantly higher, primarily as a result of the contribution from Britain's largest onshore field, at Wytch Farm (Dorset), which started production in March 1979. Twelve other onshore fields are in operation, notably Beckingham, Bothamsall and Egmanton in Nottinghamshire, Gainsborough in Lincolnshire and Kimmeridge in Dorset.

Refineries

In 1979 the nominal crude distillation capacity of Britain's oil refineries amounted to 133·1 million tonnes a year. All but three of the 20 refineries in operation specialise in heavy products, such as bitumen and waxes. Seventeen have a distillation capacity of over 1 million tonnes a year and are shown on the map on p 257. Three have a crude distillation capacity of over 10 million tonnes a year: Stanlow, in Cheshire (17·6 million tonnes); Fawley, near Southampton (17·3 million tonnes); and Kent (10·6 million tonnes). The fall in demand for petroleum products following the oil crisis in 1973 was a major factor in the abandonment or postponement of several plans for new refineries. Existing refineries are being adapted to the changing pattern of demand by the construction of new upgrading facilities which are leading to a higher output of motor spirit and naphtha at the expense of fuel oil.

Consumption

Deliveries of petroleum products for inland consumption (excluding refinery consumption) in 1978 totalled 84·1 million tonnes including 28·2 million tonnes of fuel oil, 19·5 million tonnes of gas and diesel oil (including derv fuel used in road vehicles), 18·3 million tonnes of motor spirit and 7·2 million tonnes of kerosene. Deliveries for electricity generation accounted for 40 per cent of fuel oil deliveries in 1978. The largest industrial users of fuel oil are the steel, chemicals and paper-making industries.

International Trade

Imports of crude oil have been declining recently (see Table 17) and in 1978 were valued at £3,528 million, 11·2 per cent less in value than in 1977. Saudi Arabia supplied approximately 21 per cent of crude oil by value, Kuwait 17 per cent and Iran and Iraq each supplied 14 per cent. The tonnage imported is expected to continue to decline, although heavy crude oil will still be imported for particular uses.

High quality premium oil from the UKCS is being exported and crude oil exports accounted for about 46 per cent of production in 1978. Exports of crude oil have risen considerably and were valued at £1,241 million in 1978 when £1,003 million of petroleum products were also exported. Most oil exports are sent to other countries in Western Europe.

Oil Pipelines

Oil pipelines brought ashore about 90 per cent of offshore oil in 1978. About 700 miles (1,127 kilometres) of submarine pipeline have been built to bring ashore oil from a number of North Sea oilfields (see map). Pipelines distribute crude oil to refineries from harbours, North Sea land terminals or offshore moorings capable of berthing very large tankers, for example, from Finnart to Grange-

mouth; from Angle Bay, Milford Haven, to Llandarcy; from Tranmere to Stanlow; from Amlwch (Gwynedd) to Stanlow; and from Cruden Bay to Grangemouth. Pipelines also carry refined products and petrochemical feedstocks to major marketing areas; for example, a 300-mile (480-kilometre) pipeline runs from Milford Haven to the Midlands and Manchester.

Research

Research into problems of petroleum technology is carried out mainly by the leading oil companies, which have also endowed research at the universities on a substantial scale. Research centres are situated at Sunbury-on-Thames (British Petroleum), Ellesmere Port in Cheshire and Woodstock in Kent (Shell), and Abingdon in Oxfordshire (Esso). Work in progress includes the evolution of new and improved fuels and lubricants, and the development of new uses for petroleum products and of new products based on petroleum, especially chemicals. 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 (see p 379). In 1979–80 the Department of Energy expects to spend some £18 million in support of offshore technology.

GAS

Public supply of manufactured gas in Britain began in the early nineteenth century in Westminster 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. However, a more significant change began 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 natural gas has now replaced town gas as the source of gas for the public supply system in Great Britain. Originally used almost exclusively for lighting, gas is now primarily used for domestic cooking and heating and for industrial and commercial purposes.

Structure

The Gas Act 1948 brought the industry in Great Britain under public ownership and control in 1949. As a result of the change to natural gas necessitating more centralised control of production and transmission, the British Gas Corporation was set up in 1973 under the Gas Act 1972 to replace the Gas Council and area gas boards. The Corporation's powers in connection with its main duty of developing and maintaining an efficient, co-ordinated and economical system of gas supply and of satisfying reasonable demands for gas are: to search for and extract natural gas and any oil discovered in the course of searching for gas; to manufacture or acquire, transmit and distribute gas; to manufacture, supply, or sell by-products; and to manufacture, install, maintain or remove gas plant and fittings. It has about 100,000 employees.

Natural gas is not available in Northern Ireland and the industry there, which is controlled by nine municipal undertakings and four private sector companies, uses town gas produced from oil feedstocks. The position of the gas undertakings is being reviewed in the light of the Government's decision not to provide a natural gas pipeline to Northern Ireland following a feasibility

study by the British Gas Corporation.

Production

In 1978 indigenous supplies of natural gas were equivalent to about 88 per cent of total natural gas supplies. Between 1973 and 1978 the quantity of gas sent out by the public supply system in Britain increased by 36 per cent to 15,853 million therms. Seven major gasfields are now in production (Leman Bank,

Hewett, Indefatigable, Viking, West Sole, Rough and Frigg). Output from the UKCS amounted to 38,200 million cubic metres in 1978. Supplies to the British Gas Corporation are expected to continue to rise as output from the Frigg field, which straddles the boundary between the British and Norwegian sectors of the North Sea, builds up and as a growing amount of gas produced in association with oil in oilfields is brought ashore. Total proven gas reserves remaining in known discoveries in the UKCS at the end of 1978 amounted to 706,000 million cubic metres and total possible reserves in known discoveries amounted to 1.5 million million cubic metres.

Transmission and Storage

A national high pressure pipeline system provides for the transmission of natural gas, derived mainly from British fields in the North Sea (see map, p 261). By March 1979 some 3,500 miles (5,600 kilometres) of transmission pipeline were in operation. The national transmission system is supplied by feeder mains from four North Sea shore terminals and from the Canvey Island terminal which handles tankers carrying liquefied gas imported from Algeria under a long-term contract. Three new pipelines have been built to carry gas from St Fergus (Grampian) to central Scotland and northern England, while a fourth is to be laid between 1980 and 1982. In the northern North Sea two 225-mile (362-kilometre) pipelines have been laid between the Frigg field and St Fergus, while the longest offshore pipeline in the UKCS has been laid for 281 miles (452 kilometres) between the Brent field and St Fergus.

There are considerable quantities of gas in the North Sea, some associated with oil and some existing independently, which do not justify a new pipeline to the shore. A report by Gas Gathering Pipelines (North Sea) Ltd proposed a number of schemes for feeding such gas into existing pipelines, and some of these schemes are already in progress. The Government is keeping under review the need for a new gas gathering pipeline to the shore to serve fields under

development or expected to be developed.

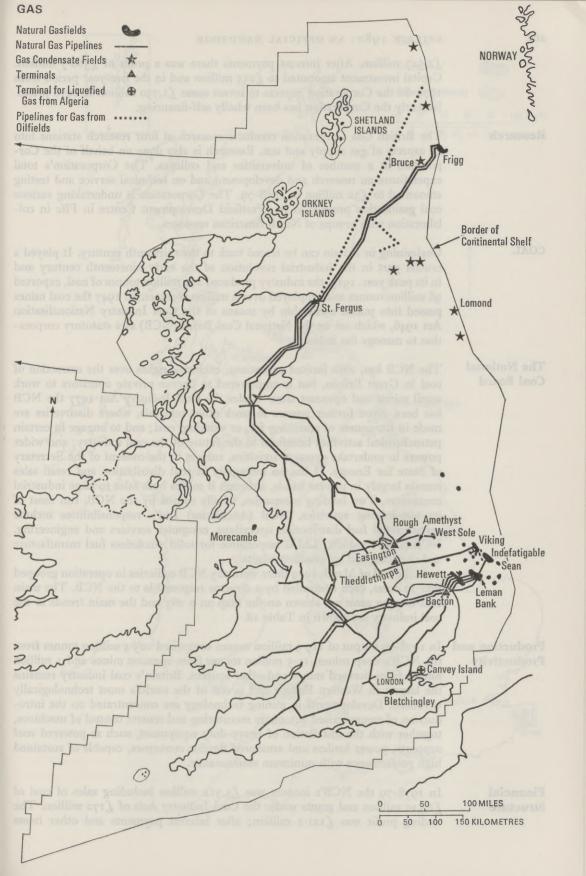
Various methods of storage of natural gas to meet peak load conditions are being investigated. Storage facilities for liquefied natural gas have been installed at four sites and further facilities are under construction. Two salt cavities at Hornsea (Humberside) are also used for gas storage and two more are under construction.

Consumption

Over half of all gas sold by the British Gas Corporation to its 14.9 million consumers is for industrial and commercial purposes, most of the remainder being for household use. Total consumption increased rapidly during the late 1960s and early 1970s, but is now growing at a more modest rate, with sales in Britain rising by 5 per cent in 1978 to 15,308 million therms. A phased programme of converting all gas appliances to use natural gas was completed in Great Britain in 1977. Gas is used particularly 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 1978, 5,965 million therms of gas were sold to industry in Britain, 338 million therms to public supply and transport power stations and 1,744 million therms to commercial 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 1978, 7,261 million therms were sold to domestic users, 10.2 per cent more than in 1977.

Operations

In 1978-79 the turnover of the British Gas Corporation and its subsidiary companies amounted to £2,972 million, of which sales of gas accounted for



£2,547 million. After interest payments there was a profit of £360.7 million. Capital investment amounted to £235 million and in the five-year period from 1979-80 the Corporation expects to invest some £1,750 million at 1978 prices. Recently the Corporation has been wholly self-financing.

Research

The British Gas Corporation conducts research at four research stations into all aspects of gas supply and use. Research is also done on behalf of the Corporation at a number of universities and colleges. The Corporation's total expenditure on research and development and on technical service and testing amounted to £32 million in 1978–79. The Corporation is undertaking various coal gasification projects at its Westfield Development Centre in Fife in collaboration with groups of North American sponsors.

COAL

Coalmining in Britain can be traced back to the thirteenth century. It played a crucial part in the industrial revolution of the early nineteenth century and in its peak year, 1913, the industry produced 292 million tonnes of coal, exported 98 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 (NCB) as a statutory corporation to manage the industry.

The National Coal Board

The NCB 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. Under the Coal Industry Act 1977 the NCB has been given further powers to work other minerals, where discoveries are made in the course of searching for, or working, coal; and to engage in certain petrochemical activities beneficial to the future of the coal industry; and wider powers to undertake overseas activities, subject to the consent of the Secretary of State for Energy. It has no monopoly in coal distribution and retail sales remain largely in private hands, although it makes bulk sales to large industrial consumers. Two holding companies, wholly owned by the NCB, run most of its non-mining activities. NCB (Ancillaries) Ltd's responsibilities include certain retail fuel distribution operations, computer services and engineering. NCB (Coal Products) Ltd is responsible for solid smokeless fuel manufacture and chemical and by-products plants.

At the end of March 1979 there were 223 NCB collieries in operation grouped into 12 areas, each controlled by a director responsible to the NCB. The main coal-bearing areas are shown on the map on p 263 and the main trends in the coal industry are shown in Table 18.

Production and Productivity

In 1978–79 output of 119.9 million tonnes comprised 105.4 million tonnes from the NCB's deep mines, 13.5 million tonnes from opencast mines and 1 million tonnes from licensed mines and other sources. Britain's coal industry remains the largest in Western Europe and is one of the world's most technologically advanced. Developments in mining technology are concentrated on the introduction of computerised automatic monitoring and remote control of machines, together with the installation of heavy-duty equipment, such as powered roof supports, power loaders and armoured flexible conveyors, capable of sustained high performance with minimum maintenance.

Financial Structure

In 1978-79 the NCB's income was £3,312 million including sales of coal of £2,510 million and grants under the Coal Industry Acts of £172 million. The trading profit was £121·1 million; after interest payments and other items



TABLE 18: Coal Statistics

				year enaca		11141616
	Unit	1969	1974	1977	1978	1979
Output of which, opencast Consumption of which, export Average labour force ^a Collieries in operation ^a	million tonnes ,, ,, ,000 number	163·2 6·4 170·8 3·1 336·3 317	108·8 9·0 123·5 2·1 252·0 259	120·8 11·4 126·1 1·4 242·0 238	120·9 13·6 123·4 1·8 240·5 231	119·9 13·5 124·5 2·1 234·9 223

year ended March

Source: National Coal Board

a NCB mines only.

there was a net loss of £19.4 million. Government assistance to the industry included grants towards the social costs of mine closures, contributions towards the mineworkers' pension scheme, aid towards the cost of stocking coal and coke, and assistance to promote the sale of coal for electricity generation. The NCB's borrowing limit is £2,200 million, with provision for further increases up to £2,600 million, subject to parliamentary approval.

Capital Investment

Capital expenditure on collieries amounted to £454 million in 1978-79. A substantial increase in investment is taking place under the Board's Plan for Coal, a general strategy for the ten years to the mid-1980s. It involves investment of £5,170 million at July 1979 prices of which nearly half is expenditure on major new projects. NCB deep mines are expected to be producing 120 million tonnes a year by the mid-1980s, with about 42 million tonnes coming from new capacity created under the 'Plan for Coal' to replace that lost by exhaustion of old collieries. By March 1979 the NCB had approved over 120 major projects designed to provide about three-quarters of this new capacity including a new mining complex at Selby (North Yorkshire) which should be producing 10 million tonnes of coal a year in the late 1980s. Some 35 major projects have been completed and new coal mines have been opened at Royston (South Yorkshire) and at

Although many good seams of coal have now been worked out due to the early development of the industry, total coal reserves in Britain are estimated at 190,000 million tonnes, of which about 45,000 million tonnes (sufficient for at least 300 years at present rates of consumption) are recoverable using existing mining technology. The NCB's national exploration programme is proving fresh reserves of economically workable coal at the rate of 500 million tonnes a year, four times the annual consumption of coal. Major new finds have been located in the North-east Leicestershire coalfield (with recoverable reserves of over 500 million tonnes), and also at Park (Staffordshire), west of Coventry, under the Firth of Forth off Musselburgh (Lothian), at Margam (West Glamor-

gan), and in north Oxfordshire.

Consumption

Coal consumption has declined in line with production. In 1978-79 internal consumption of coal was 122.4 million tonnes of which 68 per cent went to power stations, 12 per cent to coke ovens and 8 per cent to domestic users. The proportion of consumption accounted for by electricity generation is increasing and NCB sales of coal to power stations reached a record 83.3 million tonnes in 1978-79.

Exports of coal in 1978-79 were 2.1 million tonnes, almost all of which went to Western European countries, while imports also amounted to 2.1 million tonnes.

Research

In 1978-79 the NCB spent £33 million on research. It has two main research organisations: the Coal Research Establishment (CRE) at Stoke Orchard (Gloucestershire), concerned with the combustion and utilisation of coal; and the Mining Research and Development Establishment at Stanhope Bretby (Staffordshire), for work on mining methods and equipment, including underground transport and coal preparation. Long-term research at the CRE includes the liquefaction and gasification of coal, and financial assistance is being provided in support of two major projects designed to convert coal to liquid fuels (including petrol) and to produce chemical feedstocks.

Agreements to exchange technical information have been signed by the NCB with several countries. Britain is responsible through an NCB subsidiary for managing a programme of international coal research projects on behalf of the International Energy Agency. A programme of five collaborative coal research projects, including a £17 million project to develop pressurised fluidised bed combustion (a method of steam-raising for power generation), is

based in Britain.

ELECTRICITY

The first public supply of electricity in Britain was in 1881, at Godalming (Surrey). A measure of public control has always been a feature of the industry and 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 gave the industry its present structure. Electricity supply employs about 184,400 people, including 6,500 in Northern Ireland.

Structure

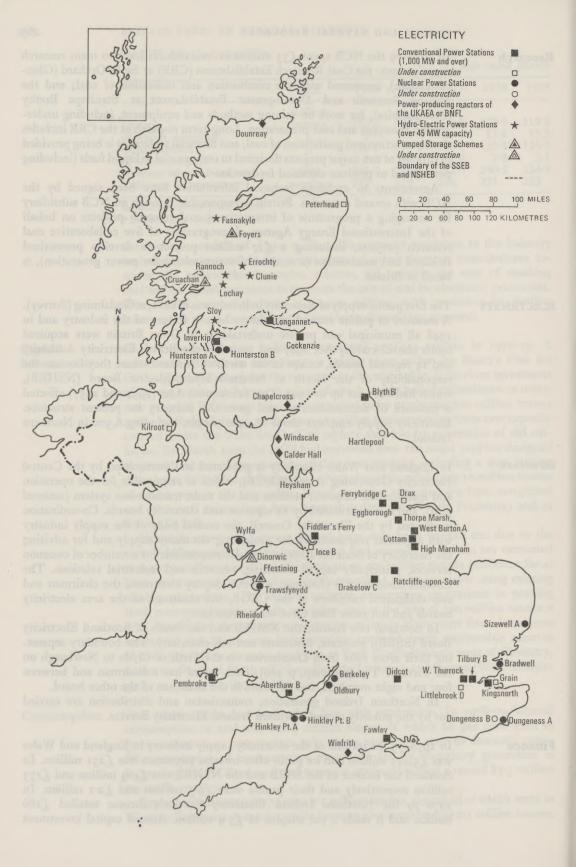
In England and Wales electricity is generated and transmitted by the Central Electricity Generating Board (CEGB), which is responsible for the operation and maintenance of power stations and the main transmission system (national grid), and it is distributed by 12 separate area electricity boards. Co-ordination is effected by the Electricity Council, the central body of the supply industry with a general responsibility for promoting electricity supply and for advising the Secretary of State for Energy; it is also responsible for a number of common services, principally capital financing, research and industrial relations. The Council consists of a chairman and two deputy chairmen, the chairman and two designated members of the CEGB, the chairmen of the area electricity boards and not more than three other members.

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, p 266). Each board has a chairman and between four and eight members, one of whom is the chairman of the other board.

In Northern Ireland generation, transmission and distribution are carried out by the publicly owned Northern Ireland Electricity Service.

Finance

In 1978-79 the income of the electricity supply industry in England and Wales was £5,445 million and its profit after interest payments was £251 million. In Scotland the income of the SSEB and the NSHEB was £463 million and £173 million respectively and their profits were £9.5 million and £2.1 million. In 1978-79 the Northern Ireland Electricity Service's income totalled £166 million and it made a net surplus of £3.9 million. Annual capital investment



amounts to £716 million in England and Wales, £100 million in Scotland and £60 million in Northern Ireland. The statutory limit to borrowings by the industry in England and Wales is £6,500 million, in Northern Ireland £650 million and in Scotland £1,500 million, with provision for a further increase up to £1,950 million.

Generation

Generation for the public supply in Britain reached a record 266,791 gigawatt hours (GWh)¹ in 1978, 1.8 per cent more than in 1977. Conventional steam power stations provided 86 per cent of the total, nuclear stations 12 per cent and gas turbine, hydro-electric and diesel plant 2 per cent. Public supply power stations in Britain consumed 115 million tonnes of coal equivalent in 1978 of which coal accounted for 70 per cent and oil 17 per cent. The output capacity of the 221 generating stations of the electricity boards in Britain at the end of 1978 totalled 67,357 megawatts (MW) including 55,910 MW run by the CEGB, 7,418 MW by the SSEB, 2,096 MW by the NSHEB and 1,908 MW by the Northern Ireland Electricity Service. An analysis of electricity generation by and output capacity of the public supply system in Britain is given in Table 19.

Generation of electricity outside the public supply system is relatively small (20,898 GWh in 1978). The major sources outside the fuel industries are the chemical, engineering, paper, and iron and steel industries and the nuclear power plants of the United Kingdom Atomic Energy Authority (UKAEA) and British Nuclear Fuels Ltd (BNFL). In 1978 these nuclear plants supplied 3,338 GWh of electricity to the public supply system.

Average thermal efficiency (the ratio of the electrical energy output to the heat energy input of the fuel consumed) of conventional steam stations in England and Wales rose from 20.75 per cent in 1947 to 31.85 per cent in 1978–79 as new plant was brought into use. The 20 most efficient stations, containing much of the newest plant, had an average thermal efficiency of 34.11 per cent in 1978–79.

TABLE 19: Generation by and Capacity of Public Supply Power Stations

	El	ectricity g	Output capacity		
	1968	1973	1977	1978	at end of 1978 (MW)
Nuclear plant Other steam plant Gas turbines and oil engines Pumped-storage plant Other hydro-electric plant	24,056 175,873	23,658 229,892	36,417 220,019	33,339 228,193	5,532 56,766
	700 851	1,347 668	966 1,313	688 1,183	2,715 1,060
	2,997	3,235	3,330	3,388	1,284
Total	204,477	258,800	262,045	266,791	67,357
Electricity supplied (net) ^a	189,241	240,373	242,477	248,003	described the second of the se

Source: Department of Energy

^a Electricity generated less electricity used at power stations (including electricity used for pumping at pumped-storage stations).

Advances have been made in the design of steam-generating plant with the introduction of 500 MW and 660 MW single-shaft generating units. Station capacities have increased and there are 11 stations each with a capacity of 2,000

One gigawatt hour = 1,000 megawatt hours = one million kilowatt hours.

MW including Kingsnorth (Kent), Europe's largest mixed-fuel station burning either coal or oil, while Britain's largest power station is at Longannet (Fife), a 2,400 MW station with four cross-compound units. Nearly 15,000 MW of plant are under construction including a 3,300 MW oil-fired station at Grain (Kent) which will be the largest in Europe, a 2,000 MW coal-fired extension to the Drax station (North Yorkshire), a 1,320 MW station at Peterhead (Grampian), which will be able to use natural gas liquids as well as oil, a 1,260 MW oil-fired station at Kilroot in Northern Ireland and three nuclear power stations (see p 269).

Hydro-electric generation is confined almost entirely to Scotland and Wales. Most of the water-power so utilised is drawn from high-level reservoirs with their own natural catchment areas. Higher capacities are also envisaged for future pumped-storage stations. (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.) Work is in progress on the construction of a pumped-storage station at Dinorwic (Gwynedd), which will be the largest of its type in the world when completed in 1983 and will have an average generated output of 1,680 MW. The NSHEB is considering a plan for a major pumped-storage station at Craigroyston on Loch Lomond.

Large gas turbine units of 55 to 70 MW, based on aero jet engines, have been introduced for peak load operation, while others of 17 to 35 MW capacity are being used in new stations to safeguard auxiliary supplies to the large new steam units and also to provide capacity for peak operation. Two 51 MW prototype units at Leicester are powered by industrial gas turbines. A new power station designed to sell waste heat from electricity generation to neighbouring firms is being built at Hereford and should be in operation early in 1980. It will be a 15 MW station with diesel generators and thermal efficiency is expected to be around 76 per cent.

Nuclear Power

Britain has been implementing a substantial nuclear power programme since the mid-1950s, the primary purpose being to produce an additional energy source for the generation of electricity. In 1956 the world's first large-scale nuclear power station, at Calder Hall (Cumbria), began to supply electricity to the national grid. Commercial nuclear power stations are producing electricity at much lower cost than conventional power stations.

Power Stations

There are 11 nuclear power stations in operation controlled by the electricity authorities, while a further five stations are controlled by the United Kingdom Atomic Energy Authority (see p 379) or British Nuclear Fuels Ltd. The UKAEA has three experimental or prototype stations which feed electricity into the national grid: the Advanced Gas-cooled Reactor (AGR) at Windscale, Cumbria (32 MW); the Steam Generating Heavy Water Reactor at Winfrith, Dorset (100 MW); and the Prototype Fast Reactor (PFR) at Dounreay, Highland (250 MW). BNFL operates the two original Magnox stations, both of 198 MW, at Calder Hall and Chapelcross (Dumfries and Galloway).

Nuclear Power
Programme

Under the first commercial programme, nine Magnox stations with a total design capacity of 4,800 MW were commissioned between 1962 and 1971. They range in size from Berkeley (Gloucestershire) with a design capacity of 276 MW to the most recent, Wylfa (Gwynedd), which has a design capacity of 1,180 MW. Two 1,320 MW AGR stations at Hinkley Point B (Somerset) and

Hunterston B (Strathclyde) began operating in 1976 and the three other stations being built under this second programme (Dungeness B, Kent, 1,200 MW; Hartlepool, Cleveland, 1,320 MW; and Heysham, Lancashire, 1,320 MW) should be commissioned by about 1981.

It was announced in 1978 that two further AGR stations would be built, at Heysham and Torness (Lothian). In addition, the electricity industry has declared its intention to order a pressurised water reactor, provided that design work is completed satisfactorily and that all necessary Government and other consents are obtained. Policy on fast reactor development, including whether or not to proceed with a full-scale commercial demonstration fast reactor, is under review. Any decision to proceed would be subject to a wide-ranging public inquiry.

British Nuclear Fuels Ltd BNFL provides nuclear fuel services covering the design and development of plant, procurement and processing of uranium, uranium enrichment, fuel element fabrication, transport and reprocessing of spent fuel, and the manufacture of specialised components and preparation of radioactive materials. All of BNFL's shares are held by the UKAEA. BNFL is organised into three divisions covering uranium enrichment, based at Capenhurst (Cheshire); fuel manufacture at Springfields (Lancashire); and reprocessing at Windscale (Cumbria) where uranium, plutonium and radioactive wastes are separated from irradiated fuel. BNFL's head office is at Risley (Cheshire). It is engaged on a large-scale investment programme costing about £2,000 million over the next ten years. This includes the refurbishing of facilities for storing and reprocessing spent fuel from Magnox power stations, the doubling of capacity of the centrifuge enrichment plant at Capenhurst, the construction of a new thermal oxide reprocessing plant (THORP) at Windscale which will deal with spent fuel from Britain's AGRs and will also reprocess spent fuel for a number of overseas customers, and the construction of a demonstration plant for vitrifying radioactive waste (see p 181). In 1978 BNFL signed contracts worth nearly £,500 million for the transport and reprocessing of spent nuclear fuel on behalf of ten Japanese electricity authorities.

Transmission and Distribution

The British system is the largest fully interconnected power network under unified control in the western world. By 31st March 1979 the main transmission lines of the CEGB totalled 14,082 circuit kilometres, of which 11,590 circuit kilometres were at 400,000 volts and the remainder at 275,000 volts. Primary distribution in England and Wales is at 132,000 volts, secondary distribution at 33,000 volts, tertiary at 11,000 volts or below and general low voltage distribution at 240 volts single phase. In Scotland there were 8,575 circuit kilometres of main transmission lines at the end of March 1979 of which 340 kilometres operated at 400,000 volts, 3,090 circuit kilometres at 275,000 volts and the remainder at 132,000 volts. Primary distribution in Scotland is at 33,000 volts. The national grid in England and Wales is divided into seven grid control areas and operations are co-ordinated by a National Control Centre in London. The grid in Scotland is operated from the control centres at Pitlochry (NSHEB) and at Kirkintilloch (SSEB).

Twin cross-Channel cables between Lydd and Boulogne are capable of transmitting up to 160 MW. Experience with this relatively low-capacity link demonstrated the benefits of the transfer of electricity between Britain and France. The CEGB and Electricité de France are proposing a 2,000 MW cable link between the two countries. The first 1,000 MW stage should be commissioned in 1983 and the second stage in 1984.

Consumption

Sales of electricity in 1978 amounted to 230,210 GWh. Industry took 39.5 per cent of the total, domestic users 37 per cent and commercial and other users the remainder. About one-fifth of domestic sales is for space heating, one-quarter for water heating and one-tenth for cooking. Electricity is used in industry almost entirely for motive power, melting, heating and lighting.

The electricity industry supplies 22.8 million consumers of whom 20.2 million are in England and Wales, 1.6 million are supplied by the SSEB, 528,000 by the NSHEB and 517,000 by the Northern Ireland Electricity Service.

Research

The Electricity Council, in consultation with the Secretary of State for Energy, is responsible for drawing up a general programme of research comprising direct research carried out by the Council and electricity boards supported by co-operative research with selected industrial research associations and by research contracts placed with universities and other organisations. 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.

Both Scottish electricity boards carry out research and experimental work on their own and in co-operation with other electricity authorities.

RENEWABLE SOURCES OF ENERGY

The financial allocation for research on alternative sources of energy (sea-wave, wind and tidal power for electricity generation, and solar and geothermal energy for low-grade heat for domestic and industrial uses) was increased in 1978. Alternative sources are not expected to change the pattern of energy supply in the immediate future but their contribution could begin to increase significantly towards the end of the century. In principle, the most promising long-term alternative sources are wave power (because of Britain's long coastline and favourable geographical position) and solar heat.

Progress continues to be made in the Government's wave power programme, the aim of which is to develop the most appropriate devices to full-scale prototypes for sea trials. Development work is in progress on a number of types of wave energy devices and includes one-tenth scale trials, full-scale component development, test tank experiments and the study of problems common to all the devices. In 1977 a four-year government-funded programme of research and development on solar energy was inaugurated to identify its potential contribution and to stimulate the development of cost-effective solar technologies, particularly on water and space heating in houses (the areas of greatest potential return).

Research on geothermal energy involves collection of data in the areas considered to have the most suitable conditions and assessment of the markets for the relatively low-grade heat produced. The Department of Energy and an industrial consortium are working on a project to establish the technical and economic potential for generating electricity from wind power. A detailed design study for a large aerogenerator has been completed and the first stage in the construction of a 3.7 MW prototype, covering detailed design and component testing, is in progress. Studies have been made of a project for harnessing the tides in the Severn Estuary, one of the world's most suitable sites for tidal power, and the Government has set up an independent Severn Barrage Commit-

tee to assist in reaching a decision on whether to proceed with such a project. The Committee has commissioned a series of engineering and environmental studies which will help it in making recommendations.

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 1977 totalled 312 million tonnes, valued at £895 million. The total number of employees in the industry was 43,900 in 1977. The geographical locations of some of the more important minerals produced in Britain are shown on the maps on p 272.

Exploration

The exploration for and exploitation of indigenous mineral resources to meet the requirements of British industry are being encouraged by the Government to minimise dependence on imports. Under the Mineral Exploration and Investment Grants Act 1972 there is provision for financial assistance of up to 35 per cent of the cost of searching for mineral deposits in Great Britain and on the UKCS and evaluating them for commercial purposes. Minerals included in the scheme are the ores of non-ferrous metals, fluorspar, barium minerals and potash. By the end of March 1979, 49 companies had sought assistance totalling £4·3 million in respect of 174 exploration projects, mainly for non-ferrous metals. Work on 111 projects had been completed.

The Institute of Geological Sciences is carrying out for the Department of Industry a programme aimed at identifying areas with the potential for economic extraction of minerals. It also has a programme for the Department of the

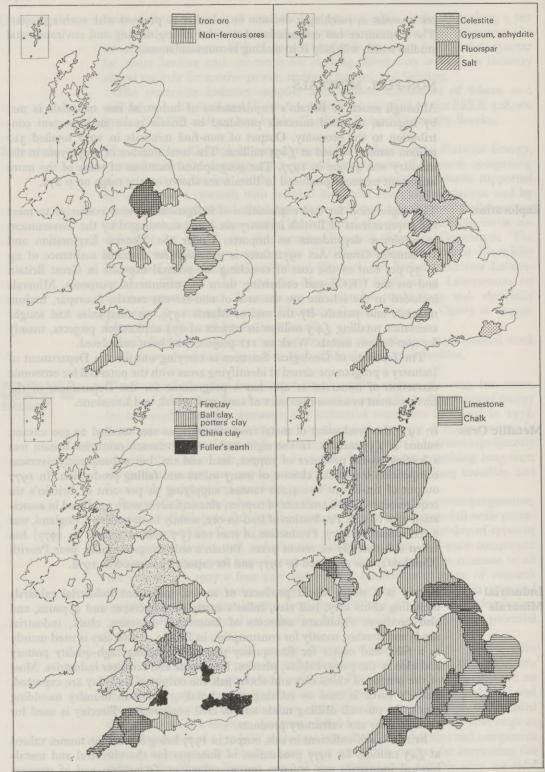
Environment to assess resources of sand and gravel, and limestone.

Metallic Ores

In 1977 the production of metal from non-ferrous ores totalled 20,500 tonnes, valued at £33 million. In the eighteenth and nineteenth centuries Britain was a leading world producer of copper, lead and tin, but subsequently overseas competition led to the closure of many mines and falling production. In 1977 output of tin-in-ore was 4,200 tonnes, supplying 30 per cent of Britain's tin requirements. Small amounts of copper, zinc and silver were produced in association with the tin. Production of lead-in-ore, mainly from northern England, was 8,200 tonnes in 1977. Production of iron ore (3.7 million tonnes in 1977) has fallen substantially in recent years. Britain's only tungsten mine, near Penrith (Cumbria), was reopened in 1977 and its capacity increased in 1978.

Industrial Minerals Britain is a major world producer of several important industrial minerals including china clay, ball clay, fuller's earth, salt, fluorspar and gypsum, and also produces significant amounts of limestone, dolomite, chalk, industrial sands and fireclay, mostly for consumption in Britain. China clay is used mainly as a filler and coater for fine-quality paper, for making high-quality pottery and also in the paint, rubber, plastics, insecticide and fertiliser industries. Most of the output of china clay and about half the output of ball clay are exported. Fuller's earth is used in refining, as a bonding agent in foundry moulding sands, for oil-well drilling muds and in civil engineering. Fireclay is used for ceramic ware and refractory products.

Britain is self-sufficient in salt, output in 1977 being 8.2 million tonnes valued at £43 million. In 1977 production of fluorspar for the chemical and metallurgical industries was 206,000 tonnes valued at £9 million and of gypsum for the construction industry was 3.2 million tonnes worth £13 million.



The maps above are based on county or regional boundaries and not those for geological outcrops.

Potash, used mainly for fertiliser manufacture, is being produced at Boulby (Cleveland).

In 1977 production of limestone and dolomite totalled 86 million tonnes, valued at £202 million, of which about 12 per cent was used in the iron and steel, chemicals and other manufacturing industries. Chalk production in 1977 amounted to 16 million tonnes worth £19 million, of which some 1.7 million tonnes were used in agriculture and industry. Industrial sands are used primarily in the glassmaking and foundry industries; output in 1977 was 6 million tonnes.

Britain also produces small amounts of barytes, talc, diatomite, calcspar, chert and flint, celestite and anhydrite.

Construction Materials

Production of sand, gravel and crushed rock as aggregates for use in construction constituted over half of Britain's output of non-fuel minerals in 1977. Of the total output of 107 million tonnes of common sand and gravel in 1977, worth £250 million, 15.7 million tonnes were marine-dredged; Britain is the world's second largest producer of marine-dredged aggregates. Production of limestone and dolomite for aggregates was 59 million tonnes in 1977. Output of sandstone in 1977 was 12 million tonnes valued at £44 million and of igneous rock 36 million tonnes valued at £130 million. Small amounts of limestone, sandstone, igneous rock and slate are used as building stone and architectural facing material.

Production of limestone, chalk and clay as raw materials for cement manufacture was 10 million, 13 million and 3 million tonnes respectively in 1977. Some 14 million tonnes of clay and shale were produced for the manufacture of bricks, pipes and tiles.

WATER

Britain's water resources are, with progressive development, normally sufficient for domestic and industrial requirements. Supplies are obtained partly from surface sources such as mountain lakes, streams impounded in upland gathering grounds and river intakes (one-third comes from rivers), and partly from underground sources by means of wells, adits and boreholes. Water consumption in Britain continues to increase and in 1978 amounted to about 17·2 million cubic metres a day (mcmd), comprising 16·6 mcmd of potable (drinkable) water and 0·6 mcmd of non-potable water. Average daily consumption per head amounts to around 390 litres.

Under the Drought Act 1976, passed in the driest period of weather since records began to be kept in 1727, water authorities in England and Wales can limit or prohibit the use of water and, if necessary, restrict domestic water supplies. Subsequent very heavy rainfall replenished surface and underground sources by the spring of 1977, but the Act has been retained as providing important reserve powers.

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.

England and Wales

Responsibility for promoting a national policy for water in England and Wales rests with the Secretaries of State for the Environment and for Wales and the Minister of Agriculture, Fisheries and Food who, under the Water Act 1973, are charged with responsibility for securing the conservation, augmentation, distribution and proper use of water resources and the 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; the use of inland waters for navigation and recreation; the provision of land drainage; and the protection and development of fisheries.

National Water Council The National Water Council advises and assists ministers and water authorities. It consists of a chairman appointed by the Secretaries of State, the chairmen of the water authorities, and ten other members with special relevant knowledge, of whom eight are appointed by the Secretaries of State and two by the Minister of Agriculture, Fisheries and Food.

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 (see p 178); sewerage and sewage treatment; river management; land drainage; sea defences; recreation; and freshwater fisheries. The board of each water authority consists of a chairman and several members appointed by the Secretary of State for the Environment (or, in the case of the Welsh Authority, by the Secretary of State for Wales), a few members appointed by the Minister of Agriculture, Fisheries and Food and a small majority, usually of only one, of members appointed by the county and district councils within the area of the authority. District councils usually also act as agents of water authorities for the design, construction, operation and maintenance of public sewers in their areas.

Statutory Water Companies The Water Act 1973 provides for 29 existing statutory water companies to continue to supply water. They account for about one-quarter of total supplies. Special arrangements govern the relationship of statutory water companies to the water authorities.

Water Data Unit

The principal functions of the Water Data Unit, part of the Department of the Environment, are to advise on information required for water management purposes, to ensure common standards and methods of data collection and to publish such data on a national basis.

Supplies

Some 13,600 million cubic metres of water were abstracted in England and Wales in 1977. Public water supplies, reaching over 99 per cent of the population, accounted for 5,377 million cubic metres. The Central Electricity Generating Board took 5,496 million cubic metres, primarily for cooling in connection with electricity generation, other industry 2,610 million cubic metres and the remainder was used in agriculture. Water authorities' estimated revenue for 1979–80 is some £1,350 million. Capital expenditure in 1978–79 on water supply, sewerage and sewage disposal is estimated at £460 million.

The provision of piped supplies for rural areas has been assisted by grants under the Rural Water Supplies and Sewerage Acts 1944 to 1971. By March 1979 schemes costing some £133 million had been completed or were in progress

with the aid of grants under these Acts totalling £36.7 million.

Scotland

In Scotland responsibility for public water supply, sewerage and sewage disposal rests with the nine regional and three islands councils. Additionally the Central Scotland Water Development Board, established under the Water (Scotland) Act 1967, 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. Over 98 per cent of the population has a public water supply. About 850 million cubic metres of water were abstracted in Scotland in 1978 for public water supplies. Capital expenditure in 1978–79 on water supply, sewerage and sewage disposal is estimated at £62 million. The Secretary of State for Scotland is responsible for the promotion of the conservation of water resources and of 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 Northern Ireland Department of the Environment is responsible for water supply and sewerage in 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. About 140 million gallons (636 million litres) of water a day are supplied to over 90 per cent of the population. Capital expenditure on water supply, sewerage and sewage disposal works during 1978 amounted to over £24 million.

Research

The central research organisation for the water industry in Britain is the Water Research Centre at Henley-on-Thames (Oxfordshire). The Centre's laboratory at Stevenage (Hertfordshire) is concerned with water pollution including sewage and industrial waste water treatment, sludge treatment and disposal, flow measurement, estuarine pollution and the development of analytical methods and quality monitoring systems. Its laboratory at Medmenham (Buckinghamshire) deals with water resources, water treatment, health aspects of water quality, distribution and operational research.

The Hydraulics Research Station of the Department of the Environment at Wallingford (Oxfordshire) predicts the performance of hydraulic civil engineering works and their effects on the environment. Its work covers background research and specific investigations into the flow of water over weirs and spillways, the performance of flood prevention and sea defence works, silting in rivers and estuaries, and harbour and offshore structure design.

The Institute of Hydrology of the Natural Environment Research Council at Wallingford studies the whole hydrological cycle, and the Meteorological Office is concerned with rainfall.

15 Agriculture, Fisheries and Forestry

AGRICULTURE

Although Britain is a densely populated, industrialised country relying on imports for nearly half its food supply, agriculture remains one of its most important industries. It occupies 664,000 people or 2·7 per cent of the total civilian working population, provides about 2·6 per cent of the gross domestic product, and uses nearly 19 million of the 24 million hectares (47 million of the 60 million acres) of land. Exports in the agricultural sector (including machinery and fertilisers) in 1978 amounted to nearly £3,700 million.

THE LAND AND ITS USES

The soils of the country are varied (see p 4). Land used for farming is conventionally divided into land suitable for cultivation (crops and grass) and rough grazing. In hill country the area of cultivated land is often small, but is usually supplemented by grazing on a comparatively large area of hill land.

There are 12 million hectares (30 million acres) under crops and grass. Cultivated land, rough grazing, woodland and other land on agricultural holdings together represent 78 per cent of the land area. The rest is mountain and forest, or put to urban and kindred uses. The area available for farming is gradually decreasing to meet the needs of housing and industry; so far, the loss has been offset by the increase in productivity on the land being farmed.

Size and Ownership of Farms

There are about 258,000 farming units in Britain. About half are very small units, mostly farmed part-time, and accounting for less than 10 per cent of the industry's total output. Some 29,000 large farm businesses (capable of employing four or more full-time workers), accounting for less than 10 per cent of the number of holdings, produce about half of the industry's total output. There are about 44,000 medium-sized (two or three workers) and some 51,000 small full-time farm businesses.

Amalgamation of small farms into larger, more viable units has been encouraged by successive governments. The average size of full-time holdings is about 114 hectares (282 acres) of crops and grass and rough grazings.

In Great Britain more than half of the farms, and in Northern Ireland almost all farms, are owner-occupied.

Types of Farming

The increasing use of intensive methods of production both in crops and in animal husbandry has led to greater specialisation. Three-fifths of the full-time farms in Britain are devoted mainly to dairying or beef cattle and sheep; one in six is a cropping farm and the remainder specialise in pigs, poultry or horticulture, or are mixed farms. The farms devoted primarily to arable crops are found mainly in the eastern parts of England and Scotland. Large-scale potato and vegetable production is characteristic of the Fens (in south Lincolnshire and

Cambridgeshire), 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 and south-west England. Elsewhere, horticultural crops are widely dispersed amongst agricultural crops.

Dairying occurs widely, but there are concentrations in south-west Scotland, the western parts of England and south-west Wales, where the wetter climate encourages the growth of good grass. Sheep and cattle are reared in the hill and moorland areas of Scotland, Wales and northern and south-western England. Beef fattening takes place partly in better grassland areas and partly in yards on arable farms.

In Northern Ireland dairying is the main occupation on 42 per cent of the full-time farms, while a further 36 per cent concentrate on beef and sheep production. The remainder specialise in other products or are mixed farms.

Mechanisation

Britain has one of the heaviest tractor densities in the world, with 504,000 tractors in 1978, or one to every 14 hectares (34 acres) of arable land. Power-take-off implements now characterise arable farming; and some 58,000 combine harvesters were in use in 1978. A wide variety of machines for harvesting and preservation of grass are employed. Milking machines are installed on all except the smallest farms.

Over 90 per cent of the farms in Britain have an electricity supply and accompanying equipment. Through machinery syndicates farmers have the use of expensive equipment whose capital cost is shared among members.

HOME FOOD SUPPLIES

Britain produces just over half of its total food requirements. About two-thirds of the country's indigenous-type food supplies are home grown. Home production of the principal foods is shown as a percentage by weight of total supplies (that is, output plus imports less exports) in Table 20.

TABLE 20: British Production as a Percentage of Total Supplies

Food product	1967–69 average	1978 (provisional)
Meat	71	82
Eggs	99	102
Milk for human consumption (as liquid)	100	100
Cheese	44	68
Butter	10	38
Sugar (as refined)	33	40
Wheat	45	71
Potatoes for human consumption	91	91

Source: Annual Review of Agriculture 1979

AGRICULTURAL PRODUCTION

Britain has a long tradition of efficient farming based on technological progress and research. Modern farming methods were first pioneered in Britain as early as the eighteenth century. The rapid growth of productivity in recent years is due largely to research and advice, much of which is undertaken by the Government.

The expansion in production and in yield per hectare which has taken place in the last decade despite falling manpower is summarised in Table 21 which also shows the effect of the drought during 1976. There has been a substantial growth in the number of beef cattle and a less marked increase in the number of dairy cattle, sheep, pigs and poultry. Total cereal production has increased by about a quarter. Potato production is particularly susceptible to weather conditions but, on average, adequate supplies are maintained from a reduced area. Increases in output of meat and milk have been associated with higher

consumption of feedingstuffs, mostly from home resources. In 1978 some 5.5 million tonnes of concentrated feeds were imported; the level of imports depends, however, on the size of the home crop of cereals.

The index of agricultural net product at constant prices (1975 = 100), which stood at 100 in 1968, is estimated to have risen to 122 in 1978. (The relatively low level in 1975, the base year, was due to unfavourable weather; the index for the years 1971-74 ranged between 111 and 114.)

TABLE 21: Manpower, Land Use, Produce and Livestock

	Average 967–69	1976	1977	1978	1978 imperial unit equiva- lents
Manpower in Agriculture ('000)	808	669	661	664	11
Land Use ('000 hectares) Total crop and fallow Grass (excluding rough grazings) Rough grazings Other land on agricultural	4,981 7,346 7,115	4,821 7,234 6,513	4,863 7,126 6,400	4,933 7,071 6,376	12,190 ^b 17,473 ^b 15,756 ^b
holdings	a	419	451	467	1,154
TOTAL	а	18,987	18,840	18,847	46,573
Main crops					
Wheat: area ('000 hectares) harvest ('000 tonnes) yield (tonnes per hectare) Barley: area ('000 hectares) harvest ('000 tonnes) yield (tonnes per hectare)	915 3,579 3·91 2,418 8,717 3·61	1,231 4,740 3.85 2,182 7,648 3.51	1,076 5,270 4·90 2,400 10,530 4·39	1,257 6,610 5·26 2,348 9,850 4·19	3,106 ^b 6,506 ^c 2·10 ^d 5,802 ^b 9,695 ^c 1·67 ^d
Oats: area ('000 hectares) harvest ('000 tonnes) yield (tonnes per hectare) Potatoes: area ('000 hectares) harvest ('000 tonnes) yield (tonnes per hectare)	391 1,305 3·33 272 6,763 24·9	235 764 3·25 222 4,789 21·6	195 790 4·06 232 6,620 28·5	180 705 3·92 214 7,330 34·2	445 ^b 694 ^c 1·56 ^a 529 ^b 7,215 ^c 13·6 ^a
Sugar area ('000 hectares) beet: harvest ('000 tonnes) yield (tonnes per hectare)	186 882 5·7	206 695 4·2	202 949 5·4	209 1,025 ⁿ 5.8 ⁿ	
Livestock ('000 head) Cattle and calves Sheep and lambs Pigs Poultry	12,289 27,831 7,425 126,532	14,069 28,265 7,947 142,222	13,854 28,104 7,736 134,286	13,625 29,686 7,708 137,329	
Livestock Products Milk (million litres) Eggs (million dozen)	11,908 1,222	13,819 1,149	14,595 1,156	15,269 1,188	
Beef and veal ('000 tonnes)	946 244	1,069 248	1,032 229	1,047 237	
Mutton and lamb ('000 tonnes) Pigmeat ('000 tonnes) Poultry meat ('000 tonnes)	846 515	840 690	903 713	874 723	861°

Source: Agricultural Departments

Differences between totals and the sums of their constituent parts are due to rounding.

a Not available.

b 'ooo acres. c'ooo tons. d Tons per acre.

e Amount of sugar produced.

f Sugar-in-beet per crop hectare.

g Million gallons. h Provisional figures.

Crops Cereals

Wheat is grown mainly in the eastern half of England. About one-half of the wheat crop is normally used for flour milling, the remainder going mainly for animal feed.

Since 1960 the area under barley has increased by about 75 per cent. In recent years, between 15 and 23 per cent of the crop has been used for malting and distilling; most of the remainder is used as feed for livestock.

The universal use of combine harvesters has necessitated the installation of drying and storage facilities on many farms. Such equipment is also often used on a co-operative basis.

Fodder Crops

The total area of fodder crops has fallen since 1960 because in many cases farmers can provide winter feed more economically by increased grass production and improved methods of conservation. The principal fodder crops are turnips, swedes and kale in England, and turnips and swedes in Scotland. Their principal use is to supplement conserved grass (mainly hay and silage) for winter feeding.

Sugar

Sugar from home-grown sugar beet provides about 40 per cent of British requirements. The British Sugar Corporation Ltd is the only processor of sugar beet in Britain and enters into contracts with farmers to buy the beet they will grow the following year.

Most of the other sugar used in Britain is refined from raw sugar imported from developing countries under the Lomé Convention (see p 73).

Potatoes

Harvesting of early potatoes starts at the end of May, and the lifting of maincrop varieties usually begins in September. Seed potato production for Britain and for export is chiefly centred in Scotland and Northern Ireland.

Hops

Hops, grown for the brewing industry, occupy only about 6,000 hectares (14,000 acres) but have a very high yield per hectare and value by weight.

Grassland

The British climate suits grassland farming. Grass supplies about 80 per cent of feed requirements of cattle and sheep (in terms of energy); its production has been enhanced over recent years by the development and application of new techniques, notably the increased use of fertilisers, new methods of grazing control, improved herbage conservation for winter feed and irrigation. Rough grazings are used for extensively grazed livestock, producing young animals for fattening elsewhere.

Livestock

A great number of specialised breeds of livestock have been developed over the centuries in Britain. Substantial sales of animals and semen are made to overseas buyers to replenish and improve their herds and flocks. In recent years farmers have introduced a number of breeds from the continent of Europe.

Artificial insemination plays an important part in cattle breeding, about 80 per cent of the dairy herd in England, Scotland and Wales being bred in this way.

Dairy Farming

In England, Scotland and Wales more milk goes for liquid consumption than for manufacture, but in Northern Ireland the greater part of the milk is used for manufactured products. Average consumption of liquid milk per head in 1978 was estimated at about 2.56 litres (4.51 pints) a week.

Average yields per dairy cow have increased during the last decade by about a quarter and were some 4,620 litres (1,016 gallons) in 1978. Freedom from tuberculosis has reduced herd wastage, and a campaign to eradicate brucellosis is well

advanced. Milk production has been stimulated by advances in grassland management, new methods of grass conservation and programmes of controlled use of concentrated feedingstuffs.

The average size of dairy herds has also been increasing over the years and in 1978 was some 46 cows a herd, the largest in the European Community.

Beef Cattle

About two-thirds of home-fed beef production derives from the national dairy herd, in which the Friesian breed is predominant. While Friesians are satisfactory dual-purpose cattle, many dairy cows are crossed with beef bulls for beef production. Recent years have seen the extensive introduction of beef breeds from continental Europe. The hill and upland areas are important in the production of store cattle which are moved for fattening to lowland pastures where cattle imported from the Irish Republic are also fattened.

Sheep

Britain has a long tradition of sheep production, with more than 40 breeds and many crosses between those breeds. Research has provided vaccine and sera protection against nearly all the epidemic diseases.

Ewes and lambs are brought every autumn from the hill areas, where winters are usually severe, to join the lowland flocks, usually in two stages: first, to intermediate altitudes, for mating with rams of a larger and more rapidly maturing breed; then, the cross-bred progeny pass on to the milder lowland conditions, where they become crossed again with Down rams for fat lamb production. The hill breeds bring in hardiness, and the lowland sires fecundity and early maturity. Store and fat lamb production provides the main source of income for sheep farmers but wool is also important, especially to farmers in hill areas.

Pigs

Pig production is carried on in most areas but is particularly important in eastern and southern England and in Northern Ireland. There is an increasing concentration into specialist units and larger herds. Artificial insemination is available nationally. About a third of the pigmeat is used for bacon, a third for pork and a third for processing into sausages and other products.

Poultry

The British poultry industry has expanded rapidly in recent years, aided by the application of improved husbandry and management techniques in intensive production units and by genetic improvements in stock. Some 85 per cent of the laying birds on farms are in flocks of 5,000 or more, while about 74 per cent of the broilers are in flocks of 50,000 or more. The average yield of eggs per bird is about 240 a year. Nearly all eggs and poultry meat consumed in Britain are home-produced.

Horticultural Industry The horticultural industry produces a wide variety of fruit, vegetables and flowers, which are worth about 10 per cent of the total value of agricultural output; in 1978 their value was estimated at £,709 million.

In 1978 the land on which these crops were grown amounted to nearly 289,000 hectares (714,000 acres), about 2·4 per cent of the land used for crops and grass. Fruit accounted for about 65,000 hectares (161,000 acres), vegetables, excluding potatoes, for about 211,000 hectares (521,000 acres) and flowers, bulbs and nursery stock for about 12,000 hectares (30,000 acres). Crops under glass, plastic and in sheds, including mushrooms, occupied about 2,000 hectares (4,900 acres).

Horticultural crops are largely grown on specialised holdings, but some, particularly vegetables for processing, are produced on arable farms. Most

horticultural enterprises are increasing output per unit area with the help of improved planting material, new techniques of cultivation and environmental control, and the widespread use of machinery.

Field Vegetables

Field vegetables, with approximately 74 per cent of the horticultural output, are the most important horticultural sector. They are widely spread over the country, with the most intensive concentrations in the Thames Valley and Hereford and Worcester and extensive production in the eastern counties. Some 38 per cent are destined for processing.

Fruit

Dessert apples are the most important fruit crop. Britain is one of the few countries which grow varieties of apples especially suitable for cooking; these are produced in England and Northern Ireland. Some high-quality pears are produced in the east and south-east of England. Cherries and plums are grown in Kent, and plums also in the Vale of Evesham and parts of East Anglia. Around Perth in Scotland is the largest concentration of raspberry plantations in the world.

Strawberries are the most widely grown soft fruit, with early production in the south and west of England. Blackcurrants are also widely grown, mainly for the manufacture of soft drinks and of flavouring for confectionery. Other fruits include gooseberries, red and white currants, loganberries and blackberries.

Glasshouse Crops

Much of the glasshouse sector of the horticultural industry has been re-equipped since the mid-1960s with the aid of government grants. Widespread use is made of units with automatic control of heating and ventilation, semi-automatic control of watering and carbon-dioxide enrichment of the atmosphere. Tomatoes form the most important glasshouse crop, and, together with lettuce and cucumbers, represent some 95 per cent of the total value of glasshouse vegetable output. Mushrooms are grown in specially constructed sheds in most parts of Britain, with concentration in south-eastern and northern England.

Other Crops

Flowers and bulbs occupied some 5,000 hectares (12,000 acres) and hardy nursery stock some 7,000 hectares (17,000 acres) in June 1978.

MARKETING AND CO-OPERATION

Agricultural products are marketed mainly through private trade channels, but also through producers' co-operatives and marketing boards. Marketing boards are essentially producers' organisations with certain statutory powers to regulate the marketing of particular products. A scheme to establish a marketing board must be approved by Parliament and (except in the case of Northern Ireland boards) by a majority of the producers of the product concerned. The majority of the members of each board are elected by registered producers; a small minority of independent members are appointed by agricultural ministers. Various safeguards exist to protect the public interest generally, including the interests of individual producers and consumers. Most of the marketing boards are either buyers from all registered producers or control all contracts between producers and first buyers. This applies to the marketing boards for milk, wool, hops and (in Northern Ireland) pigs and seed potatoes. The Potato Marketing Board, on the other hand, maintains only a broad control over marketing conditions, leaving producers free to deal individually with buyers. The Milk Marketing Boards are formally recognised as part of the European Community milk regime.

For certain other commodities there are broadly based organisations representing producer, distributor and independent interests. The object of the Home-Grown Cereals Authority is to improve the marketing of home-grown cereals. It provides a market intelligence service and promotes research and development. It also acts as agent for the Intervention Board for Agricultural Produce (see p 283) with regard to cereals and oilseed rape.

The Meat and Livestock Commission's wide range of functions includes the promotion and improvement of many activities concerning livestock and livestock products in Great Britain. In Northern Ireland, the Livestock Marketing Commission promotes better organisation, development and marketing in the livestock and livestock products industry. The Eggs Authority has the general duty of improving the marketing of eggs.

Under the Common Agricultural Policy of the European Community (see p 283) a wide range of horticultural produce (both home-grown and imported) is subject to common quality standards.

Co-operation

Agricultural co-operatives are concerned with marketing, production, services, and with supply of farmers' requirements. There are, in addition, pest control societies and machinery syndicates.

The Government provides grants for co-operative production and marketing of agricultural and horticultural produce on the recommendation of the Central Council for Agricultural and Horticultural Co-operation, a statutory body which encourages co-operation among farmers and growers throughout Britain.

FARM EXPENDITURE AND EARNINGS The aggregate net income of farmers in 1978 is estimated at £1,256 million (excluding stock appreciation). Of the total farm output, estimated at £7,064 million in 1978, about two-thirds was in the form of livestock and livestock products.

Feedingstuffs amount to approximately one-third of agriculture's total cost, and wages and machinery (including depreciation) to about one-fifth each. In recent years agricultural workers' earnings have risen considerably in real terms, but this has been offset by the manpower economies made possible by increasing mechanisation and larger farms. Labour productivity rose by nearly 4.5 per cent a year between 1968 and 1978.

Capital Requirements It is estimated that £335 million was added to the value of buildings and works and £650 million was invested in new plant, machinery and vehicles in 1978. Most of the capital for investment is generated from within the farm business. Banks are the main source of short- and medium-term credit. Mortgage loans form the chief source of long-term credit and are provided by specialised financial institutions (see p 284) and private sources.

Net Incomes

In 1977-78 the average net income (excluding stock appreciation of breeding livestock) for farms of different types in England and Wales was generally within the range of £60 to £170 per hectare (£24 to £69 per acre) with the exception of pig and poultry farms and horticultural holdings, which are more intensive in their use of land.

THE ROLE OF THE GOVERNMENT Responsibility for carrying out the Government's agricultural policy is vested in the agricultural ministers: the Minister of Agriculture, Fisheries and Food in England; and the respective Secretaries of State in Scotland, Wales and Northern Ireland. The day-to-day work is carried out by the agricultural departments: the Ministry of Agriculture, Fisheries and Food, the Department of Agriculture and Fisheries for Scotland, the Welsh Office Agriculture Department, and the Northern Ireland Department of Agriculture.

Market arrangements under the Common Agricultural Policy of the European Community are administered by the Intervention Board for Agricultural Produce, which is responsible to the agricultural ministers.

Common Agricultural Policy

As a member State of the European Community, Britain applies the Common Agricultural Policy (CAP) to its agriculture. With the exception of a few commodities (see below), all national decisions on measures of farm price support have been replaced by decisions at Community level; the cost of such support is met wholly by the Community. The position on other farm grants and subsidies varies, but national governments must not operate measures which would distort competition. In some cases Community rules lay down broad guidelines within which national governments retain considerable discretion; while certain schemes are laid down in detail at Community level. In the latter case the Community generally makes some contribution to the cost.

Price Support

Under the CAP, producers' returns for most of the main commodities are supported by a combination of charges on imports from outside the Community and internal support prices which are maintained by intervention buying when necessary. In addition, export refunds enable Community exporters to sell on world markets when world prices are below Community price levels. There is also provision for certain direct payments to producers, including beef premiums. CAP support price levels, as well as rates of levy and subsidy, are set in units of account 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 real exchange rates. The green rates can thus be out of line with the market rate of exchange between each currency and the unit of account, 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 cach 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.

The level of support prices under the CAP is reviewed by the Community each year, and the results of the British annual review (see p 284) help to shape the Government's approach to the negotiations on CAP support. The Government is seeking to make significant improvements in the operation of the CAP; it believes that support prices should be set at levels which do not produce surpluses but offer security to reasonably efficient producers. The storage and disposal of the surpluses adds significantly to the Community's budget expenditure (see p 74). The Government aims in particular at the removal of the major structural surpluses of dairy products and sugar. In 1979, Britain strongly supported the Community's decision to freeze the support price for milk.

Some of the grants paid to farmers under the schemes mentioned on p 284 also come within the scope of the CAP.

Price Guarantees

In the light of the annual review, agricultural ministers determine guaranteed prices for the coming year for certain commodities not covered by the CAP (potatoes, sheep, and wool).

Sheep producers receive guarantee payments if the average market prices fall below the guaranteed levels. For wool and (except in Northern Ireland) for potatoes, the Government operates the guarantees through the appropriate marketing boards (see p 28). The Potato Marketing Board may, with government agreement, undertake support buying of any surplus, re-selling as much as

possible for stockfeed. In Northern Ireland, the potato guarantee is operated by the Department of Agriculture.

Other Grants and Subsidies

In addition to market support under the CAP and the British guaranteed prices, producers receive support through certain capital and production grants, some of them based on Community decisions. The grants include, for example, those paid under the Farm and Horticulture Development Scheme (towards the implementation of farmers' development plans) and under the Farm Capital Grant Scheme and Horticulture Capital Grant Scheme (towards the cost of capital investment).

There is also a Payments to Outgoers Scheme designed to assist in the improvement of farm structure and a Milk Non-Marketing and Conversion Scheme under which grants are available to farmers who cease production of milk for sale, with advantageous rates if they convert to beef or sheep production. Special financial assistance is available under Community and national arrangements for farmers in less favoured (hill) areas. Community assistance may also be made available for improvements to facilities for the marketing and processing of agricultural products. There are also grants for co-operatives (see p 282).

Consultative Machinery

Each year the agricultural ministers review the economic condition and prospects of the industry in consultation with representatives of producers. The conclusions drawn from the review contribute, together with views expressed on behalf of agricultural workers, landowners, consumers and the food industry, to the formulation of the Government's position in the Community negotiations on the development of agricultural policy and to the decisions on matters remaining within national competence.

Within the National Economic Development Council (see p 198) there is a committee for agriculture, comprising representatives of farmers, workers and landowners, as well as official and independent members.

Cost of Support

Expenditure in 1978-79 on price guarantees, grants and subsidies and on CAP market regulation is estimated at about £300 million and £293 million respectively, of which an estimated £290 million was reimbursed from the Community budget.

Agricultural Credit

In England and Wales, mortgage loans for the purchase or improvement of agricultural land and buildings are available from the Agricultural Mortgage Corporation Ltd, a company which has some government financial backing but raises its funds on the London capital market. The Scottish Agricultural Securities Corporation Ltd fulfils a similar role in Scotland.

In Northern Ireland loans are available to farmers from the Agricultural Loans Fund, administered by the Department of Agriculture and financed out of public funds.

In any part of Britain, the Agricultural Credit Corporation Ltd may provide guarantees for bank loans. The Corporation may receive government help if necessary.

Agricultural Advisory Service

In England and Wales scientific, technological and management advice and services are available through the Agricultural Development and Advisory Service (ADAS) which operates mainly from the regional and divisional offices of the Ministry of Agriculture, Fisheries and Food and from the divisional offices of the Welsh Office Agriculture Department. The Service also helps to identify problems requiring investigation and research, suggests priorities for such work, and, where appropriate, contributes to possible solutions. ADAS

provides free impartial advice to landowners, farmers and growers, but charges are made for certain services.

In Scotland the agricultural advisory service is provided by the three regional independent colleges of agriculture financed almost entirely by public funds.

Advisory work in Northern Ireland is under the direction of the Department of Agriculture. The resources of the agricultural colleges, the research centres and the specialist divisions of the Department are available to the advisory service.

Smallholdings and Crofts

Local authorities provide about 8,200 smallholdings in England and about 1,000 in Wales. In England about 800 lettable holdings are provided by the Ministry of Agriculture, Fisheries and Food. The Minister and local authorities may make loans of up to 75 per cent of required working capital to their smallholding tenants.

Land settlement in Scotland has always been carried out by the central Government, which owns and maintains about 165,000 hectares (408,000 acres) of land settlement estates, comprising some 2,800 crofts and holdings.

Crofting

Within the crofting areas of Scotland (situated in Strathclyde, Highland, Western Isles, Orkney Islands and Shetland Islands) much of the land is held by crofters, that is, tenants whose holdings are generally either rented at a cost of not more than £100 a year or have an area not exceeding 30 hectares (75 acres). Crofting is administered by the Crofters Commission, and benefits from government grants for land improvement and some other agricultural work.

Tenancy Legislation

A code of landlord-tenant relationships has been written into legislation in order to protect the respective interests of landlords and tenants and to eliminate uncertainty as to their rights and obligations.

Most agricultural tenants in Great Britain have the right to contest a notice to quit, which then becomes inoperative 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).

There is a code of compensation to which the tenant is entitled on termination of the tenancy. Rent is a matter for negotiation between landlord and tenant and may be varied by agreement or, failing agreement, by arbitration.

There are provisions for succession of a close relative on the death of a tenant farmer.

Safety at Work

The Agricultural Branch of the Health and Safety Commission (see p 333) is responsible for the enforcement of regulations relating to the health and safety of workers in agriculture. The regulations cover such matters as the guarding of field and stationary machinery, farm safety, the fitting of safety cabs to tractors, and the use of agricultural chemicals. The Commission's Agriculture Industry Advisory Committee assists it in resolving problems of health and safety in agriculture, including horticulture and forestry.

Arterial Drainage and Sea Defence

Ten regional water authorities are responsible for land drainage (including flood prevention) in England and Wales. Most of the funds needed by water authorities are obtained from local authorities, but the Government pays grants towards the cost of improvement schemes. In some low-lying areas where there are special local problems of land drainage, internal drainage boards carry out work for the special benefit and protection of their districts. The boards finance their work from drainage rates levied on owners and occupiers, and from government grants payable on improvement works.

Local authorities in England and Wales also have general land drainage powers and may receive government grants towards the cost of improvement works.

In Scotland local authorities deal with coast protection and urban land flood prevention, while arterial drainage and agricultural land flood prevention are the owners' responsibility. Grants are available to owners or occupiers of agricultural land who carry out arterial drainage work.

In Northern Ireland the Department of Agriculture is the drainage authority.

CONTROL OF DISEASES AND PESTS

Animals

Responsibility for the Government's policy on animal health matters in Great Britain rests with the agricultural ministers. Professional advice and action on the control of animal disease and the welfare of farm livestock in accordance with the Government's policy is the responsibility of the Veterinary Service of the Agricultural Development and Advisory Service. The day-to-day work of treating animal disease is the responsibility of the practising veterinary surgeon.

The Veterinary Service has extensive laboratory facilities. In England and Wales 24 investigation centres perform work requiring specialist knowledge and give advice on disease problems to private practitioners. In Scotland a similar service is provided by the investigation centres of the three regional agricultural colleges.

Strict veterinary controls are exercised on the import of all 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 into Great Britain.

Foot-and-mouth disease and swine fever have been eradicated by a slaughter policy. Swine vesicular disease is combated by a slaughter policy backed up by control of pig movements and of swill feeding. Rigorous measures are being taken to eradicate sheep scab. Enzootic bovine leukosis was found for the first time in 1978; a survey was carried out to determine the extent of the problem, and a voluntary scheme for the establishment of enzootic bovine leukosis-free herds in Great Britain is under consideration. The incidence of bovine tuberculosis is now very low; cattle (except for certain categories) are tested at regular intervals and reactors to the test are slaughtered; compensation is paid to the owners. Voluntary schemes for the eradication of brucellosis have been in operation since 1967; compulsory eradication on an area basis began in 1972. By January 1979, 88 per cent of all herds in Great Britain were declared free of the disease, many areas being completely free. Newcastle disease (fowl pest) has declined to a low level due to the operation of a vaccination policy.

As a result of these measures, Great Britain is free from many serious animal diseases. Non-farm animals are subject to import licence and six months' quarantine as a precaution against the introduction of rabies, and there are severe penalties for those breaking the law. There has been no case of rabies in the Britsh Isles since 1970.

In Northern Ireland the legislation on the control of diseases is administered by the Department of Agriculture, which has its own veterinary service supplemented by a central veterinary laboratory. The Department's strict animal health control policies and the geographical situation have kept Northern Ireland free from the major animal diseases, including rabies and swine vesicular disease. A brucellosis eradication scheme has been successfully carried out and in 1971 Northern Ireland was declared brucellosis-free.

Plants

The plant health services, operated by the agricultural departments, are responsible for statutory controls designed to limit the spread of plant pests and diseases present in Britain and prevent the introduction of new ones from abroad. They

also issue the health certificates required by other countries to accompany plant material imported from Britain. Certification schemes are operated to encourage the development of healthy, vigorous and true-to-type planting stocks. The laboratory at Harpenden, Hertfordshire, and the Agricultural Scientific Services Station, East Craigs, Edinburgh, provide advice on which these controls and schemes are based.

Pests and Storage The central laboratories of the Agricultural Advisory and Development Service's Agricultural Science Service (at Slough in Berkshire, Tolworth in Greater London, and Worplesdon in Surrey) and the Agricultural Scientific Services of the Department of Agriculture and Fisheries for Scotland undertake research and provide advice on harmful mammals and birds and on insects, mites and moulds associated with grain and other stored food products.

Agricultural Chemicals

Safeguards against the dangers which could arise from uncontrolled use of pesticides have been devised and are operating successfully. Products must be cleared for safety under the Pesticides Safety Precautions Scheme (see p 178), and may be submitted through the Agricultural Chemicals Approval Scheme for efficacy approval.

Veterinary Medicinal Products

The Medicines Act 1968 provides through a system of licensing for the control of the manufacture, sale and supply of veterinary medicinal products (including those used in animal feedingstuffs). The agricultural ministers issue licences on the advice of expert committees. (For other provisions of the Act see p 131.)

RESEARCH AND DEVELOPMENT, EDUCATION AND TRAINING Research and Development

An outline of the organisation of British agricultural research and development, including that carried out by the Agricultural Research Council and the universities, is given in chapter 20. The Ministry of Agriculture, Fisheries and Food carries out research and development at its own laboratories and on the 22 experimental husbandry farms and horticulture stations operated by the Agricultural Development and Advisory Service, and commissions work from the Agricultural Research Council, the Natural Environment Research Council and outside research organisations. The Department of Agriculture and Fisheries for Scotland carries out research and development at its own laboratories, and commissions the work of eight agricultural research institutes. The Department also commissions research and development work from the three colleges which provide the advisory service (see p 285). In England and Wales, research in agricultural economics is undertaken by 12 university departments of agricultural economics. In Scotland, agricultural economists are on the staff of the three regional agricultural colleges and the Department of Agriculture and Fisheries. At the University of Reading, the Centre for Agricultural Strategy provides an assessment of British agriculture with a view to developing long-term strategies.

In Northern Ireland, the Department of Agriculture has nine research divisions.

Education and Training

Fifteen British universities provide degree and postgraduate courses in agriculture or agricultural sciences. The National College of Agricultural Engineering at Silsoe offers degree and postgraduate courses. Sandwich courses leading to a Higher National Diploma are available at eight agricultural colleges in England and Wales and there are nearly 50 local authority and other agricultural colleges providing full-time courses on different aspects of agriculture, horticulture, forestry and farm management. A centre for European agricultural studies is based at London University's Wye College at Ashford, Kent.

In Scotland the three agricultural colleges which have the advisory and development functions are also teaching establishments. They mainly provide sandwich courses leading to Higher and Ordinary National Diplomas, post-diploma courses and certain short courses. In Northern Ireland degree courses in agriculture and food science are provided at Queen's University, Belfast. Courses below this level are provided at three residential colleges run by the Department of Agriculture.

Local education authorities throughout Britain provide full-time and parttime courses for farmers, farm workers and horticulturists, as well as an advisory

service for domestic producers.

In Great Britain the Agricultural Training Board provides a training advisory service, organises training courses and pays training grants. In Northern Ireland training courses are organised by the Department of Agriculture.

FISHERIES

The industry catches demersal fish (caught on or near the bottom of the sea), pelagic fish (caught nearer the surface) and shellfish. Demersal fish accounts for about 46 per cent (by weight) of the total catch; the catches of pelagic fish comprise over 47 per cent and the shellfish 7 per cent of the catch. The principal demersal fish (in terms of value) are cod, haddock, plaice and whiting. The most important pelagic species is mackerel. Shellfish include crustacea (such as lobsters and crabs) and molluscs (such as mussels and oysters).

Fishery Limits

Since 1977 Britain's fishery limits have extended to 200 miles (or, where the distance between two countries' coasts is less than 400 miles, up to the line half-way between the two countries). This followed the European Community member States' agreement to adopt such limits jointly, after similar extensions, with resulting restrictions on Community vessels, had been announced by many maritime nations.

Community countries, and non-Community countries having temporary agreements with the Community, have the right to fish up to Britain's 12-mile limit. Restrictions are placed on fishing by Community countries in certain areas of Britain's 6 to 12-mile zone, and the only non-Community country which may fish in this zone is Norway, which has very restricted rights in some areas off the Scottish coast. No foreign vessels are permitted to fish within Britain's 6-mile limit.

Common Fisheries Policy External Regime The Community has negotiated exchanges of fishing rights within member States' waters for reciprocal rights within the waters of several non-member countries; for 1979, reciprocal quotas have been agreed with Norway and the Faroe Islands, whose waters are of the greatest interest to British fishermen, and also with Sweden. Quotas have also been granted to the Community by Canada and the United States, and by the Community to Spain. Framework agreements, intended to establish the general lines of fishery relations between the Community and non-Community countries, have been negotiated, but not finally concluded, with Canada, the Faroes, Finland, Norway, Senegal, Spain and Sweden, and an agreement has been concluded with the United States. British fishermen have been excluded from the traditionally important grounds off Iceland; reciprocal fishing with the Soviet Union and fishing by certain other East European States in member States' waters have been terminated.

Internal Regime

With the extension of fishery limits to 200 miles, it will be necessary to revise the Community fisheries' internal regime to allow for controlled Community fishing in the greatly extended area. Britain has a particularly strong interest in such control, since about 60 per cent of the total catch within the new limits 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. As a result, the British fishing industry is looking for adequate access preferences and a substantial share of the quotas proposed for the fish stocks around Britain's coasts.

There is also a need for effective and enforceable conservation measures within the waters of member States. The Government is continuing to work towards a common fisheries policy which meets these needs. However, in the absence of an agreed Community policy, the Government has introduced a number of conservation measures where these have proved necessary. Rules which would set common standards of enforcement and give member States responsibility for operating them in their own waters would form another essential part of a comprehensive revised internal regime.

Marketing and Structural Policy The Community's fishing industry is also subject to a common organisation of the market and to a common structural policy which has not yet been fully developed. The common organisation of the market aims at assisting in the adaptation of supplies to marketing requirements, while ensuring, as far as possible, a reasonable return to producers, by means of the establishment of a common grading and price system, and common rules on competition. Provision is also made for the protection of the Community market against disruption by imports from non-member countries. The responsibility for market organisation is placed largely in the hands of the industry itself through producers' organisations. Intra-Community fish trade is free and there is a common external tariff.

The common structural policy aims at promoting the rational development of the fishing industry and at ensuring an equitable standard of living for those dependent on fishing. In pursuit of these aims it envisages common measures for financing structural improvement, but to date little progress has been made towards agreeing these measures.

Fishing Ports

The principal fishing ports in England and Wales are Hull, Grimsby, Fleetwood, North Shields, Lowestoft, Plymouth, Brixham, Falmouth, Newlyn and Milford Haven. In Scotland the chief ports are Aberdeen, Peterhead, Fraserburgh, Lerwick, Ullapool, Mallaig, Ayr and Stornoway. In Northern Ireland the main fishing ports are Kilkeel, Portavogie and Ardglass.

Employment

In the British fishing industry in 1978 there were some 16,400 fishermen in regular employment and about 5,700 occasionally employed; about 48 per cent of the former and 24 per cent of the latter were based on Scottish ports. In Northern Ireland there are about 540 full-time fishermen and about 285 part-time. It is estimated that for every fisherman there are between three and five jobs in associated trades.

Fishing is an important source of employment and income in certain areas, in many of which unemployment is well above the national average. Maintenance of fishing opportunities, through conservation of stocks and through the preservation of British fishermen's access to their traditional grounds, is thus vital to Britain.

The Fishing Fleet

At the end of 1978 the deep-sea fleet comprised some 300 vessels; of these, distant-water trawlers, which operate mainly from Hull and Grimsby, numbered

78. They are 140 feet (42·7 metres) and over in length and are of two types, the older, traditional side trawlers, which can only preserve their catches on ice, and modern stern freezer/factory trawlers (34 in number). Traditionally all have fished in the north-east Arctic and still do within the constraints of quota agreements which have reduced activity. Some side trawlers have been diverted to home waters hitherto fished by smaller vessels. Stern trawlers also fish the north-east Arctic but have recently been successful in mackerel fishing, mainly off south-west England. Middle-water trawlers between 110 and 140 feet in length (33·5-42·7 metres) have also had to diversify their activity into northern North Sea grounds consequent upon reduced quota allocations off the Faroes. The inshore group consists of some 2,000 vessels of over 40 feet (12·2 metres) and about 4,700 smaller vessels.

Supplies

In 1978, landings of all types of fish (excluding salmon and trout) by British fishing vessels totalled 957,000 tonnes valued at £255 million. Cod accounted for 30 per cent of the total value of demersal and pelagic fish landed by British vessels; haddock (18 per cent), mackerel (14 per cent), and plaice (7 per cent) were the other most important sources of earnings to the industry.

Increasing attention is being paid to fish and shellfish farming and the farming

of some species of sea fish is being developed.

Experiments are being carried out in the catching and processing, for human consumption and fish meal (for animal feed), of previously under-exploited species of fish (for example, blue whiting and horse mackerel) of which large stocks are known to exist in the sea adjacent to the British Isles.

Home production of fish meal in 1978 was about 65,800 tonnes. Fish oil

production was about 18,200 tonnes.

Imports of all fresh, frozen and cured fish and shellfish totalled 290,000 tonnes valued at £154 million. Imports of fish meal amounted to 192,000 tonnes, worth £47 million, and those of fish oils to 217,000 tonnes, worth £53 million. Exports and re-exports of fish and fish products amounted to 358,000 tonnes and were valued at just under £144 million.

Total fish consumption was running at a level of approximately 13.5 lb (6 kg) a head in 1978. Home production provided about 75 per cent of supplies.

Freshwater Fisheries

The most valuable freshwater fish are salmon and sea-trout. Sea fishing for salmon is prohibited in a wide area around the British Isles outside the 12-mile zone. Within the zone, drift netting and certain other methods are prohibited off the coast of Scotland but are permitted under licence off England, Wales and Northern Ireland. In Scotland, salmon fishing is a private right. In England and Wales, water authority licences are required for coastal and estuary netting. The landed value of the salmon catch in 1978 was approximately £1,640,000 in England and Wales, about £4,500,000 in Scotland, and some £520,000 in Northern Ireland. Eels worth about £1,220,000 were caught in Northern Ireland.

Distribution System

Fish is distributed through wholesalers located at the ports, who buy fish at quayside auctions and sell to inland wholesalers or retailers, and through processors who also buy at auctions and sometimes under contract arrangements with the owners of fishing vessels, particularly for fish frozen at sea.

Promotion and Regulation of the Industry

The government departments mainly responsible for the administration of legislation concerning the fishing industry and for fisheries research are the Ministry of Agriculture, Fisheries and Food, the Department of Agriculture and Fisheries for Scotland, the Welsh Office Agriculture Department and the

Department of Agriculture for Northern Ireland. The safety and welfare of crews of fishing vessels and other matters common to shipping generally are provided for under the Merchant Shipping Acts administered by the Department of Trade.

The Herring Industry Board was set up to reorganise, develop and regulate the herring industry. In England, Scotland and Wales, the Board administers the government grant and loan schemes which provide for assistance towards the purchase of new fishing vessels and the improvement of existing vessels.

The function of the White Fish Authority is to reorganise, develop and regulate the British white fish industry in all its aspects from catchers to retailers, and to keep under review matters related to the industry. In England, Scotland and Wales the Authority administers grant and loan schemes providing financial assistance to the industry for the purchase of new fishing vessels, vessel improvements, provision and improvement of processing plants, cold stores and ice plants, and towards the formation of fishermen's co-operatives. Other duties include research and development, training, dissemination of information, publicity and promotion, and the provision of consultancy services, including services to developing countries.

The Herring Industry Board and the White Fish Authority jointly operate a

unified administration.

Northern Ireland

The Department of Agriculture for Northern Ireland operates grant and loan schemes for the purchasing of new fishing vessels and engines and the improvement of existing vessels, and for processors, co-operatives and fish farmers.

FORESTRY

The estimated total area of woodland in Britain is 2.061 million hectares (5.092 million acres), or about 8.5 per cent of the total land area; 41 per cent of the area is in England, 45 per cent in Scotland, 11 per cent in Wales and the remainder in Northern Ireland.

The area of productive forest in Great Britain managed by the Forestry Commission, at 856,000 hectares (2·11 million acres), constitutes 50 per cent of this category. The annual rate of productive forest expansion is currently 14,000 hectares (35,000 acres) by the Commission mainly in Scotland, and some 6,600 hectares (16,300 acres) by private woodland owners. The Commission's programme includes considerable planting in upland areas, and consists mainly of conifers because of the difficult site conditions encountered.

Total employment in state and private forests in Great Britain was estimated

at 20,700 in 1978.

Except for the periods of the two world wars, when felling was abnormally heavy, home woodlands have until recent years made only a limited contribution to the nation's consumption of wood and wood products, as less than half of the Commission's woodlands are yet in production. Britain imports 92 per cent of its needs, the total import cost of wood and wood products, including pulp and paper, being over £2,000 million in 1978.

The Forestry Commission and Forestry Policy The Forestry Commission is the national forestry authority charged with promoting the interests of forestry, the development of afforestation and the production and supply of timber in Great Britain. The Commissioners comply with directions given by the forestry ministers, who are the Minister of Agriculture, Fisherics and Food and the Secretaries of State for Scotland and Wales. Northern Ireland has its own separate organisation (see p 292). In pursuing its

main objective, timber production, Great Britain's forestry policy also takes into account amenity, environmental and employment criteria. Thus the Commission's activities include wildlife conservation, the landscaping of plantations, and the provision of facilities for recreation. The Commission has also encouraged the setting up of some 20 major new timber-using industries.

Production of timber from the Commission's woodlands amounted to 2.02

million cubic metres in 1978-79.

Finance

The Forestry Commission is financed partly by the State and partly by receipts from sales of produce, rentals and other sources. Income from timber is expected to increase as production doubles in the next 20 years, probably leading to a reduction in state subsidy.

Private Forestry Privately owned woods comprise 50 per cent of the total forest area in Great Britain. About half of the private woodland area is in ownerships of under 80 hectares (198 acres) in extent.

The effective management of private woodlands is encouraged by the provision of grants administered by the Forestry Commission, in return for which owners accept a continuing obligation to manage their woodlands in accordance with sound forestry practice.

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.

The Furniture and Timber Industry Training Board is concerned with training for private-sector employees in the home timber trade.

Forestry research is carried out by the Forestry Commission, universities and other institutions (see p 382).

Forestry in Northern Ireland The Department of Agriculture is the forest authority for Northern Ireland. The Department may acquire land for afforestation and give financial and technical assistance for private planting. It has introduced measures to control felling, fires near plantations and damage by certain animals. Financial provision is made annually by Parliament.

The state forest area has grown steadily since the end of the second world war. By 1979, 57,300 hectares (142,000 acres) of plantable land had been acquired, of which 52,200 hectares (129,000 acres) were planted. There were about 12,000 hectares (30,000 acres) of privately owned forest.

Some 1,300 people worked in state and private forests in 1979; of these, about 700 were employed under the Urban and Rural Improvement Campaign for developing recreational facilities, mostly in state forests.

16 Transport and Communications

The application of technological developments to Britain's transport and communications network is helping to make travel quicker and more convenient. 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 increased use of containers and other modern methods in shipping, the use by airlines of larger or speedier aircraft (such as the Concorde supersonic aircraft) and the expansion of facilities at many airports.

Transport and communications contribute 8 per cent of gross national product and are responsible for a rather higher proportion of gross domestic fixed capital formation. These activities employed some 1.4 million people in Great Britain in December 1978 and accounted for 6 per cent of the employed

Great Britain in December 1978 and accounted for 6 per cent of the employed labour force. Of these, 420,800 employees were engaged in road passenger transport and road haulage, 208,300 in railways, 412,500 in postal services and telecommunications, 146,200 in sea transport, port and inland water transport, 87,700 in air transport and 156,700 in other transport services and storage.

INLAND TRANSPORT

Passenger and freight traffic is carried mainly by road. At the end of 1978 there were 17.8 million vehicles licensed for use on the roads of Great Britain. Of these 14.1 million were motor cars, 1.7 million road goods vehicles, 1.2 million motor cycles, scooters and mopeds, and 109,000 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 travel. Road haulage has a dominant position in the movement of inland freight, accounting for 85 per cent of tonnage moved in 1978 and for some three-quarters of tonne-kilometres. Railways and, to a lesser extent, pipelines and inland waterways are important in carrying certain types of freight, particularly bulk goods. The railways and much of the bus industry are publicly owned, but road haulage is largely in the hands of private enterprise.

Transport policy rests on the fundamental aims of helping economic growth and higher national prosperity, and ensuring a reasonable level of personal mobility, while improving safety, particularly on the roads, minimising damage

to the environment and taking account of energy considerations.

Large-scale investment in improving the network of trunk roads (which form a basic network linking major centres of population, industrial areas, and ports) has been undertaken since the mid-1960s. Of a total road network of 223,633 miles (359,903 kilometres) in Britain in April 1978, some 1,568 miles (2,523 kilometres) were motorways (roads specially designed for high speed traffic).

ROADS

These and other trunk road improvements have helped to make travelling easier and faster, particularly over long distances and between cities. Congestion on inter-urban roads has been reduced or eliminated and many towns and villages have been relieved of heavy through traffic. The programme for constructing new trunk roads is nearing completion and accordingly annual investment in new roads is being reduced. Motorways and other major roads are shown on the map at the end of the book.

TABLE 22: Road Mileage

	Public roads ^a	Trunk roads ^a	Trunk motorways ^b		
	Toaus	(including motorways)	in use ^c	under construction	
England	159,314	6,224	1,297	110	
Scotland	30,444	1,953	119	15	
Wales	19,361	1,062	59	16	
Northern Ireland	14,514	398	67	2	
Britain	223,633	9,637	1,542	143	

Sources: Department of Transport, Northern Ireland Department of the Environment, Scottish Development Department and Welsh Office.

In England a more selective approach to new schemes has been adopted, and the emphasis has shifted from building a predetermined strategic network to providing roads of a standard appropriate to the local need. Schemes are now designed to solve specific problems by, for example, constructing by-passes to relieve traffic congestion and environmental stress, or new sections of road to replace dangerous or inadequate stretches. Some completely new roads, such as the M25 London orbital route and certain routes to serve industry and the ports, are still needed but, in general, work is being concentrated on improving existing through routes. In Wales the priorities are to complete the motorway across south Wales, reconstruct the coast road in north Wales and improve roads which are important for industrial redevelopment. The main objectives of the programme in Scotland are to complete the remaining links in the motorway/dual carriageway network in central Scotland, to continue improving roads which are important for North Sea oil-related activities and to construct by-passes to relieve traffic congestion and environmental stress. In Northern Ireland the emphasis is on building new links to the motorway network, constructing more by-passes, and improving roads in the Belfast area and other urban areas. Priority for new roads in urban areas of Great Britain is being given to those designed to meet the needs of industry and commerce, serve new industrial or housing estates, provide links to the national trunk road network or to complement traffic manage-

Motor vehicle traffic in Great Britain rose in 1978 by 4·1 per cent to a record 274,184 million vehicle-kilometres, of which cars and taxis accounted for 80 per cent.

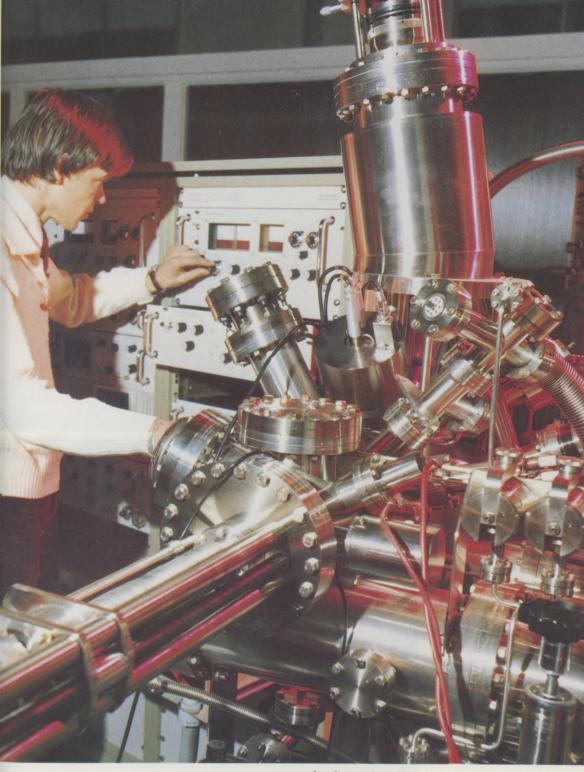
Bridges and Tunnels

The suspension bridges across the Firth of Forth and the Severn Estuary, completed in the mid-1960s, both incorporated major advances in suspension bridge design. Their main spans are among the longest suspension bridge

a As at April 1978.

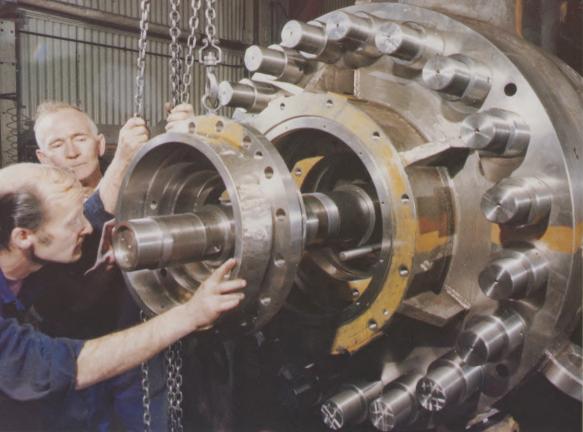
b As at April 1979.

c In addition, there were 58 miles (94 kilometres) of local authority motorway in use in England and 10 miles (16 kilometres) in Scotland.



Industrial Exports

This Scanning Auger Microprobe is one of the most powerful analytical probes commercially available. Nineteen have been sold to Japanese companies and universities for applied semiconductor research.

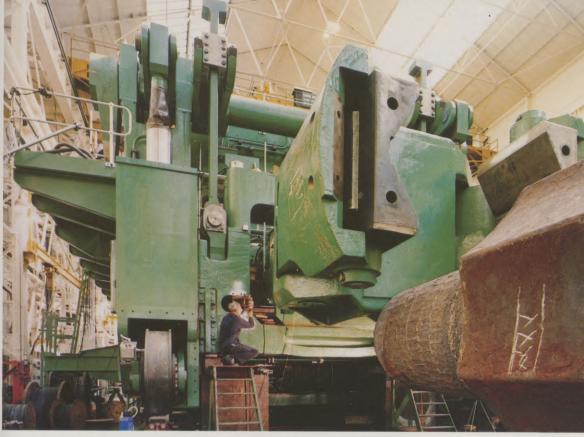


Industrial Exports

Aligning the main shaft of a 17,250-hp barrel casing pump, one of 14 pumps supplied for use in the world's largest oilfield in Saudi Arabia.

Rolling stock being built for the Hong Kong Mass Transit Railway Company. Orders for 360 railcars worth more than £120 million have been received.

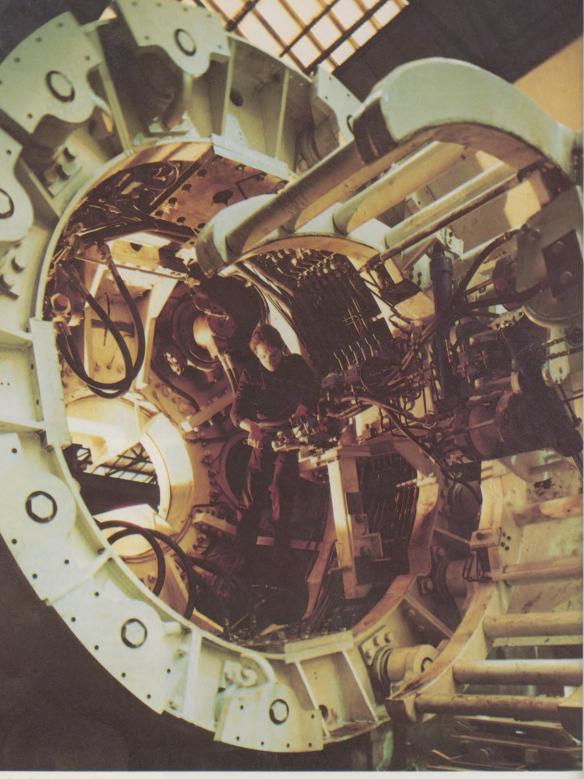






The first of three 120tonne-capacity forging manipulators ordered by the USSR. It weighs 820 tonnes and has the most advanced electronic control system in the world for equipment of this size.

A compressor casing of a Frame 9 87-MW gas turbine. This is one of five turbines of this type for the DUBAL aluminium smelter power station in Dubai. Eight Frame 5 25-MW turbines have also been ordered.



Industrial Exports

A hydraulically powered full-face tunnelling machine for use in the installation of a major sewer system on the Italian island of Ischia. spans, but the bridge being built across the river Humber and due to be opened in 1980 will have a span of 1,410 metres (4,626 feet), longer than any existing bridge span in the world.

A few road tunnels have been built to cross major estuaries, notably the Mersey, the Thames, the Tyne and the Clyde. A second crossing of the Thames at Dartford (Kent) is being built and is due to be completed in April 1980.

Administration

Responsibility for trunk motorways and other trunk roads in Great Britain rests in England with the Minister of Transport, in Scotland with the 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. Work on major trunk road and motorway schemes in England is controlled by regional road construction units which include staff from the Department of Transport and county councils. The highway authority for non-trunk roads in England and Wales is, in general, the county council in whose area the roads lie, and in Scotland the regional or islands council. The Government is in the process of transferring to local authorities the responsibility for those trunk roads which have lost their importance as major through routes following the completion of nearby motorways.

In Northern Ireland the Northern Ireland Department of the Environment is responsible for public roads and bears the cost of maintenance and construction.

Road Safety

Great Britain's accident record is considerably better than that of most other countries even though it has one of the highest densities of road traffic in the world. In 1978 6,900 people were killed on the roads, about 83,000 seriously injured and 261,000 slightly injured. A comprehensive framework of legislation embodied in the Road Traffic Acts and summarised in the Highway Code (which sets out the standard of conduct for road users) has contributed to the decline in casualty rates. Other factors have been modern roads, designed for present-day traffic and segregating vehicles from pedestrians, and campaigns conducted nationally by government departments and the Royal Society for the Prevention of Accidents and locally by local authorities to persuade people to take greater care on the roads. In recent years major publicity campaigns have been undertaken to increase the wearing of seat belts, to reduce casualties to child pedestrians and to riders of motor cycles, and to reduce the incidence of drinking and driving.

Comprehensive regulations govern the design of vehicles, their use on the roads, and the maintenance of their mechanical condition. On 1 August 1978 a 'type approval' scheme came into operation whereby the use of cars manufactured after 1 October 1977 is not permitted unless they are of a type that has been certified as meeting the required standards. In Great Britain 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 seven or more years old are tested at official vehicle inspection centres.) Heavy goods vehicles are tested annually at government test stations. Public service vehicles must be specially approved before being licensed to carry passengers, and are tested at regular intervals. Any vehicle may be stopped on the road at any time by the police and examined.

Minimum ages are laid down for driving: 16 for driving invalid carriages and mopeds; 17 for cars and other passenger vehicles with nine or fewer seats (including that of the driver), motorcycles and goods vehicles not over 3.5 tonnes maximum permissible 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 are required to pass the

driving test before being granted a full licence to drive. Until they pass the test they must hold a 'provisional' licence, display 'L' (learner) plates on their vehicle and be accompanied while driving (with certain exceptions) by a qualified driver. In Northern Ireland a driver having passed the test is required to display an 'R' (restricted) plate for a one-year period during which he must not exceed 45 mph (72 km/h). There are schemes for special licensing and testing of drivers of heavy goods vehicles and public service vehicles.

Speed limits also contribute to road safety. There are national limits of 70 mph (113 km/h) on motorways and other dual carriageway roads, and 60 mph (97 km/h) on single carriageway roads, while in built-up areas a general limit of 30 mph (48 km/h) applies. To meet local needs the urban limit can be raised and the other limits lowered on specific stretches of road. A wide range of other measures directed primarily towards road safety include legislation and publicity to discourage drinking and driving (including a maximum permissible blood alcohol level for drivers of 80 milligrams of alcohol per 100 millilitres of blood), computer-controlled warning signals on most busy motorways to inform motorists of advisory speed limits in adverse conditions and of lane closures, and regulations (now being revised) governing the carriage of dangerous goods by road.

Traffic in Towns

Traffic in the centres of cities and towns in Britain is increasingly being managed so as to minimise congestion and its environmental effects, and to improve road safety. Local authorities have powers to introduce a range of measures which, when combined, form comprehensive traffic management schemes covering a particular area. Such schemes may include one-way systems, streets reserved for pedestrians, bus priority measures, parking controls and limited road construction.

Parking control is an important element of comprehensive traffic management. In most town centres parking is restricted and waiting limits apply. Major city centres often have controlled parking zones, where payment is required for on-street parking.

Several cities have new shopping precincts, some of them enclosed, which are specially designed for pedestrians and from which motor vehicles are excluded. In the centres of many towns, areas containing several streets have been wholly or partly converted to pedestrian use, and this has resulted in a more attractive environment.

Urban traffic control systems, which link traffic signals and some traffic signs to a central computer, represent an important addition to local authorities' ability to control traffic. They are confined to large towns and cities, but they are being adapted and extended for use in smaller towns. The Department of Transport is sponsoring two of the new systems at Torbay (which began operating in 1979) and Hull (which is due to become operational later in 1979).

Research

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 (TRRL), jointly responsible to the Department of Transport and the Department of the Environment. The TRRL provides technical and scientific advice and information to help in formulating, developing and implementing the Government's transport policy. It employs nearly 1,000 people of whom about half are scientists and engineers.

ROAD HAULAGE Road haulage traffic in terms of tonne-kilometres has increased substantially and reached a record 99,100 million tonne-kilometres in 1978. Actual goods vehicle traffic has, however, grown much less because of a move towards larger and more efficient vehicles carrying heavier loads-over three-fifths of the traffic, in terms of tonne-kilometres, is carried in vehicles of over 28 tonnes gross laden weight. Much of the traffic is moved over short distances, with about three-fifths of the tonnage being carried on hauls of 50 kilometres (31 miles) or less. The growth in road haulage has been concentrated on long-distance traffic, particularly international road haulage, and British hauliers are increasingly running goods vehicles to the rest of Europe and as far afield as North and West Africa and the Middle East. The Minister of Transport has set up an independent inquiry to consider the growth in road haulage, especially its impact on people and the environment, and the best way of ensuring that future developments meet the public interest.

Structure of the Industry

Road haulage is predominantly an industry of small businesses. Many of the 124,700 holders of an operator's licence in 1978 had only one vehicle and the average size of a vehicle fleet is only about four. Most of the industry is privately owned, but the biggest operator in Great Britain is the publicly owned National Freight Corporation (NFC). Turnover of the NFC's freight transport subsidiaries amounted to £393 million in 1978 and at the end of 1978 it owned or leased 19,100 vehicles, 12,800 trailers and 5,200 containers and demountable bodies. The Government is preparing legislation to allow a substantial private sector stake in the NFC. Public haulage (private road hauliers and the NFC carrying other firms' goods) accounts for 66 per cent of freight carried in Great Britain in terms of tonne-kilometres. In Northern Ireland the biggest operator is Northern Ireland Carriers Ltd, owned jointly by the Northern Ireland Transport Holding Company and the NFC.

Licensing and Other Controls

Those operating goods vehicles of 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, sub-divided into 'national only' and 'international', for hauliers operating for hire or reward. Proof of professional competence is required to obtain a standard licence.

Regulations control the emission of smoke and noise by lorries and the carriage of dangerous goods by road. There are limits on the hours worked by drivers of goods vehicles. The Government has proposed that the European Community regulation requiring the use of the tachograph (a device which automatically records a vehicle's speed and distance covered, driving time and stopping periods) in most goods vehicles over 3.5 tonnes gross weight, should be phased in over a two-year transitional period with full implementation by the end of 1981. International road haulage is governed mainly by bilateral agreements, which are in force with 23 other European countries and allow British road hauliers to carry goods to or through these countries. Permits are required in some cases and with special exceptions these are limited to a quota negotiated annually.

PASSENGER TRANSPORT

Bus and railway services in Britain are provided mainly by publicly owned operators, coach and air services partly by publicly owned bodies, and taxis and hire cars almost entirely by privately owned businesses. Buses and coaches account for about 11 per cent of passenger mileage within Great Britain, rail for 7 per cent and air 0.5 per cent.

Metropolitan Passenger Transport

In the metropolitan countics of Greater Manchester, Merseyside, West Midlands, Tyne and Wear, South Yorkshire and West Yorkshire, the metropolitan county council, acting as the passenger transport authority (PTA), is responsible

for local transport policy as a whole, and appoints a professional passenger transport executive (PTE) to be responsible for day-to-day management and operations. In Scotland the Strathclyde Regional Council is the PTA for Greater Glasgow. The PTEs operate bus services in their areas and are responsible for reaching agreements with other passenger transport operators in their areas, including the British Railways Board, to provide such services as are considered necessary by the PTAs. In London the bus and Underground rail services are operated by the London Transport Executive which is responsible to the Greater London Council.

Buses and Coaches

In the public sector in Great Britain 22,000 vehicles are operated by the National Bus Company and the Scottish Transport Group, 11,000 by the seven PTEs, 6,600 by the London Transport Executive and 6,000 by other local authority undertakings. There are some 5,600 privately owned undertakings (of which the majority have fewer than five vehicles) comprising about 28,600 vehicles; only a small proportion of these operators are concerned with scheduled bus services. Double-deck buses are an important feature of urban passenger transport in Britain and there are some 26,700 in operation. In addition, there are 47,000 single-deck buses and coaches, and nearly 100 trams (at Blackpool and Llandudno which have Britain's only remaining tramway systems).

Improvements to bus services have been undertaken in many areas to try to halt the continuing decline in their use due primarily to the growth in ownership of private cars. These include express and/or limited-stop bus services, 'park and ride' bus services between suburban car parks and town centres, and 'postbus' services (Post Office minibuses carrying mail and passengers) in rural areas. Bus operators have taken action to contain costs and to improve productivity by introducing larger buses, increasing the proportion of bus services operated by one man and reducing or rationalising services. Many uneconomic bus services have had to be withdrawn, particularly in the more remote rural areas.

Publicly Owned Operators

The National Bus Company operates in England and Wales through locally based subsidiaries, such as the Western National Omnibus Company, Ribble Motor Services Ltd and Crosville Motor Services Ltd, and has a network of long-distance coach services. At the end of 1978 it owned some 17,700 vehicles and employed 64,300 people. In 1978 passenger journeys on the Company's buses amounted to 1,787 million, gross revenue was £437 million and the Company had a net surplus of £17.7 million.

The Scottish Transport Group (with about 3,900 vehicles) operates the main bus services in Scotland outside the major cities and also runs ferries to the islands off the west coast of Scotland.

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 400 and 1,000 vehicles respectively.

Licensing

There are 11 traffic areas in Great Britain each under the jurisdiction of an independent body of three traffic commissioners. The commissioners are responsible for ensuring the fitness of vehicles used to carry passengers for hire or reward, and for licensing public road passenger services. Legislation is being prepared to revise the bus licensing system in order to make it easier for new bus services to be introduced and to facilitate car-sharing.

Taxis

There are about 37,000 taxicabs in Great Britain, mainly in urban areas, especially London where some 12,500 taxicabs that ply for hire in the streets are privately operated by companies or owner-drivers and are licensed annually by the Metropolitan Police. There are about 16,700 licensed cab drivers in London. Numerous car-hire firms are also in operation. Elsewhere taxis are licensed by local authorities. In Northern Ireland all taxis are licensed by the Northern Ireland Department of the Environment.

Urban Railways There are underground railway services in three British cities: London, Glasgow and Liverpool. London Transport has 4,223 railway cars and serves 278 stations, while its trains operate over 257 miles (414 kilometres) of railway, of which about 100 miles (161 kilometres) are underground.

Urban rail projects are proceeding in several areas. A light rapid transit system under construction on Tyneside involves the electrification of two suburban railway lines, linked by new tunnels under Newcastle upon Tyne and Gateshead, and a new bridge over the Tyne. The first section should be open in 1080 and the remainder of the system, which will eventually be 34 miles (55 kilometres) long with over 40 stations, should be brought into operation during the 1980s. The project is the largest provincial urban transport scheme to have been undertaken in Britain in the twentieth century. In Glasgow, as part of the 'Trans-Clyde' integrated public transport system, the Underground has been completely modernised and a new rail link, the Argyle line, has been built; both will be opened in November 1979. Two recent additions to the London Underground were the extension of the Piccadilly Line to Heathrow Airport in December 1977, enabling passengers to travel directly between Heathrow and central London by the Underground; and the opening in April 1979 of the first section of the Jubilee line, linking north-west and central London.

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 1963 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 200 miles (322 kilometres) of track.

A high rate of progress in railway development has been maintained in recent years, notably on the inter-city passenger network where the introduction of faster trains, together with the raising of standards of track and signalling, has brought significant reductions in journey time on many routes. Inter-city rail services in Great Britain are among the best in the world in speed, frequency and comfort. Two major projects, the High Speed Train (HST) and the Advanced Passenger Train (APT), have been designed to raise speeds using existing track. A continuing important role is envisaged for the railways in Britain's transport system, especially in the provision of long-distance passenger transport, commuter services and essential local services, and in the movement of bulk freight.

Operations

British Rail's operating statistics are shown in Table 23. In 1978 the Board's turnover, including financial support and income from other activities but excluding internal transactions, was $f_{1,070}$ million. It achieved a trading surplus of £58.3 million and a net surplus of £6.4 million. Financial support for British Rail includes compensation for the financial burden of operating the rail passenger system as a public service and grants for level crossings. In 1978 the British Railways Board received £434 million from the Government and the PTEs in respect of the public service obligation. At the end of 1978 the British Railways Board employed 243,300 people, of whom 182,200 were engaged on the railways.

TABLE 23: Railway Statistics

	1973	1976	1977	1978
Passenger journeys (million)	728	701	702	724
Passenger-miles (million)	18,500	17,700	18,200	19,100
Freight train traffic			,	,
(million tonnes)	197	176	170	171
Freight train traffic				
(million net tonne-miles)	na	12,794	12,501	12,416
Assets (at end of year):				,
Locomotives	3,972	3,689	3,610	3,580
HST power cars and passenger carriages	_	193	378	530
APT power cars and passenger carriages		_		8
Other coaching vehicles	23,344	22,222	21,580	21,031
Freight vehicles	248,682	187,000	166,935	150,371
Stations	2,735	2,865	2,848	2,837
Route open for traffic (miles)	11,326	11,189	11,168	11,123

Source: British Railways Board

na = not available.

Passenger Services

The passenger network (see map, p 301) 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 the south east. British Rail introduced the world's fastest diesel rail service, known as Inter-City 125, in 1976 on the route from London to Bristol and south Wales and a similar service on the London-Edinburgh route in 1978. These services are operated by HSTs, which travel at maximum sustained speeds of 125 mph (201 km/h). In October 1979 HSTs were introduced between London and the west of England. HSTs have been ordered for the route linking Edinburgh, Newcastle upon Tyne, Birmingham and south-west England or south Wales. The first of three pre-production electric APTs, capable of sustained speeds of over 150 mph (241 km/h), is being used for testing purposes and crew training; they will operate on the London-Glasgow route, covering the 400-mile (644-kilometre) journey in about 4 hours 15 minutes.

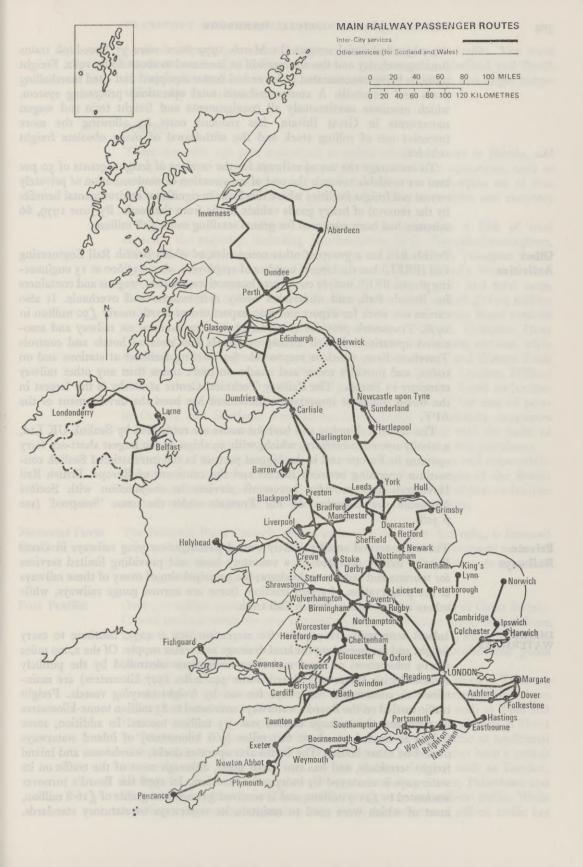
Electrification is continuing, the latest project being an £80 million scheme, to be completed in 1982, to electrify the line between London and Bedford. A review of the case for a programme of further main-line electrification is being conducted by the Government and the British Railways Board, and the results

are expected to be issued in 1980.

Freight

The most important freight commodities handled in 1978 were coal and coke (94 million tonnes) and iron and steel (24.7 million tonnes). British Rail is concentrating on traffic particularly suitable for carriage by rail, especially long-distance and bulk trainload traffic. Trainload traffic accounts for over 80 per cent of freight tonnage, compared with 31 per cent in 1968.

Increased efficiency is being obtained as new types of wagon are introduced with larger capacities and which are capable of higher speeds. A network of 'Speedlink' high-speed freight services using these new wagons is being established between



the major industrial centres. In March 1979 there were 37 Speedlink trains running each day and the number will be increased to about 80 by 1982. Freight traffic is being concentrated at fewer and better equipped and sited marshalling yards and terminals. A computer-based total operations processing system, which monitors continuously all consignments and freight train and wagon movements in Great Britain, has reduced costs by allowing the more intensive use of rolling stock and the withdrawal of many obsolete freight vehicles.

To encourage the use of railways for the carriage of freight, grants of 50 per cent are available towards the cost of construction or modernisation of privately owned rail freight facilities where this leads to significant environmental benefits by the removal of heavy goods vehicle traffic from the roads. By June 1979, 66 schemes had been approved for grants totalling some £18 million.

Other Activities

British Rail has a group of other companies, of which British Rail Engineering Ltd (BREL) has the largest number of employees, about 35,600 at 13 engineering plants. BREL mainly constructs locomotives, coaches, wagons and containers for British Rail, and undertakes heavy maintenance and overhauls. It also carries out work for export and won export orders worth nearly £50 million in 1978. Transmark provides consultancy services overseas on railway and associated operations. British Transport Hotels Ltd runs 29 hotels and controls Travellers-Fare, which is responsible for catering facilities at stations and on trains, and provides meals and snacks on more trains than any other railway company in Europe. The Railway Technical Centre at Derby is the largest in the world; its most important achievement has been the development of the APT.

The Board's shipping and harbour assets are controlled by Sealink UK Ltd, a wholly owned subsidiary, which, with 39 ships, is the largest short-sea ferry operator in Europe and is the biggest partner in the international Sealink consortium operating between Britain and the continent of Europe. British Rail Hovercraft Ltd provides hovercraft services in conjunction with Société Nationale des Chemins de Fer Français under the name 'Seaspeed' (see p 308).

Private Railways

There are several 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 principal aim of many of these railways is the preservation of steam traction. Some are narrow gauge railways, while others run on former British Rail track.

INLAND WATERWAYS

Inland waterways are popular for recreation (see p 423), continue to carry freight and are important for land drainage and water supply. Of the 2,000 miles (3,219 kilometres) of canal and river navigations controlled by the publicly owned British Waterways Board, some 340 miles (547 kilometres) are maintained as commercial waterways for use by freight-carrying vessels. Freight traffic carried on the Board's waterways amounted to 85 million tonne-kilometres in 1978 and the tonnage carried was 5.5 million tonnes. In addition, some freight is carried on about 600 miles (966 kilometres) of inland waterways owned by other bodies. The Board also operates docks, warehouses and inland freight terminals, and has two barge fleets, although most of the traffic on its waterways is conveyed by independent carriers. In 1978 the Board's turnover amounted to £21.9 million, and it received government grants of £16.8 million, most of which were used to maintain its waterways to statutory standards.

Limited improvements are being undertaken for freight traffic. The most important is the £10 million scheme for improving the Sheffield and South Yorkshire Navigation between Doncaster and Rotherham so that larger barges will be able to use this section.

PORTS

There are some 250 port authorities or public wharf operators in Britain, and about 800 other undertakings engaged in various harbour operations, such as stevedoring, towage, warehousing and lighterage. Port authorities are of four main types: nationalised bodies, public trusts, local authorities and statutory

companies.

Ports run by nationalised undertakings represent over a fifth of total capacity, the majority, including Southampton, Hull, Grimsby/Immingham, Newport, Cardiff and Swansea, being owned by the British Transport Docks Board. In 1978 shipping arrivals and departures at the Board's docks totalled 133.1 million net registered tons (including fishing vessels) and total cargo handled was 78.9 million tonnes. The Board's revenue totalled £119.9 million and it achieved a net surplus of £7 million. The British Railways Board controls certain ports, including Fishguard, Folkestone, Holyhead, Parkeston Quay (Harwich) and Stranraer, which are largely used for its shipping services, while the British Waterways Board owns Sharpness (Gloucester) and Weston Point in Runcorn. Major ports controlled by public trusts include London, Milford Haven, Tees and Hartlepool, Medway, Forth and Clyde. Local authorities own about one-third of Britain's ports, including Bristol and the new oil ports in Orkney and Shetland. Port undertakings owned by statutory companies include Manchester and Liverpool. Many private ports deal with the traffic of individual industrial firms in commodities such as china clay and petroleum.

Port authorities, in the main, operate with statutory powers and responsibilities set out in private Acts of Parliament. Most are members of the British Ports Association which aims to further the common interests of port authorities

in their relations with the Government, shipowners and traders.

National Ports
Council

The National Ports Council, set up under the Harbours Act 1964, is financed principally by a levy on port authorities. It advises the Government on major port developments and has various responsibilities in relation to research, training, statistics and charges.

Port Traffic

Over 353 million tonnes of cargo a year pass through the ports of Great Britain. Coastal traffic accounts for over 110 million tonnes consisting largely of petroleum and coal. Of some 153 million tonnes of imports from overseas, about 76 million tonnes consist of petroleum and petroleum products. Manufactured goods form about 26 per cent of exports.

Britain's main ports, in terms of total tonnage handled, are given in Table 24. A noticeable feature has been the effect of offshore oil developments, which have greatly increased the flow through certain North Sea ports, such as Tees and Hartlepool and the Forth ports, resulted in the creation of new oil ports at Flotta in Orkney and Sullom Voe in Shetland, and reduced oil traffic at traditional oil importing terminals such as Milford Haven. There has also been a switch in general cargo traffic from some of the traditional ports, such as London, Liverpool and Manchester, to smaller ports including Dover, Felixstowe and Harwich, partly because of the growth of container and roll-on traffic. While non-fuel traffic has been growing only slowly, container and roll-on traffic has

trebled since 1969 to 39.3 million tonnes in 1978 and now accounts for almost one-third of non-fuel traffic. The leading ports for this type of traffic are Dover, Felixstowe, London, Southampton, Liverpool and Hull.

TABLE 24: Traffic through the Principal Ports of Great Britain^a

million tonnes

1968	1973	1976	1977	4070
		1770	1977	1978
57.3	51.3	44.2	43.1	41.7
29.8	53.4	43.2	37.3	40.0
18.7	26.0	30.5	28.2	30.7
7.9	10.3	13.7	24.9	28.5
11.7	24.4	23.4	22.5	25.1
26.8	27.1	20.7	20.2	20.3
28.2	29.1	26.6	23.7	20.0
na	na	na	9.0	15.6
29.7	27.3	22.2	17.7	14.8
16.0	15.9	14.9	12.8	13.0
	29·8 18·7 7·9 11·7 26·8 28·2 na 29·7	29·8 53·4 18·7 26·0 7·9 10·3 11·7 24·4 26·8 27·1 28·2 29·1 na na 29·7 27·3	29·8 53·4 43·2 18·7 26·0 30·5 7·9 10·3 13·7 11·7 24·4 23·4 26·8 27·1 20·7 28·2 29·1 26·6 na na na 29·7 27·3 22·2	29.8 53.4 43.2 37.3 18.7 26.0 30.5 28.2 7.9 10.3 13.7 24.9 11.7 24.4 23.4 22.5 26.8 27.1 20.7 20.2 28.2 29.1 26.6 23.7 na na 9.0 29.7 27.3 22.2 17.7

Source: National Ports Council

Development

Modernisation of Britain's ports is in progress, primarily to accommodate the increase in the proportion of goods carried in container ships and roll-on vessels, and the changing nature and direction of Britain's trade. However, port investment in real terms has been declining in the 1970s and most current developments are concerned with specific energy or industrial needs or to accommodate specialised container or roll-on services rather than with general purpose port facilities.

Recent major schemes have included a £24 million container terminal, the world's largest terminal for refrigerated containers, at Tilbury (London) covering 64 acres (26 hectares), which received its first ship in September 1978; the £37 million Royal Portbury Dock at Bristol, containing six berths and the largest entrance lock in Britain; the £10 million third phase of the 120-acre (48-hectare) Prince Charles container port at Southampton; and one of the world's biggest hoverports, a £12 million terminal at Dover to handle cross-Channel hovercraft, which became fully operational in July 1978. A terminal for handling iron ore and coal was opened at Hunterston on the Clyde in June 1979. It can accommodate ships of up to 350,000 deadweight tons and is the biggest terminal of its type in Europe. Work on a £20 million development scheme at Belfast, to provide two new terminals (one for roll-on traffic and one for container services) and a deep-water berth, is expected to begin in 1979 and should be completed in 1984.

The first purpose-built terminal for oil from the British sector of the North Sea was completed at Hound Point on the Forth in 1975 and other terminals have been built on the Tees and at Flotta (Orkney), while the £813 million terminal at Sullom Voe (Shetland), which received its first oil in November 1978, is partially open. Sullom Voe is expected to become the largest oil port in Europe in the early 1980s. Of the four jetties in use or under construction, three are, or will be, able to handle oil tankers of up to 300,000 deadweight tons. Other developments related to offshore oil and gas include the construction of supply bases for offshore vessels at a number of ports mostly on the east coast; those include Great Yarmouth, Leith, Dundee, Montrose, Aberdeen, Peterhead, and Lerwick in Shetland.

^a Belfast is the main port in Northern Ireland and it handled 10.7 million tonnes in 1978.

na = not available.

SHIPPING

The British merchant fleet in mid-1978 at 30.9 million gross tons¹ (50.5 million deadweight tons), was the fourth largest in active employment after those of Liberia, Japan and Greece. The oil tanker fleet (14.7 million gross tons) was the third largest and the fleet of fully cellular container ships (1.8 million gross tons) was the largest, accounting for 21 per cent of vessels of this type. The British fleet is one of the most modern in the world; some 36 per cent of the tonnage is less than five years old. In the last ten years some £4,500 million has been spent on new ships and other capital investment by Britain's 200 shipping companies. However, the world recession in shipping has led a number of shipowners to sell or scrap a considerable amount of tonnage, particularly general cargo and bulk carrier vessels, and many other ships have been laid up.

Role of the Government

The Department of Trade is the government department responsible for most matters connected with merchant shipping, including general policy towards the industry and Britain's relations with other governments and international organisations on shipping matters. Under the Merchant Shipping Acts it administers many regulations for marine safety and welfare, and for preventing and cleaning up pollution from ships (see p 179). For instance, it certifies the load-line (or Plimsoll line) that shows that a ship is not overloaded; ensures that standards of safety are observed in ship construction; ensures the provision of adequate life-saving, fire-fighting and radio equipment; and deals with the discipline, professional standards, health and accommodation of seamen. The Acts also contain certain reserve powers for protecting shipping and trading interests from measures adopted or proposed by overseas governments. The Merchant Shipping Act 1979 has brought a number of major changes, including an increase in the Department's powers to make regulations to promote health and safety on ships registered in Britain, and will allow the Government to ratify several important international conventions.

The Department's duties are carried out from marine survey offices and mercantile marine offices located at various ports. In the offices of the Registrar General of Shipping and Seamen, at Cardiff, a record is kept of all ships registered

in Britain and its dependencies.

THE MERCHANT FLEET

In July 1978, 46·7 million deadweight tons of trading vessels of 100 gross tons and over were both owned and registered in Britain. (This figure excludes non-trading vessels, such as fishing vessels, tugs and dredgers, and shipping registered in Britain but owned in other Commonwealth countries, which are included in the figure of 50·5 million deadweight tons.) These ships were usually employed as follows: 27·4 million deadweight tons as tankers; 14·4 million deadweight tons as tramps and 5 million deadweight tons as cargo or passenger liners. Technological change in the merchant fleet is reflected in the current composition. Vessels are becoming obsolete over a shorter period and as they do so are being replaced by larger ships, incorporating labour-saving devices.

Lloyd's Register of Shipping surveys and classifies ships with particular

regard to their safety and operational efficiency.

OWNERSHIP

Nearly the whole of the British merchant fleet is privately owned, apart from some ships which are owned and/or operated by nationalised industries as

One gross ton = 100 cubic feet (2.83 cubic metres). One deadweight ton = 1 long ton (2,240 lb or 1,016 kilogrammes). Gross tonnage indicates the total capacity of the enclosed space on a ship. Deadweight tonnage denotes the maximum load which a vessel can carry before submerging the load-line.

part of their normal commercial operations, the main example being British Rail (see p 302). Over half of the tanker fleet belongs to the oil companies, although there are a few independent tanker operators. British liner tonnage is dominated by a relatively small number of large groups, the largest liner company being the Peninsular and Oriental Steam Navigation Company. Some shipowners have delegated the management of their fleets to specialist ship management companies. Several companies are participating in consortia, particularly where heavy investment in ships and facilities is required, as with container and bulk cargo vessels. Chartering of ships of all nationalities takes place on the Baltic Exchange, the largest market of its type in the world. The representative body for shipowners (excluding owners of fishing vessels) is the General Council of British Shipping.

TRAFFIC

Almost all Britain's overseas trade by weight, about four-fifths by value, is carried by sea. Ships registered in Britain carry 32 per cent by weight, 43 per cent by value, of seaborne trade between Britain and other countries. Tanker cargoes account for nearly half this trade by weight but only about 11 per cent by value, and foodstuffs and manufactured goods account for over three-quarters by value.

Container and roll-on/roll-off vessels are responsible for a growing proportion of general cargo trade. Many of the deep-sea liner services from Britain are operated by container ships. Roll-on services, accommodating passengers and their cars and, in some cases, commercial vehicles are increasing in number, particularly between Britain and the continent of Europe. Several freight-only roll-on services operate to the Irish Republic, the continent of Europe, and to more distant countries, especially in the Middle East, North Africa and West Africa.

The proportion of passengers travelling to or from Britain by sea is about one-third, compared with about one-half in the early 1960s. Almost all of these travel to or from the continent of Europe or the Irish Republic, services on other routes having virtually ceased as a result of the growth of air services. Remaining long-distance passenger ships are used for cruising and about 80,000 passengers a year embark on pleasure cruises from British ports.

Conferences

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. The essential principle of a conference is the establishment of a common tariff of freight rates to be applied by each member line. Each conference regularly reviews existing rates and the share of the trade carried by member lines. Rates are reviewed in consultation with shippers' organisations. There are about 100 conferences dealing with trade to and from Britain.

EMPLOYMENT OF SEAFARERS Various qualifications are required for employment on board ship in certain grades. Responsibility for holding examinations and issuing certificates of competency rests with the Department of Trade, except in the case of radio officers where this is the function of the Home Office.

There are some 50 establishments providing full-time vocational training for seafarers. Most deck and catering junior ratings are trained at the National Sea Training College at Gravesend (Kent), the world's largest ratings' establishment, which can accommodate some 2,000 ratings a year. The Merchant Navy Training Board promotes the instruction and studies of apprentices,

cadets and ratings who are preparing for their examinations for the various certificates of competency.

Conditions of Employment

Wages and conditions of employment of most seafarers are negotiated by the National Maritime Board, composed of equal numbers of representatives of the General Council of British Shipping and seafarers' trade unions. Under the Merchant Navy Established Service Scheme, seafarers are employed either as 'registered seafarers' or they may enter into a company service contract, for a minimum of one year, for employment on the ships of a particular company. Registered seafarers receive special benefits between voyages in addition to the normal state benefits. The benefits paid to company service contract seafarers must be at least equivalent to those paid to registered seafarers. The industry has introduced new disciplinary procedures and is studying ways of improving seafaring conditions of work and leisure.

SAFETY AT SEA

The Department of Trade's responsibilities for safety include administration of the Marine Survey Service, the Coastguard Service, and certain administrative functions concerning lighthouses and pilotage. It makes regulations to ensure safety of navigation at sea and conducts inquiries into shipping casualties and accidents. Britain's merchant fleet is one of the safest in the world; it has a consistently lower record of ship losses than the world average.

Sea Rescue

The Coastguard Service is responsible for initiating and co-ordinating civil marine search and rescue action off the coasts of Britain. There are some 600 regular coastguards and about 9,000 voluntary auxiliary coastguards operating from more than 100 coastal stations. A constant visual and radio listening watch is maintained all the year round at certain main stations and at times of high casualty risk at a number of others.

The Coastguard Service calls upon the lifeboats of the Royal National Lifeboat Institution (RNLI), Ministry of Defence aircraft and helicopters, a long-range civilian helicopter based at Sumburgh (Shetland), and any other ships or aircraft available to assist in rescue action. In 1978 the Coastguard Service took action in 3,740 incidents (including cliff rescues) in which 6,684 people were rescued. The RNLI is supported entirely by voluntary contributions and depends for its operation on voluntary workers. In 1978 lifeboats were launched 2,380 times and rescued 933 people.

Lighthouses

The general lighthouse authority for England and Wales, the Channel Islands and Gibraltar is the Corporation of Trinity House, which is administered by a board of Elder Brethren elected from the Royal Navy and the Merchant Navy. Lighthouses in Scotland and Ireland are the responsibility respectively of the Northern Lighthouse Board and the Commissioners of Irish Lights. These authorities control about 350 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.

Pilotage

In Britain there are 46 pilotage authorities for the 86 pilotage districts and over 1,500 licensed pilots. Trinity House is the chief pilotage authority, licensing some 700 pilots in 41 districts in England and Wales. In some cases the harbour authority or local council is the pilotage authority. Under the Merchant Shipping Act 1979 a Pilotage Commission is to be established to advise on the organisation of pilotage.

Traffic Control

There are a number of traffic separation schemes around the shores of Britain, all of which have been adopted by the Inter-Governmental Maritime Consultative Organisation (a United Nations agency with headquarters in London). Compliance with these schemes is mandatory for all vessels of countries contracting to the 1972 International Collision Regulations. The most important scheme affecting British waters is in the Dover Strait, one of the world's busiest seaways. It consists of traffic lanes for shipping passing through the strait and inshore traffic zones for use by local shipping. The number of collisions has fallen considerably since the scheme was introduced. 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 Dover Strait. The Anglo-French Safety of Navigation Group, comprising representatives of British and French government departments, is responsible for reviewing and improving safety measures in the English Channel. An important development in 1978 was the establishment of 'Mancheplan', a joint Anglo-French contingency plan for handling maritime disasters in the Channel.

HOVERCRAFT

The hovercraft, a vehicle which rides on a cushion of air over both land and water surfaces, was invented in Britain and has been in regular public passenger service since the mid-1960s. There are services on cross-Channel routes and on routes across the Solent to the Isle of Wight. Two operators provide cross-Channel services: Seaspeed with routes between Dover and Boulogne, and Dover and Calais; and Hoverlloyd Ltd between Ramsgate and Calais. A hovercraft crossing takes about one-third of the time taken by ships and hovercraft carry about one-quarter of the traffic on the short-sea crossings to the continent of Europe. Seaspeed operates the world's largest hovercraft, two British Hovercraft Corporation SR.N4s which have been structurally enlarged so that each accommodates 416 passengers and 60 cars.

CIVIL AVIATION

Britain has a growing civil aviation industry which is continuing to develop to meet the increasing demand for air travel, particularly international travel. Airline services are operated by British Airways and by a number of independent airlines. Their fleets contain some of the most modern types of aircraft including wide-bodied aircraft and the Concorde supersonic aircraft with which British Airways inaugurated in 1976, jointly with Air France, the world's first supersonic passenger services. To cater for the growing number of air passengers, many airports are being substantially modernised and new terminals installed.

Role of the Government

The Secretary of State for Trade is responsible for international matters (including negotiation of air service agreements with 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.

Civil Aviation Authority

The Civil Aviation Authority (CAA) is an independent statutory body responsible for the economic, technical and operational regulation of the industry; the provision by the National Air Traffic Services, jointly with the Secretary of State for Defence, of air navigation services and the aerodrome navigation services at certain British airports; and the operation of eight aerodromes in Scotland.

The Secretary of State for Trade appoints the members of the CAA, and issues a written guidance on the general policies to be followed, which requires

approval of both Houses of Parliament.

The CAA has been given the objective of recovering as soon as possible the whole of its costs and a reasonable return on capital from the users of its services. Meanwhile the Government is paying the CAA a grant to meet the deficit on its revenue account; it amounted to £13.3 million in 1978-79.

Air Traffic

Since 1962 more passengers have entered or left Britain by air than by sea. In 1978 a total of some 38.9 million passengers travelled by air (international terminal passengers), compared with 19.9 million by sea. Air traffic is continuing to increase as a result of the introduction of new and more frequent services and lower fares on some routes. Total capacity offered on all services by British airlines amounted to 11,970 million capacity-tonne-kilometres in 1978, 14 per cent more than in 1977. British Airways accounts for some 90 per cent of scheduled services flown by British airlines, whereas the charter market is dominated by independent companies.

The value of overseas trade by air rose by 30 per cent in 1978 to £14,558 million, and the proportions of Britain's overseas trade carried by air amounted to 20 per cent of the value of exports and 18 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 (particularly diamonds), 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.

British Airways

British Airways is one of the world's leading airlines, and in terms of international passengers carried and of international passenger-kilometres flown it is the largest in the world. During 1978–79 British Airways' turnover was £1,640 million (including £1,403 million from airline operations), and it made a net profit of £83 million. In March 1979 British Airways employed about 57,700 staff. Its assets of £828 million included £652 million of aircraft and spares and £106 million of land and buildings. The Government intends to introduce legislation to give British Airways a new capital structure, and a substantial minority shareholding will then be offered for sale to the public.

Airline Operations

British Airways' route network, covering some 579,800 kilometres (360,200 miles) of unduplicated route, is among the largest in the world. The airline serves nearly 180 destinations in 80 countries and in 1978-79 carried some 15.8 million passengers on scheduled services. International scheduled services are operated to the rest of Europe, the Middle East, the Far East, Australasia, East and South Africa, North America and Guyana in South America. Within Britain it runs over 1,000 services a week to 26 towns and cities throughout the country. Scheduled Concorde services are operated from London (Heathrow) to New York; to Washington, with Braniff Airways flying the aircraft on to Dallas/ Fort Worth airport; and to Singapore via Bahrain (in joint operation with Singapore Airlines). In 1975 British Airways inaugurated Europe's first air 'shuttle' service (a regular scheduled no-reservation service with back-up aircraft to carry extra passengers) between Heathrow and Glasgow, and similar services have been introduced from Heathrow to Edinburgh and Belfast. A new shuttle service between Heathrow and Manchester was inaugurated in October 1979. Joint shuttle services with national airlines to a number of other European countries are being investigated.

Other Activities

British Airways Associated Companies Ltd is responsible for the group's investments connected with a number of hotel companies and air companies in different parts of the world. The main activity of British Airways Helicopters Ltd is the provision of links between oil and gas production platforms in the North Sea and the mainland. It also operates a scheduled service between Penzance (Cornwall) and the Isles of Scilly, undertakes charter work and operates air-sea rescue services from Sumburgh (Shetland). Engine overhaul work for British Airways and other airlines is carried out by British Airways Engine Overhaul Ltd. International Aeradio Ltd plans, installs, operates and maintains airport technical services and general communications and manufactures specialised equipment for use in these services.

Aircraft

British Airways operated 212 aircraft and helicopters in July 1979. Aircraft included 25 BAC One-Elevens, 20 Boeing 707s, 26 Boeing 747s, 5 Concordes, 2 HS 748s, 5 Merchantmen (converted Vanguard passenger aircraft), 15 Trident Ones, 16 Trident Twos, 25 Trident Threes, 12 TriStars, 15 Super VC10s and 20 Viscounts. A large investment programme is under way to replace the older aircraft, and major orders for new aircraft include 28 Boeing 737s, 19 Boeing 757s and 11 TriStars. Helicopters operated comprised 23 Sikorsky 61Ns, 1 Bell Jet Ranger and 2 Bell 212s.

Independent Airlines

The independent airlines carry over 4 million passengers a year on scheduled services and over 10 million on charter flights. The main independent scheduled airline is British Caledonian Airways, which operates a fleet of 29 aircraft and carried nearly 1.4 million scheduled service passengers in 1978. Its scheduled services are primarily to the continent of Europe, West and Central Africa, South America and Houston in the United States. Other independent operators of scheduled passenger services include British Island Airways, British Midland Airways and Dan-Air Services. A notable development in transatlantic air travel occurred in 1977 when Laker Airways pioneered a daily 'Skytrain' service, a service based on low fares, between London (Gatwick) and New York. A second Skytrain service, between Gatwick and Los Angeles, was started in 1978. Dan-Air Services, Britannia Airways, Laker Airways and Monarch Airlines are the leading independent airlines running charter passenger services.

About 300 aircraft operated by some 130 public transport companies are engaged in air-taxi operations. Helicopters are also used to transport businessmen, but are being employed on a large scale in 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, crop-spraying, and aerial survey and photography.

Licensing

Under the CAA's air transport licensing system, British operators apply for licences for scheduled and charter services, or for revocation or variation of existing licences. The CAA also considers changes in fares, both for British carriers and for overseas carriers on services to and from Britain, and licenses air travel organisers who charter aircraft for inclusive tours. The Air Transport Users Committee, which is financed by the CAA but independent of it, makes reports and recommendations to the CAA for furthering the interests of air transport users including the investigation of complaints against airlines.

Safety

The CAA is responsible for the regulation of the safety of civil aircraft registered in Britain. Its Operations Division deals with the preparation and application of safety requirements concerning airline operations, flight crew licensing and training, aerodromes, and fire and rescue services. The Airworthiness Division is responsible for functions such as the airworthiness certification of aircraft, the licensing of aircraft maintenance engineers and the approval of work schedules to which transport aircraft are maintained. The CAA is advised in its duties by the Airworthiness Requirements Board.

Air Operators'
Certificates

Every operator of aircraft above a certain weight 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.

Flight Crew Qualifications and Training

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 experience, all candidates for a first professional pilot's licence must have undertaken a full-time course of ground and flying instruction at a flying school 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 planning and provision of the facilities necessary for control of aircraft at the higher flight levels are carried out in conjunction with Eurocontrol, a European international agency of which Britain is a member. The Controller of the NATS reports to both the CAA and the Ministry of Defence. The function of the NATS is to secure the safe, orderly and expeditious flow of air traffic within British airspace. It also provides air traffic services for aircraft flying over the northeastern quarter of the North Atlantic. At some 20 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 overall flow of traffic within British airspace. To provide its services, the NATS uses radar, some 100 navigational beacons, landing aids, air-to-ground communications and an extensive telecommunications network.

Airports

Of the 131 licensed civil aerodromes in Britain, nearly one-quarter each handles more than 100,000 passengers a year. In 1978 Britain's civil airports handled a total of 53.4 million passengers (52.2 million terminal passengers and 1.2 million in transit), 13.4 per cent more than in 1977, and 746,100 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 26.9 million passengers and 460,200 tonnes of freight in 1978. Gatwick, the second major airport in the London area, handled 7.8 million passengers in 1978. Other leading airports were Manchester, Glasgow, Luton, Birmingham, Edinburgh, Aberdeen and Belfast. While the number of passengers has, in general, risen in recent years, there has not been a corresponding increase in air transport movements owing to the growing use of wide-bodied aircraft.

Ownership and Control

The British Airports Authority (BAA), an independent statutory body operating on a commercial basis, owns and manages seven airports—Heathrow, Gatwick and Stansted in the south-east, and Glasgow, Edinburgh, Prestwick and Aberdeen in Scotland—which handle 76 per cent of air passengers and 89 per cent of air cargo traffic in Britain. In 1978-79 the BAA's income was £162.2 million and it recorded a pre-tax profit of £29.4 million.

Sumburgh airport and seven small aerodromes in the Highlands and Islands

of Scotland are controlled by the CAA and Belfast's airport (Aldergrove) is managed by Northern Ireland Airports Ltd, a subsidiary of the Northern Ireland Transport Holding Company. Most of the other public airports are controlled by local authorities. All airports and aerodromes (apart from those controlled by the Government or by the CAA) must be licensed by the CAA. Stringent requirements, such as the provision of adequate fire-fighting, medical and rescue services, suitable runways, and of air traffic control services and visual aids, must be satisfied before a licence is granted. Strict security measures are in force at airports.

Development

Existing airports are being developed to accommodate the substantial increase expected in the number of air travellers. The capacity of Heathrow's three main terminals has been developed to their ultimate limit of about 30 million passengers a year. Plans for a fourth major terminal, which would raise Heathrow's annual capacity to about 38 million passengers, have been examined at a local planning inquiry and the report is being considered by the Government. At Gatwick a £100 million redevelopment programme has been virtually completed, increasing the airport's annual capacity to some 16 million passengers. The BAA has submitted a planning application for a second passenger terminal which, if approved, would be in operation by the mid-1980s and would increase Gatwick's capacity to about 25 million passengers a year.

Work is in progress to develop facilities at several of Britain's other airports. A five-year development scheme, costing some £15 million, started in 1977 for the expansion of terminal facilities at Aldergrove. Construction work has started on a scheme to rebuild the runway at Manchester airport. A new passenger terminal is planned at Birmingham airport. Offshore oil and gas activities have stimulated a number of major expansion schemes at airports in north-east Britain, such as at Aberdeen, where a new terminal was opened in 1977 and which has become the world's biggest heliport. At Sumburgh in Shetland the CAA has invested £30 million in developments including a new terminal for oil-related traffic.

An Advisory Committee on Airports Policy and a Study Group on South East Airports were set up in 1978. Their first task is to advise the Secretary of State for Trade on the provision of a new airport to accommodate in the longer term the growth in the demand for air transport expected in the London area, and the Study Group has identified six locations in the south-east for further consideration.

THE POST OFFICE

The Post Office, founded in 1657, provides postal, telecommunications, data processing and Giro services. It was set up as a public authority under the Post Office Act 1969, having previously been a government department. The chairman and other members of the board are appointed by the Secretary of State for Industry. With some 411,000 employees, it is the largest commercial employer in Europe. The Government intends to separate the Post Office into two corporations, one for postal and Giro services and the other for telecommunications, and legislation to create a new telecommunications corporation is being prepared.

In 1978–79 the Post Office's income, excluding internal transactions, was £4,619 million and a profit of £375·1 million was recorded, with profits of £347·1 million on telecommunications and £33·1 million on posts. Capital expenditure on fixed assets amounted to £1,032 million in 1978–79. Some £74

million a year is spent on research and development, mostly at the Post Office's research centre at Martlesham Heath (Suffolk).

POSTAL SERVICES The Post Office pioneered postal services and was the first service to issue adhesive postage stamps as proof of advance payment for mail. It provides deliveries each working day to 22 million addresses. In 1978–79 the Post Office handled some 172 million parcels and 9,793 million items of other correspondence (including 9,338 million inland letters).

Postal operations are being mechanised and by 1982 there will be a national network of 83 mechanised high-speed sorting offices. Large parcel centres, each serving a group of counties, are gradually taking over the work of the 1,200 offices which handle parcels manually. Mechanised sorting is aided by the use of postcodes, of which there are 1.5 million; Britain's postcode system is one of the most sophisticated in the world.

Post Offices

Britain has 22,800 post offices, of which nearly 1,600 are operated directly by the Post Office and the remainder on an agency basis by sub-postmasters. At a post office counter, besides making use of postal and telegraph facilities, a person may draw a pension or a family allowance, buy a dog licence, a television receiving licence, renew a motor vehicle licence, obtain a British visitor's passport, buy national insurance stamps, and use the facilities of the National Savings Bank (see p 352) and of the National Girobank (see p 351). In much of its counter service the Post Office acts as agent for government departments and local authorities.

Other Services

The Post Office provides a range of 40 specialist services, mainly for commerce. 'Datapost', a door-to-door overnight delivery service originally for computer data, has been expanded to include documents, medical samples and spare parts, and handles 3 million packets a year. There are International Datapost links with 16 countries. An 'Expresspost' messenger service, for rapid delivery of mail within or between cities, was started in London in 1976 and has been extended to 15 centres. About one-third of the Post Office's philatelic business, which mainly involves the sale of stamps to collectors or dealers, is conducted by the Philatelic Bureau in Edinburgh. The British Postal Consultancy Service offers advice and assistance on all aspects of postal business to overseas postal administrations, and over 20 countries have used its services.

TELE-COMMUNICA-TIONS Britain has over 25 million telephones, 16 million exchange connections, 80,000 telex connections and 57,000 data transmission modems (more than in any country except the United States). The Post Office's telecommunications business employs 233,000 people, has assets of nearly £6,700 million, and runs eight factories and a fleet of nearly 52,000 telecommunications vehicles.

Telephone Services In 1978–79 some 19,306 million telephone calls were made in Britain comprising 16,100 million local calls, 3,022 million trunk calls and 184 million international calls. Subscribers dial virtually all local and trunk telephone calls, and about 90 per cent of international calls are dialled direct. Some 92 per cent of Britain's telephone subscribers can dial direct to 85 countries. To back up its nationwide system of cables, the Post Office has built a network of radio towers for transmitting telephone calls, television programmes and computer data over microwave channels.

Services

Special Telephone Several specialised services are available by telephone, including the 'qqq' emergency dialling service enabling subscribers to be connected rapidly and free of charge to the police, ambulance or fire brigade. Of the 618 million calls made to recorded information services in 1978-79, over 430 million were to the speaking clock. Other services include Dial a Disc, weather forecasts, sports results, motoring information, recipes, bedtime stories and Financial Times Index and Business News Summary.

Exchanges

Over 1,100 electronic exchanges are in use in Britain and nearly 500 more have been ordered. They are more reliable than conventional electro-mechanical exchanges as they have very few moving parts and so require less maintenance. Most electronic exchanges are of the TXE2 type, with a capacity of up to 7,000 lines. Larger TXE4 exchanges, with a capacity of up to 40,000 lines, have been brought into service since 1976, and the first orders for an improved version, the TXE4A, have been placed.

Overseas Services

The demand for international calls is doubling every four or five years and the Post Office has increased the amount of equipment in its international exchanges substantially and raised the number of cable and satellite circuits linking Britain with other countries from nearly 3,000 in 1970 to over 13,000 in mid-1979. Nearly 70 per cent of the intercontinental telephone traffic to or from Britain is carried by satellite. Three aerials at the Goonhilly earth station in Cornwall provide commercial telecommunications services via high-capacity geostationary satellites positioned over the Atlantic and Indian Oceans. A fourth aerial is sending test speech and television signals to the European Space Agency's orbital test satellite, as the first step in the European Communications Satellite project (the responsibility of Eutelsat, an organisation set up by the telecommunication administrations of 17 European countries) intended to provide high-capacity links across Europe and the Mediterranean to meet future demand for international telephone calls and live television pictures. Britain has the second largest interest, after the United States, in Intelsat, the world space communications satellite network. A second earth station at Madley near Hereford, opened in 1978, is helping the Post Office to cope with the growth in international traffic. It carries about 1 million calls a month between Britain and some 40 other countries via the Indian Ocean Intelsat satellite.

There are some 30 submarine cables, covering a total of 6,671 nautical miles (12,350 kilometres), from Britain to the continent of Europe, the Irish Republic and the Faroe Islands, and three cables between Britain and North America.

Prestel

The Post Office's 'Prestel' service, the world's first public viewdata service (in which information can be obtained through the telephone network from a computer and displayed on a suitably equipped television set in words and simple graphics), was inaugurated in London for householders in March 1979 and for business users in September 1979. (A public test service had been in operation since 1978.) In 1980 Prestel will be extended to a number of other areas. Some 156,000 'pages' of information are being provided from over 160 sources. Information is available on a wide range of subjects such as Government services, financial services, jobs and careers, housing, travel and sports results. Prestel centres have been or are to be established in London, Birmingham, Cardiff, Edinburgh, Leeds, Manchester and Norwich. The Post Office has exported the system to telecommunications authorities in a number of countries. (Viewdata services transmitted by broadcasting instead of the telephone network

are operated by the British Broadcasting Corporation and the Independent Broadcasting Authority, see p 419.)

Maritime Communications The Post Office provides day-to-day communications links and radio services for shipping of all nations through one long-range and 11 medium-range radio stations around the coastline of Britain. At all medium-range stations a continuous watch is maintained on the international distress frequencies, as part of a safety of life at sea service provided on behalf of the Department of Trade. A number of remotely controlled short-range coast radio stations provide radiotelephone links with ships at sea at a range of up to 50 miles (80 kilometres). Britain, through the Post Office, has the third largest share in the International Maritime Satellite (INMARSAT) Organisation, which came into existence in July 1979 and will provide satellite capacity to improve maritime communications. A fifth aerial will be built at Goonhilly in Cornwall and INMARSAT's headquarters will be set up in London.

Oil and gas production platforms in the North Sea are linked to Britain's telecommunications network by transhorizon radio. Two new radio stations have been built in south Shetland and one near Frascrburgh (Grampian).

Datel Services

Post Office Datel services provide for transmission of information for computers and other automatic processors. A wide variety of data transmission facilities, at speeds from 50 bits a second to 50,000 bits a second, are provided using Post Office circuits. The services consist of a suitable telegraph or telephone line and, when necessary, a modem (which converts digital signals into voice frequencies for transmission). An internationally compatible Datel service at 2,400 bits a second was introduced in 1977.

Telex

The British telex service is fully automatic. Demand for inland and international telex services is growing and the number of connections has more than doubled since 1971. Customers can dial direct to 135 countries and 98 per cent of all international calls are dialled direct. Britain's first computer-controlled telex exchange handling international automatic calls was installed in London in 1978 and a second is due to be brought into operation in 1981.

Telegrams

International telegrams are transmitted through the Post Office's computer-controlled Telegram Retransmission Centre in London. It is one of the largest in the world, and has direct access via satellite, cable and radio circuits to over 90 terminals in 80 countries.

Developments

The Post Office is developing several new telecommunications services other than Prestel. A radiopaging service, providing direct dialling access over the public telephone network to small lightweight portable receivers, is already operating in two areas (Greater London and the Thames Valley) and is to be extended to a number of other areas, while a national service is to be established in 1980.

The Post Office Experimental Packet Switched Service for sending computer data came into full operation in 1977 and was the first experimental public service of its type in Europe. It will be followed in the early 1980s by a fully commercial packet switched service. Similar services are available to the United States and will be extended into the continent of Europe. As a start to its European services, the Post Office is participating in the European Community's 'Euronet' project which gives access to European databases through a packet switching network.

A series of new switching and associated systems for telephone exchanges, known as System X, using microelectronics technology, integrated digital transmission and switching, stored program (software) control and common channel signalling, has been developed. The first prototype exchanges are expected to enter service in 1981 and the first production exchanges in 1983.

A Post Office facsimile transmission service, 'Fonofax', is due to be opened on a limited basis within Britain later in 1979.

DATA PROCESSING The Post Office has a corporate Data Processing Service for internal services, and a comprehensive bureau service, known as National Data Processing, for industry and commerce. It operates some of the most comprehensive data processing systems in Europe and has implemented more than 400 projects.

17 Employment

As a major industrial country, Britain has a labour force with high levels of technical and commercial skills. To ensure as far as possible that the working population, like the country's other economic resources, is fully utilised, the Government intervenes in the labour market in a number of ways: by providing employment services supplementing the training undertaken by employers; by policies to promote regional development and labour mobility; by measures to alleviate unemployment; through legislation to regulate terms and conditions of employment and improve industrial relations; and through legislation relating to health and safety at work.

THE WORKING POPULATION

The total working population of Britain at the middle of June 1978 was 26.4 million, about 48 per cent of the total population. If the unemployed, the self-employed, and the Armed Forces are omitted from the working population, there remained 22.7 million employees (13.4 million men and 9.4 million women) in employment. The percentage of women (particularly those working part-time) in the labour force continues to rise, although at a reduced rate compared with previous years. The great majority of the working population work for a wage or salary, but nearly 2 million are employers or self-employed. The working population increased slowly until 1966, then declined between 1966 and 1971, since when it has been rising again (see Table 25). One reason for the fall after 1966 was the increased number in full-time education. During the next few years both the male and female labour forces are expected to continue to increase. In June 1978 men accounted for 59 per cent of all employees and women for 41 per cent (about two-fifths of whom worked part-time).

TABLE 25: Manpower in Britain 1970-78

Thousandsa

Year	Employees in employment ^b	Employers and self-employed	Unemployed ^c	Armed Forces ^d	Total working population ^d
1970	22,479	1,902	555	372	25,308
1971	22,121	1,909	724	368	25,122
1972	22,121	1,899	804	371	25,195
1973	22,663	1,947	575	361	25,546
1974	22,790	1,925	542	345	25,602
1975	22,710	1,886e	866	336	25,798
1976	22,543	1,886e	1,332	336	26,097
1977	22,665	1,886	1,450	327	26,328
1978	22,724	1,886¢	1,446	318	26,374

Source: Department of Employment Gazette

- ^a Discrepancies between totals and the sums of their constituent parts are due to rounding.
- ^b Part-time workers are counted as units.
- ^c Excluding adult students.
- ^d Including ex-Service personnel on leave after completing their service.
- e Estimates.

The distribution of employees by industry in 1970 and 1978 is shown in Table 26.

The most notable trend in the employment pattern during the last decade has been the transfer of employment from manufacturing to service industries. Technological developments have increased automation, with a consequently reduced demand for manpower, and have assisted the growth of manufacturing capacity in other countries, particularly developing ones. New and, in some cases, cheaper services have been introduced through advances in technology, while improvements in living standards have led to an increasing demand for services. There is considerable public discussion of the social and economic effects of micro-electronic technology, in particular, and these effects are under consideration by the Central Policy Review Staff.

MANPOWER POLICY

In Great Britain the Department of Employment is generally responsible for employment policy, industrial relations and pay policy, and for the payment of unemployment benefit, but the Manpower Services Commission (MSC) advises the Government on manpower policy issues.

TABLE 26: Analysis of Civil Employment in Britain 1970 and 1978

	1970)	1978a		
Industry or Service	Thousands	Per cent	Thousands	Per cent	
Agriculture, forestry and fishing Mining and quarrying	466 410	1·9 1·7	387 344	1·6 1·4	
Manufacturing industries Chemicals and allied industries Metals, engineering and vehicles Textiles Clothing and footwear Food, drink and tobacco Other manufactures	8,342 442 4,318 678 455 792 1,657	34·2 1·8 17·7 2·8 1·9 3·2 6·8	7,302 431 3,788 495 382 718 1,487	29·7 1·8 15·4 2·0 1·6 2·9 6·0	
Construction Gas, electricity and water Transport and communications Distributive trades Professional, financial, scientific	1,339 391 1,572 2,675	5·5 1·6 6·4 11·0	1,272 350 1,447 2,739	5·2 1·4 5·9 11·1	
and miscellaneous services ^b National and local government service	5,801 1,482	23·8 6·1	7,247 1,637	29·4 6·7	
Total: employees Employers and self-employed persons (all industries and	22,479	92.2	22,724	92.3	
services)	1,902	7.8	1,886°	7.7	
Total in Civil Employment	24,381	100.0	24,610	100.0	

Sources: Department of Employment and Northern Ireland Department of Manpower Services

Discrepancies between totals and their constituent parts are due to rounding.

The MSC, which is separate from the Government but accountable to the Secretaries of State for Employment, Scotland and Wales, has a chairman and

a Provisional estimates.

^b Excludes private domestic service.

^c June 1975 estimate.

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nine other members appointed after consultation with employers and employees, and local government and educational interests. Scottish and Welsh committees of the MSC consider special Scottish and Welsh aspects of manpower issues and bring these to the attention of the respective Secretaries of State. Most of the MSC's activities are financed from public funds; expenditure in 1978-79 amounted to £509 million (plus £134 million on behalf of the Department of Employment). The MSC is advised by a network of district manpower committees on which employers, employees and other local interests are represented.

The MSC's main statutory duty is to make such arrangements as it considers appropriate, within a general policy framework agreed with the Department of Employment, for assisting people to select, train for, obtain and retain employment, and for assisting employers to obtain suitable employees. The services in Northern Ireland are run on similar lines by the Department of Manpower

Services.

EMPLOYMENT SERVICES

The main public employment services (other than the careers service) are provided in Great Britain by the MSC's employment service division, the principal aim of which is to provide a comprehensive service for employers needing staff and for people, whether or not already in employment, seeking jobs. It operates through a network of about 1,000 local employment offices and 'jobcentres' which handle all occupations except professional, scientific, technical and managerial, for which Professional and Executive Recruitment (PER) is responsible. Jobcentres, where the provision of self-service facilities for job-seekers is a standard feature, are gradually replacing employment offices where such facilities do not always exist.

Though use of the service by both employers and job-seekers is voluntary, in the year to March 1979 over 6 million people registered for employment, 2.7 million vacancies were notified and 1.8 million were placed in employment.

Special Services

Special employment services include services for disabled people, occupational guidance, services to assist the geographical mobility of workers, Professional and Executive Recruitment and the Careers Service.

Services for Disabled People

The public employment service has long provided a resettlement service to disabled people. This is provided by over 500 specially trained Disablement Resettlement Officers (DROs) who can advise on rehabilitation and training courses and on the comprehensive range of special schemes and facilities available. They can also advise employers on aspects of employing disabled people, including grants available for adaptation to premises and equipment in order to employ or retrain a specific disabled person. The DROs administer the quota scheme which, under the Disabled Persons (Employment) Act 1944, requires employers to include 3 per cent registered disabled people among their workforce. Employment rehabilitation is provided at 27 centres (including one linked with a medical rehabilitation unit); in 1978 some 15,000 people attended the wide range of courses available. The MSC also gives financial assistance to voluntary and local authority bodies concerned with specific disabilities such as blindness, cerebral palsy and psychiatric disorders; in 1978 more than 500 people passed through these courses.

There are vocational training facilities for the disabled at 'skillcentres', educational institutions and employers' establishments. For the more seriously disabled there are special residential training colleges run by voluntary organisations with the help of the MSC's training services division. Grants are available

to disabled people qualified to undertake study or training for professional or

comparable employment.

Sheltered employment is provided for the severely disabled in Great Britain by Remploy Ltd, a non-profit making company, and in Northern Ireland by Ulster Sheltered Employment Ltd, a company constituted similarly to Remploy, and by local authorities and voluntary organisations. The MSC also works in close co-operation with the National Advisory Council on Employment of Disabled People.

In 1978 the MSC and the Northern Ireland Department of Manpower Services helped with the cost of providing places for over 13,500 severely disabled people, of which approximately 1,900 were blind or partially sighted

and some 190 were trainees.

Occupational Guidance

Occupational Guidance is a free advisory service available to anyone seeking advice on changing or choosing a job. It operates through a national network of 49 occupational guidance units, helping about 50,000 people a year. The service is based on interviews with specially trained staff who can call on the services of occupational psychologists if necessary.

Geographical Mobility Schemes In order to ease unemployment, particularly in the special development and development areas, the MSC administers various grants and allowances under the Employment Transfer Scheme to enable the unemployed, and those under threat of redundancy, to take up jobs in other areas; and the Job Search Scheme to provide the cost of fares and subsistence in order to attend interviews and to move to other areas temporarily to look for work. Similar schemes are operated in Northern Ireland by the Department of Manpower Services.

Professional and Executive Recruitment Professional and Executive Recruitment (PER) provides a specialist employment service at managerial, professional, scientific and technical levels. It is organised separately from the rest of the MSC and operates through a network of 38 offices staffed by experienced consultants. PER has a computer-assisted matching and selection system but also offers an interviewing service and an advertising service. The service is free to candidates, while employers are charged a fee based on the starting salary. A broadly similar service, known as Professional and Executive Personnel and free to both employers and candidates, is operated in Northern Ireland.

Careers Service

Local education authorities have a statutory obligation under the Employment and Training Act 1973 to provide a careers service, a vocational guidance service for people attending all educational institutions (except universities) and an employment service for those leaving them. Authorities also provide an employment service for people, especially young people, in their early years at work. There is close co-operation with the MSC's employment service division which also caters for those who have left school and choose to use its facilities in preference to those of the careers service.

In Northern Ireland the careers service is an integral part of the Department

of Manpower Services.

The Careers and Occupational Information Centre publishes a wide range of 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.

Immigrant Workers In general, people coming to Britain for employment (including Commonwealth citizens who do not have the right of abode, see p 12, but excluding nationals of

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other European Community countries and Gibraltar) need a work permit issued by the Department of Employment. This must be applied for by the prospective employer for a specific person and is issued for a specific job and for a fixed period not exceeding 12 months in the first instance. People admitted as holders of work permits may change their jobs only with the approval of the Department of Employment. Normally further leave to remain will be given on application to the Home Office if they remain in approved employment. Under current immigration rules the Home Office will consider an application to remove the conditions attached to their stay after four years in approved employment, and if granted, a worker may change employment without restriction. Among other conditions, work permits are issued only for work requiring a professional qualification, skill or experience, where the Department of Employment is satisfied that the worker is necessary and there is no suitable resident worker to fill the post, and where the wages and conditions are not less favourable than for similar work. For many occupations it is proposed to raise the lower age for a permit from 18 to 23 on 1 January 1980.

Permits for nursing auxiliaries and resident domestic workers in hospitals, schools and similar establishments and private households are subject to overall numerical limits decided annually. Applications for such employment are only accepted from nationals of countries in Europe. Permits for resident domestic employment are issued only for unmarried people and for married couples if they are to work in a joint post. They are not issued to those with children under 16 years of age. Permits for nursing auxiliaries are issued only for un-

married people without dependants.

Commonwealth citizens and foreign nationals (other than nationals of European Community countries and Gibraltar) are generally eligible for permits on the same terms. In addition, Commonwealth citizens may be admitted for fixed periods of training 'on the job' arranged in advance if they hold trainee permits issued by the Department of Employment. Foreign nationals may also enter Britain as holders of student employee permits for short-term employment to enable them to improve their English and widen their business experience.

European Community regulations establish the right of workers to move freely between member States for the purposes of employment. European Community workers entering another member State are entitled to be treated in the same way as nationals of that State as regards facilities of the national employment services, pay and working conditions, trade union rights, vocational training and retraining facilities, access to housing and property, and social security and industrial injury benefits. Workers who wish to remain in the United Kingdom for longer than an initial period of six months must apply to the Home Office for a residence permit. If they are in permanent employment the residence permit is normally valid for five years. If the employment is temporary (that is, for less than a year) the permit is valid for the expected duration of the employment.

Race Relations

The Department of Employment operates a Race Relations Employment Advisory Service with advisers based in the main areas where ethnic minorities have settled. Its general aim is to promote equal opportunity in employment regardless of race, colour, nationality, ethnic or national origin, and its advisers offer help and guidance to employers and unions on a wide range of issues which arise in the employment of a multi-racial workforce.

UN-EMPLOYMENT In common with many other industrial countries, unemployment in Britain rose in the 1970s to the highest level for 40 years, though there was a gradual

decline in the seasonally adjusted level of unemployment from the end of 1977 to

mid-1979.

Unemployment has been relatively low in the south-east of England, and consistently higher in those parts of the country which have the greatest dependence on shipbuilding, and certain branches of the heavy engineering and metal manufacturing industries, notably parts of Scotland and Wales, and northeast England and Merseyside. The general unemployment rate in Great Britain in August 1979 was 5.1 per cent: the areas with the highest rates were Wales and Scotland and the north of England.

The unemployment rate in Northern Ireland has remained higher than in other parts of the United Kingdom. In August 1979 it was 10.5 per cent of all

employees.

Government Action

A succession of selected measures has been introduced since the autumn of 1975 with the purpose of mitigating the effects of high unemployment by providing job or training opportunities for people who would otherwise be unemployed. The level of the measures reached a peak early in 1978, when some 350,000 were benefiting from them. Since then the numbers supported have fallen (at the end of August 1979 the figure was 329,000). In mid-1979 some of the arrangements were changed to concentrate them in the areas where unemployment is highest and the need for special assistance greatest and the special measures are expected to take more people off the unemployment register in 1979 than in 1978.

The measures include: a scheme to encourage employers to use short-time working as an alternative to redundancies; a small firms employment subsidy for extra jobs provided by small manufacturing firms in certain areas; a youth opportunities programme to provide a range of training and work experience opportunities to unemployed 16–18 year olds; a special temporary employment programme to provide worthwhile temporary jobs for adults in special development areas, development areas and designated inner city areas, who have been unemployed for a long time; a 'job release' scheme to encourage older workers, approaching pensionable age, to leave work early and release jobs for younger unemployed people; a 'job introduction' scheme for disabled people; and support for training places in industry.

TRAINING **SERVICES**

The main responsibility for carrying out industrial and commercial training lies with individual employers, but in recent years the MSC, with government support, has evolved a comprehensive strategy to help to improve the supply of trained manpower needed by the economy, to provide opportunities for individuals to acquire new skills, and to improve the efficiency and effectiveness of training generally. The MSC's Training Services Directorate is responsible for putting these programmes into effect.

Training in Industry

There are 23 industrial training boards and one industrial training committee, covering firms employing about 60 per cent of all employees, which are responsible for promoting training in their respective industries. They receive Exchequer funds to meet their advisory service and other costs and to enable them to pay grants to employers to encourage training activities of national importance (supplemented, during periods of economic recession, by special grants to support craft and technician training). The boards' five-year strategies and short-term operating plans and budgets are agreed with the MSC.

The MSC also promotes training for some 10 million people employed in industries not covered by industrial training boards, maintaining liaison with major training organisations in this sector.

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Training Opportunities Scheme

The Training Opportunities Scheme (TOPS) is intended to supplement the training given in industry and commerce by providing individuals over the age of 19 with the opportunity to acquire new skills. Training is carried out at 69 'skillcentres' and at many colleges and employers' establishments. Skillcentre courses concentrate mainly on engineering, construction and automotive trades and those at colleges on clerical and commercial skills.

Special priority has been given to expanding and developing technician training particularly for computer operations. In addition, electronics engineering courses biased towards micro-electronics and micro-processor applications have been established in several centres. In all about 600 different courses are available in a wide range of occupations. Trainees are paid allowances which vary with domestic responsibilities and may receive, among other things, an earnings-related supplement, travelling expenses and a lodging allowance. Some 70,000 adults were trained under TOPS in 1978–79.

Other Training Services

The MSC also provides a number of other direct training services to employers. The Training Within Industry scheme is intended to develop the skills of supervisors in developing leadership, instructing and communicating, improving methods and improving safety practices. Special courses are also available for supervisors employed in offices. Courses in international trade procedures are available for staff employed in export/import offices. Courses in instructional techniques are available to skillcentre staff and industrial and commercial firms at the MSC's two instructor training colleges (one in England and one in Scotland) and at three instructor training units attached to skillcentres. In-plant courses are also available.

Employers are able to sponsor their own employees for refresher and upgrading training at skillcentres, on courses designed specifically to meet the needs of the employer and of the employees concerned. There is also a complementary mobile instructor service for employers, which provides specific training for employees in their own workshops.

Training services at skillcentres and courses at instructor training colleges are also available to trainees from overseas. These facilities are increasingly being used by overseas governments and organisations, and in every case programmes are structured to meet agreed training objectives.

EMPLOYMENT PROTECTION LAW

Terms and Conditions of Employment

Britain has been a pioneer in the introduction of protective legislation for the safety, health and welfare of employees. The determination by statute of minimum wages, holidays and holiday pay was until recently confined in principle to those trades and industries where the organisation of employers or workers, or both, was inadequate to negotiate collective agreements and to ensure their observance. However, recent legislation, consolidated in the Employment Protection (Consolidation) Act 1978, provides considerable safeguards for employees in their terms of employment.

An employer is required to give employees written information on their terms and conditions of employment, the disciplinary rules applicable to them and the procedure available where an employee has a grievance about his or her employment or is dissatisfied with any disciplinary decision; minimum periods of notice when employment is to be terminated are also laid down for both employers and employees. Employees with a minimum period of service of 104 weeks 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 industry. Protection against unfair dismissal is provided by machinery under which an employee may complain against an employer of unfair dismissal, and, if successful, obtain reinstatement, reengagement or compensation. Legal support is given to the right to trade union organisation by making it unfair to dismiss a person because of membership or participation in the activities of an independent trade union; rights of employees are also protected in regard to penalisation short of dismissal because of trade union membership or activities. Other rights which are maintained in the Act include payment when work is not available for reasons other than as a result of a trade dispute, and maternity rights for female employees, including protection from dismissal because of pregnancy, maternity pay, and the right to return to work after confinement (although proposals put forward for discussion by the Government would restrict some of these maternity rights in some cases).

Discrimination

The Race Relations Act 1976 (see p 148) makes unlawful discrimination on grounds of colour, race, nationality (including citizenship) or ethnic or national origin, in employment, training and related matters. Employers may not discriminate when recruiting workers or in their treatment of employees in regard to their terms and conditions of employment, promotion, transfer, training and access to other benefits, or to their dismissal.

The employment provisions of the Sex Discrimination Act (see p 146) make sex discrimination unlawful in employment, training and related matters. An employer may not discriminate between men and women either in recruitment or in treatment of existing employees in such matters as promotion, training, transfer, benefits, facilities and dismissal. It is also unlawful for a married person to be treated less favourably than an unmarried person of the same sex.

PAY, HOURS OF WORK AND HOLIDAYS

Wage Rates and Earnings

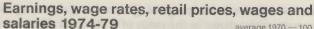
Pay for manual occupations, and increasingly for non-manual occupations, is normally set by collective bargaining (see p 330). In a small number of industries and trades legally enforceable minimum rates are set by wages councils.

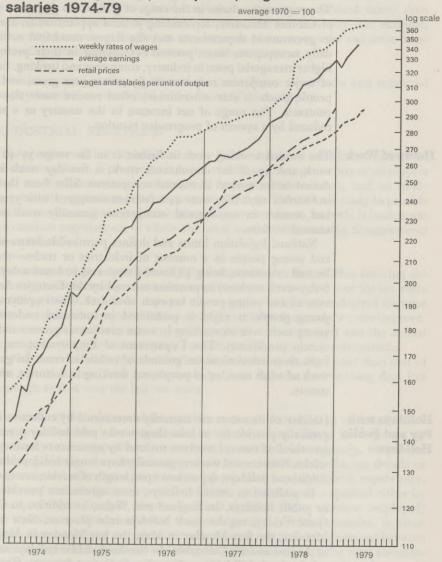
Basic rates of pay vary widely, though in private industry local rates normally exceed the rates specified in national agreements. Higher rates are usually paid for overtime and shift work, and weekly earnings may be further increased by incentive bonus schemes. Piecework, or payment-by-results, is still common, though of declining importance as production methods in many industries increasingly dictate employees' output.

According to the latest annual survey conducted by the Department of Employment into earnings and hours of work, the average weekly earnings of full-time male adult manual workers in April 1979 were, including overtime, £93; while for full-time female adult manual workers they were £55·20. The corresponding figures for non-manual workers were £113 and £66. Women's earnings are thus 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 same at here ally similar

Equal Pay Act 1970 requires that a woman doing the same or broadly similar work as a man, or work that has been given equal value by job evaluation, should receive equal pay and conditions of employment.

Between April 1970 and April 1979 the average weekly earnings of manual workers before tax and national insurance deductions increased by 248 per cent for men and by 305 per cent for women. Part of this was offset by a rise in retail





prices of about 193 per cent and by increased national insurance contributions and income tax payments. For trends between 1974 and 1979 in earnings, wage rates, retail prices, and wages and salaries per unit of output, see the diagram above.

Salaries and Fees

Remuneration in commercial, technical and professional careers is normally by annual salary paid monthly, often on a scale carrying annual increments, and such careers generally afford opportunities for promotion to posts with higher remuneration. Starting salaries may be in the range of £3,000 to £3,500 (lower for trainees from 16-18 years of age and higher for some graduates entering industry).

Most of the senior posts in business, the professions and the Civil Service

command salaries in the range of £12,000 to £18,000 a year gross before tax. The posts with salaries in the range of £18,000 to £35,000 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, some persons outstanding in their professions and in the higher managerial posts in industry, commerce and banking. Salaries of chairmen of major companies may exceed £50,000 a year gross, and highly successful people (such as star entertainers) often receive more through fees or fixed contracts. The range of net incomes in the country as a whole is, however, reduced by a system of progressive taxation.

Hours of Work

The normal working week in Britain is in the range 39-40 hours for manual work and 37-38 for non-manual work; a five-day week is usually worked. Actual hours worked in manual occupations differ from their standard hours; in October 1978 they were 44.2 for men compared with 37.4 for women. Men and women in non-manual occupations generally work less overtime than manual workers.

National legislation limits and defines permissible hours of work for women and young people in a number of industries or trades—the maximum, with limited exceptions, being 48 hours a week and 10 hours a day (9 hours a day for 6-day-week workers) in premises covered by the Factories Act for adult women over 18 and young people between 16 and 18. The employment of women and young people at night is prohibited in industrial undertakings, except for young men over 16 working in some continuous-process industries (subject to certain conditions). The Department of Employment can make exemptions from these restrictions on grounds of public interest. In general the hours of work of adult men, or of people not working in factories, are not restricted by statute.

Holidays with Pay and Public Holidays Holiday entitlements are normally determined by collective agreements. These generally provide for at least three weeks paid holiday a year. However about one-third of manual workers covered by agreements have entitlements of four weeks. Non-manual workers generally have longer holidays than manual workers. Additional holidays, dependent upon length of service, are also quite common.

In addition to annual holidays, most agreements provide for bank holidays or public holidays. In England and Wales, in addition to Christmas Day and Good Friday, regular bank holidays take place on New Year's Day, Easter Monday, the first Monday in May, the last Monday in May, the last Monday in August and 26 December. In Scotland public holidays are declared locally; regular bank holidays are New Year's Day, 2 January, Good Friday, the first Monday in May, the last Monday in May, the first Monday in August, Christmas Day and 26 December. The English and Welsh bank holidays apply also to Northern Ireland, where in addition St Patrick's Day (17 March) and 12 and 13 July are public holidays; in certain areas the Tuesday after Easter is also a customary holiday for industry and trade.

Provision for an alternative day to be observed is made when any bank or public holiday falls on a Saturday or Sunday.

'Fringe' Benefits A variety of additional benefits exist in varying degree. About half of employees in employment are covered by occupational pension schemes (see p 138). Many employees are also covered by occupational sick pay schemes, additional or complementary to the State schemes (see p 141), and by schemes to provide private medical treatment. A smaller number are covered by schemes for redun-

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dancy payments above the statutory minimum. Such benefits are more usual among clerical and professional employees receiving a standard salary than among manual workers, who have a chance to increase their pay—for example, by working overtime. Employees may have use of a company car and some firms provide profit-sharing and share-saving schemes.

Social Security

Social security benefits, which include unemployment, sickness and industrial injury benefits, are described in the Social Welfare chapter.

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 between them at all levels. The State is ready to provide assistance where the organisation of employees, employers, or both, is inadequate to conduct negotiations, or where the usual methods of resolving disagreements have failed.

Industrial Disputes

According to figures published by the International Labour Office covering the mining, manufacturing, construction and transport industries, over the ten years 1968–77 Britain lost fewer days per 1,000 employees through industrial disputes than several other major industrial countries; official figures show some improvement in industrial relations in 1978 compared with both 1977 and the annual average for the previous ten years but the trend in 1979 was unfavourable.

Northern Ireland's industrial relations record is generally better than that of the rest of Britain, with proportionately fewer disputes and working days lost through strikes over the last ten years.

TRADE UNIONS

In nearly all industries and occupations some workers (and in some industries nearly all workers) are organised into trade unions. These have grown up gradually and independently over many years and, consequently, their form and organisation vary considerably, as do their traditions. In the last decade or so, trade unionism has again increased particularly among clerical, supervisory, technical and administrative workers. Trade unions may be organised either by occupation (for example, they may recruit clerks or fitters wherever employed) or by industry. Some are based on a combination of both principles. In some firms membership of the relevant trade union is required by agreement between the employer and union ('closed shops'). At the end of 1977 the total membership of British trade unions was 12.7 million. There were 480 unions, but nearly 80 per cent of all trade unionists were in the 26 largest unions, each with a membership of 100,000 or over, while only 0.6 per cent were in the 263 smallest unions with under 1,000 members each.

The Certification Officer appointed under the Employment Protection Act 1975 is required to maintain a list of trade unions. 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.

Under the Employment Protection Act 1975 and other legislation, certain rights and privileges are reserved for independent trade unions. A trade union on the list may apply to the Certification Officer for a certificate that it is independent of employers, such a certificate being considered conclusive evidence of independence.

The central organisation of most large unions consists of a national executive council, usually elected by 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 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. Members may attend branch meetings, make suggestions about terms and conditions of employment, discuss the work of the union, and take part in the election of the union's officers. The branch takes action on certain matters considered to be entirely, or mainly, of local interest and forwards its views on wider issues for action by the union's national or regional bodies. The organising of members in individual places of work, and the negotiation of local pay agreements with managements at the factory or plant, may be done by full-time district officials of the union, or, increasingly, by 'shop stewards', who are chosen by their fellow members in the place of work to represent them. Trade unions vary in the degree to which shop stewards are integrated into their organisation. Where two or more unions have members in the same workplace, shop stewards' committees may be formed to discuss matters of common concern.

Unions often provide dispute benefit ('strike pay') for members involved in official industrial action. They also provide legal advice for members who suffer injury or contract diseases at work, and may pay members' legal costs where a case for compensation goes to court. Some unions pay benefits in case of illness, accident, death and retirement (additional to those payable under the national insurance scheme) financed out of membership contributions. Many trade unions are affiliated to the Labour Party, although individual members may opt out of paying that part of their affiliation fees which is paid to the Labour Party.

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 112 trade unions which together represent 11.9 million workpeople, or 94 per cent of all trade unionists in Britain. The TUC deals with all general questions which concern trade unions both nationally and internationally and gives assistance on questions relating to particular trades or industries.

The annual Congress convenes in September to discuss matters of concern to trade unionists and to employees generally. It elects a General Council which 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 council is also empowered to mediate in inter-union disputes in certain circumstances, and uses its authority to deal with unauthorised and unconstitutional stoppages of work, as well as official disputes.

The TUC as well as many individual unions conduct 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 affiliations 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.

There are eight TUC regional councils in England, based on the Government's eight planning regions (see p 170) with a further similar body for Wales

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known as the Wales Trades Union Council. These bodies, whose function is to make representations to the Government's various regional bodies, co-ordinate the activities of trade unions in the regions and keep them in touch with the policy of the TUC at national level.

Scotland and Northern Ireland Scottish trade unions also have their own national central body, the Scottish Trades Union Congress (STUC), which in many respects is similar in constitution and function to the TUC. Trade unions whose membership includes Scottish workers may affiliate to the STUC and a number of trade unions are in fact affiliated to both bodies. Trade unions in Northern Ireland are represented by the Northern Ireland Committee of the Irish Congress of Trade Unions (ICTU), though the majority of trade unionists in Northern Ireland belong to unions based in Great Britain. Almost 90 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.

EMPLOYERS' ORGANISA-TIONS Many employers in Britain are members of employers' organisations, a large number of which are wholly or partly concerned with labour matters. 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. They 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. A few are purely local in character or deal with a section of an industry; others are national in scope 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 150 national employers' organisations, which negotiate the national collective agreements for their industry with the trade unions concerned. Many of these national organisations belong to the Confederation of British Industry.

The final authority of local or small national organisations may be a meeting where all member firms are directly represented; but in larger organisations some form of indirect representation is necessary, either through local organisa-

tions or through regions or sections into which these are grouped.

The representatives thus chosen, together with a number of office holders, form a general council or central committee, which meets perhaps once a quarter, mainly to make major policy decisions, to elect committees and to ratify their work. A paid staff under a director or secretary carries out the day-to-day work of the organisation. There is usually a small working group, consisting of senior officials and committee chairmen, which meets to deal with urgent questions and co-ordinate the work of committees. Employers' associations (as defined in the Trade Union and Labour Relations Act 1974) may apply to the Certification Officer for inclusion in the list of employers' associations maintained by the officer.

Confederation of British Industry

The central body of employers is the Confederation of British Industry (CBI) which deals with all matters affecting the interests of employers and represents them nationally to the Government and the public and also internationally, for

instance, in the International Labour Organisation and in the various institutions of the European Community. It is also the British member of the Union of Industries of the European Communities and the Business and Industry Advisory Committee to the Organisation for Economic Co-operation and Development, and a member of the British national committee of the International Chamber of Commerce. The majority of national employers' organisations and nationalised industries and a large number of individual companies, both large and small, belong to the CBI, whose representatives or nominees sit on various official bodies and take part in the discussion of matters of importance to the national economy through their membership of the National Economic Development Council (see p 198).

Legal Framework

The Trade Union and Labour Relations Act 1974 defines the status of trade unions and employers' associations and sets out certain legal requirements which they must observe. The Act confers immunities on trade unions in respect of actions taken in support of a trade dispute, allows peaceful picketing, and also provides that collective agreements shall not be legally enforceable unless they are written agreements and specifically provide for this.

Subsequent legislation has extended the rights of employees in a number of respects and strengthened voluntary collective bargaining. The Employment Protection Act 1975 placed the Advisory, Conciliation and Arbitration Service on a statutory basis, provided for the appointment of a Certification Officer and for the setting up of the Central Arbitration Committee; and established an Employment Appeal Tribunal to hear appeals concerning decisions of the Certification Officer and of industrial tribunals. (Industrial tribunals are independent judicial bodies which deal, in general, with complaints from employees on infringements of individual rights under a number of Acts concerning, for example, redundancy payments, contracts of employment, equal pay, unfair dismissals and sex discrimination.)

With the aim of achieving a balance between trade unions' rights and obligations, legislation is to be introduced, after consultations with the unions and other parties concerned, to limit the right to picket to those in dispute picketing their employer's premises and to protect those not concerned in the dispute; to modify legislation on the closed shop to protect existing employees and those with personal convictions about union membership, to give the right of appeal against arbitrary exclusion or expulsion from a trade union and acceptance of a closed shop only if an overwhelming majority is in favour of it; and to provide financial aid for the holding of postal ballots for election to union office and other decisions. A statutory code of practice on closed shops is also proposed.

Northern Ireland

Northern Ireland has a similar but separate system of industrial relations under which certain responsibilities devolve upon the Labour Relations Agency. Industrial relations legislation enacted in 1976 has brought the province largely into line with similar legislation enacted in Great Britain since 1974.

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 and trade unions. Agreements may be industry-wide, supplemented as necessary by informal local agreements in firms or factories, or at firm and factory level (plant bargaining). In the public sector agreements are generally reached at industry level. In some industries, firms and factories, negotiations are conducted by meetings held when necessary, while in others, joint negotiating councils or committees have been established on a permanent EMPLOYMENT 331

basis. The scope of the various joint bodies (from the national joint industrial councils for whole industries to the works councils and committees in individual workplaces) varies widely, and has frequently been extended to cover such additional matters as production plans, absenteeism, training, education and welfare. Normally these arrangements for collective bargaining suffice to settle all questions which are raised, but provision is sometimes made for matters not so settled to be referred for settlement to independent conciliation or arbitration. The Employment Protection Act 1975 made provision for information needed for collective bargaining purposes to be disclosed by employers to trade unions, subject to certain safeguards.

Standing arrangements exist for consultation at national level between the Government, the TUC, the CBI, and the nationalised industries through the National Economic Development Council on matters in which employers and workers have a common interest. The operation of collective bargaining has

from time to time been restricted in an attempt to control inflation.

Advisory, Conciliation and Arbitration Service

The Advisory, Conciliation and Arbitration Service (ACAS) is charged with the general duty of promoting the improvement of industrial relations, and in particular of encouraging the extension of collective bargaining and the development and (where necessary) reform of collective bargaining machinery.

In 1976 ACAS was placed on a statutory basis under the Employment Protection Act and is controlled by a council consisting of a chairman and nine other members experienced in industrial relations, of which three are nominated by the CBI, three by the TUC, and three are independent.

The service may offer conciliation in industrial disputes in both the public and private sectors of industry where this is thought to be helpful, and has discretion in meeting requests for conciliation subject only to the need to pay regard to agreed procedures in the industry or area of employment concerned.

At the joint request of the parties in dispute, and having regard to the need to safeguard negotiating procedures, ACAS may appoint single arbitrators or boards of arbitration to settle disputes on the basis of agreed terms of reference. Alternatively ACAS may refer cases for arbitration to the Central Arbitration Committee (see below). Some 390 joint requests for arbitration were made to ACAS during 1978.

Although ACAS has prime responsibility for intervention in disputes, the Secretary of State retains powers to appoint a court of inquiry or committee of

investigation into a dispute, whether existing or foreseen.

The service gives advice on all aspects of industrial relations and personnel management. It conducts surveys to diagnose the causes of industrial relations problems and suggests remedial action to management and trade unions or employee representatives. It 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 and complaints on employment matters under the Sex Discrimination Act 1975 and the Race Relations Act 1976).

The service is concerned with the long-term improvement of collective bargaining and, with the consent of the parties involved, conducts detailed inquiries in particular firms or industries. It also considers claims by independent

trade unions that they should be recognised by an employer.

Central Arbitration Committee The Central Arbitration Committee (CAC) is a permanent body for the settlement of disputes by voluntary arbitration. Disputes may be referred to the CAC by ACAS at the joint request of the employers and trade unions concerned.

The committee is also called upon to arbitrate on claims made under various Acts, including the Equal Pay Act 1970 and the Employment Protection Act 1975, and acts as the independent tribunal to which the Secretary of State for Employment refers questions relating to the payment of wages and conditions of employment observed by Government contractors.

Worker Participation

The need for better communication between management and workers has led to movements towards greater participation by workers in industry and commerce, that is towards enabling workers to have a more decisive voice in the way in which their firms are run. This includes the experimental appointment of directors from the trade unions or the workforce in some nationalised industries and public corporations; moreover, some private sector companies have long had a system of works councils, while others are conducting experiments in greater worker participation in one form or another.

Public **Authorities**

While industrial relations in government service and in the nationalised industries are, in general, organised on the same principles as in private industry, there are some special features.

Government

Central and Local Non-industrial employees in central Government service, are permitted and encouraged to join the appropriate Civil Service unions and there is a highly developed system of negotiation and joint consultation by means of the National and Departmental Whitley Councils. Unresolved disputes may, subject to certain limitations, be reported to the Secretary of State for reference to the Civil Service Arbitration Tribunal, an independent body appointed by the Secretary of State. Government industrial employees are similarly encouraged to belong to trade unions and there is machinery for joint consultation. Disputes on wages or conditions of employment that cannot be resolved by the existing machinery can be referred to the Central Arbitration Committee.

In local government service there are separate National Joint Councils for the main grades of employees (such as manual, clerical and technical employees) which deal with wages and conditions of service as well as other matters. There are corresponding regional and district councils.

Nationalised Industries

The major nationalised industries have a statutory duty to establish satisfactory arrangements for collective bargaining and for joint consultation with their employees; the British Steel Corporation and the Post Office have proceeded with the appointment of worker directors.

Unlike firms in the private sector, the corporations are not usually members of employers' associations (although the majority are 'public sector members' of the CBI). In some industries they are sole or main employers, but even where part of the industry is in private hands, as for example in road transport, the corporations are separately and directly represented on wage-negotiating bodies.

Wages and conditions of service in the nationalised industries are generally settled by negotiation between representatives of management and trade unions at the national level; in most cases there are also regional and local bodies, similarly representative, to deal with local issues but not normally to negotiate separate local agreements. Most of the industries use the facilities for arbitration offered to industry generally by the ACAS, but coalmining and rail transport have their own special arrangements. Consultation at all levels, including the workplace, has been arranged in all the nationalised industries.

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Office of Manpower Economics The Office of Manpower Economics, established in 1971 as an independent non-statutory body, acts as secretariat for the three review bodies set up to advise on the remuneration of certain groups in the public sector for which negotiating machinery is not appropriate, such as chairmen and members of boards of nationalised industries, the higher judiciary and senior civil servants; the armed forces; and doctors and dentists. It also services special inquiries on particular pay structures and related problems.

STATUTORY NEGOTIATING MACHINERY In a number of industries and trades where the organisation of employers or employees or both is not strong enough to provide a basis for successful voluntary arrangements, there are statutory wage-regulating bodies, known as wages councils. These are composed of equal numbers of representatives of employers and employees in the respective sectors of industry, with three independent members. Wages councils publish proposals for minimum remuneration, holidays, holiday remuneration and other terms and conditions of employment. After considering any representations the councils make orders giving statutory force to such proposals. The Department of Employment's Wages Inspectorate enforces the provisions of these wages orders. About 2.7 million workers are covered by such arrangements.

Agricultural wages boards (there are boards for England and Wales, for Scotland and for Northern Ireland) perform similar functions in relation to

employment in agriculture.

The Secretary of State for Employment has power to convert a wages council into a statutory joint industrial council (SJIC), a body which functions in the same ways as a wages council, except that it has no independent members. Such conversion is intended to assist in the development of collective bargaining, an SJIC being seen as a half-way stage between the statutory system and full voluntary collective bargaining.

HEALTH AND SAFETY AT WORK

Employers have a duty at common and criminal law to take reasonable care of their employees and 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. In addition, minimum required standards of safety in certain kinds of workplaces or work are laid down under a number of statutes; some of these also deal with health and welfare. The Health and Safety at Work etc. Act 1974 reorganised the system under which safety and health at work was safeguarded and extended it to cover everyone at work and to further the protection of the general public from industrial hazards.

Health and Safety Commission The Health and Safety Commission, appointed by the Secretary of State for Employment after consultation with the TUC, CBI and local authorities, has responsibility for supervising the application and enforcement of health and safety legislation. Its operational arm is the Health and Safety Executive, consisting largely of the government inspectorates covering factories, mines and quarries, agriculture, explosives, nuclear installations and alkali works; the Employment Medical Advisory Service; and the Health and Safety Laboratories, which include the Safety in Mines Research Establishment.

The basic obligations laid down in the Act are supported by ministerial powers to make regulations dealing with a wide range of health and safety matters. Regulations may be supplemented where appropriate by codes of practice approved by the commission, and by guidance notes and other codes.

In particular the Act gives inspectors the power to issue improvement and prohibition notices, which enable them to require practical improvements to be made within a specified time or to require preventive measures immediately without first having to obtain a court order. There are provisions for appeals to industrial tribunals against such notices.

Safety Regulations

About 207,000 industrial premises (factories, warehouses, shipyards, docks and construction sites) are regulated under the Factories Act 1961, which is enforced mainly by the Factory Inspectorate, part of the Health and Safety Executive. Likewise about 770,000 premises are subject to the Offices, Shops and Railway Premises Act 1963, whose enforcement is shared by the Factory Inspectorate and the Mines and Quarries Inspectorate, the Railway Inspectorate (see below) and local authorities.

The Acts and regulations made under them are designed to secure the health, safety and welfare of employers, and deal with such matters as the fencing of machinery; precautions against the exposure of people to toxic gases and dusts; precautions against fire, dangerous substances and special risks; the safe condition of premises; and cleanliness, lighting, temperature and ventilation. They also contain provisions concerning the employment of women. Anyone intending to employ other people in industrial or commercial premises to which either the Factories Act or the Offices, Shops and Railway Premises Act applies has to notify the enforcing authority of his intention and there is a statutory duty to report every accident which is either fatal or causes more than three days' incapacity. The Factories Act includes provisions for the compulsory notification and investigation of certain types of dangerous occurrence.

Comparable provision with appropriate variations covers mines and quarries, agriculture and transport (including aviation and shipping, the responsibility of the Department of Trade). As with the Factories Act these other provisions are, with some exceptions, enforced through inspectorates—the Mines and Quarries Inspectorate, the Agricultural Inspectorate, and the Railway Inspectorate of the Department of Transport. Safety requirements in all other places of work including hotels, places of entertainment and educational establishments but excluding domestic work in the home, are covered by the Health and Safety at Work etc. Act or (in respect of their offices and shops) by the Offices, Shops and Railway Premises Act, while fire authorities are responsible for general fire precautions and means of escape.

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 such installation may be constructed or operated in Britain without a licence granted by the executive under sections of the Nuclear Installations Act 1965 which are relevant statutory provisions under the Health and Safety at Work etc. Act. Conditions attached to such licences in the interests of safety are imposed and enforced by the inspectorate.

The Health and Safety Commission also has responsibility under the Mineral Workings (Offshore Installations) Act 1971 and the Petroleum and Submarine Pipelines Act 1975 for the health and safety of all persons (including divers) engaged in the offshore oil and gas industry, by agency agreement with the Petroleum Engineering Directorate, Department of Energy.

Other Measures

Transport operators and ministries concerned with road and air travel give high priority to safety measures affecting crews and passengers. Every effort is made to counter the higher risks resulting from rising traffic densities by improving the design of vehicles and transport equipment, by control of standards

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of maintenance, by traffic regulations and by training crews in safety awareness.

To minimise the hazards which may arise from the use of pesticides, a voluntary scheme has been established under which pesticides are vetted by the Ministry of Agriculture, Fisheries and Food's Advisory Committee on Pesticides and Other Toxic Chemicals (see p 178) before being marketed. The committee gives clearance for specific uses, subject to its recommendations on such matters as safety precautions and labelling being agreed to.

There are also the Health and Safety Laboratories, which are concerned with

research into health and safety problems in industry (see p 383).

Employment of Women and Children 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 (now 16); of women and young people underground in mines and in certain other dangerous occupations (for example, certain processes connected with lead manufacture); and of women in factories and workshops within four weeks after childbirth. It also limits and defines the permissible hours of employment for women and young people.

Promotion of Safety Measures

The Health and Safety Commission encourages the development of voluntary central organisation within each industry at national level for the consideration of safety matters and the formulation of policy and accident prevention. Its inspectorates, besides inquiring into notified accidents and safety aspects of machine design and specification, circulate expert advice to both sides of industry and to the general public, and maintain a health and safety centre in London, at which various types of guards for machinery are displayed, as well as a wide range of protective clothing and equipment. Regulations which came into force in October 1978 provide that recognised trade unions may appoint safety representatives to represent the employees in a workplace; also, two or more such representatives may make a written request to the employer to establish a safety committee, which must then be set up within three months of the request being made.

Organisations in industry participate also in joint standing and advisory committees appointed by the Secretary of State for Employment, but these arrangements are being superseded. The Health and Safety Commission has appointed four major advisory committees in addition to the Committee on Major Hazards set up in 1975; these include one on asbestos, one on toxic substances, one on dangerous substances and one on medical matters. Proposals have also been made for the appointment of a number of industry-based committees, six of which have already been set up. The Royal Society for the Prevention of Accidents (RoSPA) and the British Safety Council are national bodies concerned with accident prevention and sponsor a number of local accident

prevention groups.

Training and Research in Safety Training is important in accident prevention and the Manpower Services Commission provides a course in job safety for supervisors in its Training Within Industry scheme (see p 323). The industrial training boards include specific provisions for safety training in their training recommendations.

RoSPA provides a variety of safety courses for special needs, mainly at its Industrial Safety Training Centre in Birmingham, and also helps the accident prevention movement by providing and organising conferences; its regional industrial safety officers work to promote safety activity among top-level managers. The British Safety Council also offers safety training courses. Other

courses are organised by local accident prevention groups and organisations such as the Federation of Civil Engineering Contractors.

A substantial amount of research is being done by industry, universities and other academic bodies, and government research organisations into problems of guarding machines, ergonomics, safe handling, electrical hazards, nuclear safety, protective personal equipment, construction methods, fires and explosions, psychological factors and causes of accidents, both generally and in particular sectors of industry. Industrial research associations include among their more purely economic research projects the improvement of working conditions and the reduction of hazards.

The National Coal Board conducts courses of safety training for workmen and officials. Its research programme includes a number of projects with a direct bearing on safety. In addition, the Health and Safety Executive has a statutory responsibility for research concerning the safety and health of coal miners, largely exercised through its Safety in Mines Research Establishment.

The University of Aston in Birmingham runs a degree course for the training of safety officers and engineers whose careers will be concerned with the technical aspects of insurance and forensic work.

Employment Medical Advisory Service

The Employment Medical Advisory Service (EMAS), set up under the Employment Medical Advisory Service Act 1972 and now part of the Health and Safety Executive, provides a nation-wide service of advice on the medical aspects of employment problems to employers, employees, trade unions, doctors and others. It carries out medical examinations of workers in hazardous occupations and surveys of employment hazards, advises the staff of the Manpower Services Commission on medical aspects of job placement, rehabilitation and industrial training and co-operates with school medical officers and careers officers in helping to solve the employment problems of handicapped school leavers. The service, headed by the Health and Safety Executive's Director of Medical Services, has over 100 employment medical advisers based in the country's main industrial centres. The TUC, the CBI and other interested organisations are associated with the work of the service through advisory committees.

for Occupational Health

Scientific Support The Occupational Medicine and Hygiene Laboratories (which are part of the Health and Safety Laboratories, see p 335) at Cricklewood, north London, provide laboratory services and undertake research in the field of occupational health. The Factory Inspectorate also looks to the laboratories as a main source of laboratory assistance.

> Research facilities are provided by government agencies such as the Medical Research Council; by university faculties of industrial health and social medicine; and by the research departments of various industries and large industrial concerns. Field investigations are carried out by the Factory Inspectorate, which has specialised technical branches, and by the EMAS.

Employers' **Health Services**

Many employers voluntarily maintain medical services for their employees over and above the statutory requirements. The big employers, including the State and the boards of nationalised industries, have taken the lead but a number of smaller factories also provide medical services and in a few cases have joined together in group medical services.

Other Amenities

An increasing number of firms pay part or all of the cost of recreational facilities. Some have their own rehabilitation centres or support convalescent homes. The provision of low-priced meals at the place of employment has become EMPLOYMENT 337

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.

Human Relations in Industry

Both official and voluntary organisations are concerned with promoting better human relationships in industry. Official research has sought to extend the available knowledge of the factors influencing human relations in industry and human efficiency. Such research is sponsored or conducted by the Social Science Research Council (see p 378) and the Medical Research Council (see p 376). In addition, the Department of Employment's Work Research Unit provides information on how particular jobs can be redesigned to create greater satisfaction, helps industry and others in initiating and evaluating changes in the content of work, and administers a research programme. Voluntary organisations include bodies which deal with management problems and provide a service to subscribing firms; professional associations, linking individuals with a common interest in particular functions of management; and bodies providing specialist services, usually on a fee-paying basis.

Safety, Health and Welfare in Northern Ireland The safety, health and welfare of employees in Northern Ireland have been the subject of legislation which is embodied in the Factories Act (Northern Ireland) 1965 and the Office and Shop Premises Act (Northern Ireland) 1966. A number of firms voluntarily employ safety officers, and industrial safety groups, supported by representatives of industry, insurance companies and public authorities, make a valuable contribution to accident prevention.

Legislation for Northern Ireland in line with the Health and Safety at Work etc. Act 1974 came into effect in 1979.

18 Finance

Through the public finance system the Government raises money from individuals and companies by taxation, borrowing and other means, and spends it on behalf of the community in the provision of goods and services such as education, health and defence, in payments to people and organisations, and in capital investment. The term public finance also covers the raising of revenue and its expenditure by local authorities and certain other public bodies and the financial relationship between these agencies and the central Government.

THE PUBLIC SECTOR

PUBLIC EXPENDITURE Public expenditure comprises the current and capital expenditure of central government and local authorities (collectively known as general government), excluding expenditure charged to the operating account of trading bodies; central government finance in the form of grants, loans or public dividend capital provided towards the cost of capital investment by the nationalised industries; the capital expenditure of other public corporations; the contingency reserve; and those debt interest payments which constitute a charge on taxation. Public expenditure, excluding the contingency reserve and debt interest, in 1978–79 amounted to nearly £63,000 million (at 1978 prices) of which 71 per cent was undertaken by the central Government and 27 per cent by local authorities, the remaining 2 per cent representing the capital expenditure of certain public corporations other than the nationalised industries. The social services programmes accounted for nearly 51 per cent of the total programmes, and defence expenditure for about 11 per cent. The wide range of functions and purposes of this expenditure and its distribution is shown in Table 27.

Out of the total public expenditure of £65,200 million in 1978-79 some £35,916 million or 55 per cent was spent by the public sector directly on goods and services (wages and salaries, other current expenditure on goods and services, gross domestic fixed capital formation and stocks). Transfer payments to individuals, companies and other institutions in the private sector (for example, social security payments, capital grants, subsidies, and debt interest) made up the balance. Unlike public authorities' direct purchases of goods and services, transfer payments do not represent a direct demand on the nation's resources. The gross sums transferred create a proportionately lower indirect demand for goods and services because of taxes paid and savings made by the recipients.

Between 1973-74 and 1978-79 total public expenditure programmes grew in real terms by about 10.8 pcr ccnt, but they are now being stabilised.

Planning Control and Monitoring of Public Expenditure Major importance is attached to adequate planning and control of public expenditure. There are three principal and interdependent ways in which this is done. First, the annual public expenditure survey, which leads to the publication of a report describing the Government's medium-term expenditure plans on a constant price basis; secondly, the Supply Estimates by means of which Parliament votes the cash required to run certain central government services in the

coming financial year; and thirdly, the system of cash limits under which, for the financial year immediately ahead, the volume of expenditure at constant prices shown in the survey plans is translated into cash provision which will not normally be exceeded. Effective control requires up-to-date information on the progress of expenditure, achieved through monitoring by the Treasury or other departments. These arrangements are described in more detail below.

TABLE 27: Public Expenditure 1978-79

	£, million at 1978 Survey prices
Defence and external relations (UK) Defence	
Overseas aid and other overseas services	6,868 1,762
Commerce and industry	
Agriculture, fisheries, food and forestry Trade, industry, energy and employment	845
1 7	3,232
Government lending to nationalised industries	1,100
Environmental services	
Roads and transport Housing	2,782 5,006
Other environmental services	3,047
Law, order and protective services	2,092
Social services	
Education and libraries, science and arts	8,722
Health and personal social services Social security	8,233 15,361
·	15,301
Other services Other public services	882
Common services	1,007
Northern Irelanda	2,020
Total programmes	ŕ
Contingency reserve	62,958 41
Debt interest	2,200
Total Public Expenditure	65,199

Source: The Government's Expenditure Plans 1979-80 to 1982-83

Public Expenditure Surveys Each year a survey is made of the whole range of projected public expenditure covering the period five years ahead. It is carried out by officials in the Treasury and other government departments, under the direction of the Public Expenditure Survey Committee.

The primary purpose of the survey is to present to ministers an up-to-date assessment of the cost of their existing policies and proposed changes as a basis for decisions about the total and the composition of public expenditure in the five-year period covered. This gives the Government the opportunity to plan ahead any necessary changes without causing wasteful disruption in existing services, and to have regard to the overall economic outlook when taking decisions.

^a Including the other services shown above except defence and external relations.

A report on the survey is prepared in the first half of the year. This is followed by ministerial consideration of the report and then by the publication of the Government's public expenditure plans (see Bibliography). This provides the basis for an annual public expenditure debate in the House of Commons. The plans contain a contingency reserve to provide for additions to the programmes set out. Since 1976 this has been developed into a more operational instrument, as one of the means of securing that actual expenditure is kept within the plans. The object is, as far as possible, to limit claims on the reserve by meeting the cost of new measures, or increased estimates for existing measures, within existing departmental totals. Recourse to the reserve to meet additional expenditure is subject to the approval of Treasury ministers, who may refer the larger or more difficult claims for consideration by the Cabinet as a whole.

Estimates

Each department submits its cash requirements to the Treasury in the December before the financial year beginning on the following I April. Estimates cover central Government's own expenditure. (Not all this expenditure is classified as public expenditure—for example, payments to local authorities. Only when the money is spent by the local authorities is public expenditure recorded.) After they have been approved by the Treasury, the Supply Estimates are presented to Parliament shortly before the Budget (see p 342) and are approved by Parliament for one year ahead, by means of an annual Appropriation Act, in July (expenditure to this date from I April is covered by a Vote on Account approved by Parliament before the beginning of the financial year). There are 29 allotted days (known as supply days) in each session on which the choice of subject for debate rests with the Opposition and on which estimates can be debated. Broad issues of policy are normally discussed.

Other Government Funds

Certain expenditures are not approved annually, but are covered by Acts of Parliament allowing payments to continue from one year to another and are paid direct from the Consolidated Fund. These include the financial provision for members of the royal family, and salaries and pensions of judges. The Consolidated Fund, into which tax revenue and other receipts are paid, finances most of the Government's expenditure; its balance is held in the Exchequer account at the Bank of England. The National Loans Fund covers most of the Government's domestic lending and borrowing, and is operated as an official account at the Bank of England. The two funds deal only with sterling receipts and payments; official dealings in foreign exchange are carried out by the Exchange Equalisation Account (see p 349).

Cash Limits

Cash limits, first introduced on an extensive scale in 1976–77, have been applied to public spending wherever they can make a useful contribution to financial discipline. They also contribute to the Government's policy for reducing inflation and help in forecasting the Government's maximum financing requirements. About two-thirds of public expenditure is covered by cash limits.

Certain services such as social security payments are excluded because, once policy and rates of payment have been determined, cash spending in the short term depends on factors outside the Government's direct control. Cash limits are also placed on the financial assistance given to local authorities by central Government and on local authority capital expenditure. The estimates of the financing requirements of the nationalised industries are also treated as a form of cash limit.

Spending departments and authorities are normally required to provide within their cash limits for any increase in costs due to pay and price changes.

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The cash limits for 1979-80 were first published in April 1979 and revised

figures were published in June 1979 (see Bibliography).

To simplify the control of expenditure the Supply Estimates and those cash limits on public expenditure covered by the estimates are being assimilated. Most were assimilated in 1979–80; the remainder will be so in early 1980.

Monitoring

Expenditure by government departments is monitored by the Treasury and compared with profiles of expected expenditure prepared at the beginning of the financial year in accordance with the approved Public Expenditure Survey, Supply Estimate and cash limit provisions.

This process has been improved in recent years through the introduction of a computerised financial information system for both the Treasury and for spend-

ing departments.

Parliament and Audit

Parliamentary control of public expediture is exercised not only through approval of the supply estimates but also on the work of the Comptroller and Auditor General, the Public Accounts Committee and the House of Commons Select Committee on the Treasury and the Civil Service.

The Comptroller and Auditor General The Comptroller and Auditor General is appointed by the Crown and his independence of the Executive is secured by specific statutory provisions.

He has two functions: as Comptroller General he exercises his statutory duty to ensure that all revenue and other public moneys payable to the Consolidated Fund and the National Loans Fund are duly paid over and that all issues from these funds are authorised by statute; and as Auditor General, and in accordance with the Exchequer and Audit Department Acts and the National Loans Act 1968, he audits, on behalf of the House of Commons, accounts of the transactions of the Consolidated Fund and National Loans Fund and every Appropriation Account, and submits his reports on them and other accounts to Parliament. For many years and with the encouragement of the Public Accounts Committee his statutory audit functions have been interpreted widely and his reports regularly examine and criticise matters of general financial administration, cost-effectiveness and cases of apparent waste or extravagance.

Parliamentary Control of Expenditure

A new structure of House of Commons Select Committees was established in June 1979 (see also p 33). There are 14 committees which examine the expenditure (as well as the administration and policy) of the principal government departments. The objective of the new structure is to strengthen the accountability of ministers to the House of Commons and, to this end, the Government makes available to the select committees as much information as possible, including confidential information.

The Public Accounts Committee

The accounts of each department and the reports of the Comptroller and Auditor General upon them are considered by a House of Commons Select Committee called the Public Accounts Committee. This was established in 1861 to ensure that expenditure was only incurred in accordance with the purposes for which it was voted and with the relevant Acts of Parliament. The Committee's terms of reference are simply that it must examine and report upon the accounts laid before Parliament but these terms are widely interpreted. Successive committees have investigated whether full value has been obtained for the sums spent by departments and have reported in detail on cases in which administration appeared faulty or negligent. The Committee has become a powerful instrument for the exposure of waste or inefficiency and it embodies its findings

in regular reports to Parliament. Although the Committee has no executive powers its reports to Parliament carry considerable weight and its recommendations are taken very seriously by departments and organisations that it examines. The Government's formal reply to these reports is presented to Parliament by the Treasury in the form of a Treasury Minute, and the reports and the Minute are made the subject of an annual debate in the House of Commons.

THE BUDGET

The Budget (an old word which meant a bag containing papers or accounts) is a set of proposals, usually put forward in March or April, for financing government expenditure and managing the economy. In 1979 there were Budgets in April and June because of the timing of the general election in May. Supplementary budgetary measures may also be introduced at other times of the year. The proposals are described by the Chancellor of the Exchequer in the Budget speech, against the background of a statement on Britain and the world economy, the Government's past and prospective revenue and expenditure, and an assessment of the position and prospects of the economy.

The Budget speech is followed by the moving of a set of Ways and Means (or Budget) resolutions, in which the proposals are embodied. These resolutions, when passed by the House, become the foundation of the Finance Act, which

expresses the proposals in statutory form.

A major function of the Budget is to act as an instrument of economic management, and the Budget statement is normally the main occasion for a review of general economic policy. The Budget is therefore concerned with the balance between the total of goods and services which are likely to be available to the nation and the total claims which are likely to be made on them. Through taxation the Government can exert a considerable influence on the volume of demand for goods and services; its measures can also have a broader influence on the pattern of demand and, through, for instance, increasing incentives, on the long-term performance of the economy.

The Budget deals with the means of financing expenditure and particularly with changes in taxation and not primarily with expenditure itself. On occasions, changes affecting expenditure, such as increases in pensions and family allowances, have been announced in the Budget statement, as have financial and monetary measures, such as changes in exchange control policies. Such measures, however, are not generally reflected in the resolutions or the Finance Act but are applied by the appropriate procedure, that is, separate legislation, statutory

instruments or administrative action.

The scope of the Budget and that of the Finance Act which follows it are different although they are closely interrelated. The Budget is essentially concerned with the measures that give effect to the Chancellor's decision to increase or reduce to an appropriate extent the predicted level of demand on economic resources by use of the instruments at his disposal, and especially by increasing or reducing the yield of central government taxes. The tax changes proposed on the basis of the Budget judgment are enacted in the form approved by Parliament in the Finance Act, which also provides the annual opportunity for non-budgetary changes in the tax system and for certain other financial matters, such as provisions relating to Government borrowing.

The bulk of the taxation proposals in the Budget are concerned with changes in the rates of coverage of existing taxes, the introduction of new taxes or the abolition of existing ones, and changes in the administrative machinery relating to taxation. In two cases (income tax and corporation tax), however, annual Ways and Means resolutions followed by a Finance Act clause are necessary to maintain the taxes in existence at all, since they are annual

taxes. Thus a Budget at or about the beginning of each financial year is a necessity.

New taxes and changes in certain existing taxes, like other changes in statute law, do not come into effect until the appropriate Bill—in this case the Finance Bill—has received Royal Assent (in the case of the spring Budget, normally about the end of July) or at some other date laid down in the Bill. Some changes, however, come into effect earlier, usually from Budget Day or from the start of the tax year, under the Provisional Collection of Taxes Act. This enables the Government to collect certain taxes provisionally, income tax, for example, either at the rates previously in operation or at new rates following the passing of the appropriate Ways and Means resolutions. Other ways of changing taxation are by special legislation or the use of the regulator (see p 347).

Public Sector Accounts The economic background to the spring Budget and the transactions of the central government and the public sector as a whole are presented in the *Financial Statement and Budget Report* (see Bibliography) which is laid before the House of Commons by the Chancellor of the Exchequer when he presents the Budget. The report is in three parts: the economic context of the Budget; the accounts of the public sector for the past financial year and the one immediately ahead; and the accounts of the central government for the same two years. The accounts are designed to assist in assessing the impact of changes in revenue and public expenditure on the economy.

The accounts of the public sector show the transactions of the central government, local authorities, nationalised industries and other public corporations combined into a consolidated account covering the whole of the public sector. The transactions within the public sector cancel out on consolidation and the net balance on the consolidated account represents, therefore, the borrowing which is required by the public sector from the private and overseas sectors.

The accounts of the central government show transactions both on the conventional cash basis of Exchequer accounting and in accordance with the framework of the national income accounts.

To raise the money it requires over and above tax revenue the Government offers a great variety of claims on itself designed to attract different types of lender. Broadly there is marketable debt and non-marketable debt. Marketable debt is made up of short-term floating debt consisting of Treasury bills, and funded or longer-term debt made up of government securities which are of varying maturities and publicly quoted on the Stock Exchange. Non-marketable debt comprises the various forms of national savings designed to attract the smaller saver; certificates of tax deposits; and ways and means advances, which basically is very short-term internal government borrowing. The bulk of public corporations' borrowing is met by central government through the National Loans Fund, although public corporations' temporary borrowing needs are met largely from the market under Treasury guarantee. That part of local authority borrowing met by central government is dealt with through the Public Works Loan Board which has recourse to the National Loans Fund. The local authorities also borrow directly from the market, both short-term and long-term, through a range of different investments. Some public corporations also borrow, under special statutory power and with Treasury consent, in foreign currencies.

After allowing for the changes introduced by the Budget of June 1979 the central government's borrowing requirement for 1979–80 was expected to be £9,564 million, compared with an estimated outturn of £8,043 million in

¹ This figure does not take account of proceeds from proposed sale of state-owned assets, estimated at £1,000 million in 1979-80 in the June 1979 Budget.

1978–79, and that for the public sector as a whole £8,305 million, compared with an estimated £9,227 million in 1978–79.

Table 28 shows total revenue from taxation and other sources in 1978-79 and the forecasts for 1979-80 together with the effects of the Budget changes.

TABLE 28: Taxation and Miscellaneous Receipts 1978–79 and 1979–80

£, million

					£, million
		1978-79		1979–80 I	Forecasts
	Budget	Forecast changes ^a	Estimated Outturn	Before Budget changes	After Finance Act
Taxation					
Inland Revenue: Income tax	19,310	18,865	18,776	23,157	19,655
Surtax	19,310	10,003	15,770	10	19,033
Corporation tax	4,170	4,137	3,938	5,046	4,850
Petroleum revenue tax	170	.,	183	620	730
Capital gains tax	375		353	390	390
Development land tax	10		13	22	20
Estate duty	50		46	25	25
Capital transfer tax	320		323	360	360
Stamp duties	440		433	550	550
Total Inland Revenue	24,860	24,382	24,080	30,180	26,590
Customs and Excise:					
Value added tax	4,775		4,900	6,175	8,325
Oil	2,500		2,460	2,535	2,900
Tobacco	2,450		2,445	2,520	2,550
Spirits, beer, wine, cider and perry	2,400		2,335	2,500	2,400
Betting and gaming	350		345	410	410
Car tax	325		380	520	510
Other excise duties	10		10	10	10
Customs duties, etc.	765		740	860	860
Agricultural levies	175		220	285	285
Total Customs and Exciseb	13,750		13,835	15,815	18,250
Vehicle excise duties	1,120		1,113	1,148	1,148
National insurance surcharge	1,475	1,940	1,914	2,952	2,952
Total Taxation Miscellaneous Receipts:	41,205	41,192	40,942	50,095	48,940
Broadcast receiving licences	317		337	383	383
Interest and dividends	264		267	310	310
Other	960		1,542	1,380	1,380
Total	42,746	42,733	43,088	52,168	51,013

Source: Financial Statement and Budget Report 1979-80 and Treasury

The three principal sources of tax revenue are first, taxes on income, which include income tax and corporation tax; second, taxes on capital, which include

a Changes in the Finance Act 1978.

 $^{^{\}it b}$ Includes customs duties and agricultural levies accountable to the European Communities as 'own resources'.

 $^{^{\}rm c}$ Includes the 10 per cent of 'own resources' refunded by the European Communities to meet the costs of collection.

capital transfer tax and capital gains tax; and third, taxes on expenditure (including taxes on the ownership or use of certain assets), which include protective and excise duties, value added tax (VAT), the National Insurance Surcharge, local rates (see p 64), stamp duties and licence duties (for example, on motor vehicles). Taxes on individual (but not corporate) incomes are progressive in that larger incomes bear a proportionately higher rate of tax. The Board of Inland Revenue assesses and collects the taxes on income and capital and the stamp duties; the Board of Customs and Excise collects the most important taxes on expenditure (the customs and excise duties and VAT) while a variety of authorities is responsible for the collection of the remainder. The Government has begun to shift the emphasis from taxes on income to taxes on expenditure. The main changes in the June 1979 Budget were a reduction in income tax and an increase in VAT.

Taxes on Income
Income Tax

Income tax is imposed for the year of assessment beginning on 6 April. The Finance Act (No 2) 1979 reduced the basic and top rates of tax and broadened the bands of taxable income chargeable at the intervening rates. The first £750 of taxable income (total income less deductions and personal allowances) is taxed at 25 per cent, after which a basic rate of 30 per cent (formerly 33 per cent) is charged on the balance of taxable income up to f,10,000, 40 per cent on the $f_{10,001}$ - $f_{12,000}$ band of taxable income, 45 per cent on the $f_{12,001}$ - $f_{15,000}$ band, 50 per cent on the £15,001-£20,000 band, 55 per cent on the £20,001-£25,000 band and a maximum rate of 60 per cent over £25,000 of taxable income. These rates are charged on both earned and investment incomes. Investment incomes are also liable to a 15 per cent surcharge on the amount by which they exceed £5,000. The tax imposed on an individual is graduated by means of personal allowances and reliefs. In general, the income of married couples is taxed as one but they receive higher allowances than a single person. Husband and wife may choose to have the wife's earnings charged separately for tax on condition that the former receives the single instead of the married personal allowance. But even then the married couple are taxed jointly on their investment income.

For 1979–80 a single person earning £5,000 a year pays £1,113 in income tax, while a married man with the same earned income pays £918. The amount of tax payable by a single person varies from, for example, £84 on an earned income of £1,500 a year to £13,663 on an earned income of £30,000.

Most wage and salary earners pay their income tax under a PAYE ('Pay as You Earn') 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 and on all income arising abroad of persons resident in Britain. Interest on certain British government securities belonging to persons 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 allowed.

Corporation Tax

Companies pay corporation tax at a single rate on all their profits, whether distributed or not. Only a proportion of any capital gains is included in total profits, with the result that chargeable gains as a whole are subject to a lower effective rate of tax. Income tax is not deducted from dividends but 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 corporation tax bill and the recipient of the distribution in respect of which the advance payment was made is entitled to a tax credit, which satisfies the liability to income tax at the basic rate.

The rate of corporation tax is fixed retrospectively in the Budget for the past financial year; for the financial year 1978 (1 April 1978–31 March 1979) it is 52 per cent with a reduced rate of 42 per cent for small companies (as defined in the Finance Acts 1972, 1974, 1976, 1977, 1978 and 1979). The tax is assessed on the profits of accounting periods, the rate of tax being the rate for the financial year in which the accounting period falls. Where an accounting period straddles 31 March the profits are apportioned on a time basis. Relief is given by an interim scheme for the rise in the value of stocks and work in progress between the beginning and the end of the accounting period. The Government is to consult with the accountancy profession on a possible permanent scheme of relief following the profession's recent proposals for a system of inflation accounting. Meanwhile deferred tax liability arising from stock relief for 1973–74 and 1974–75 has been written off. Outstanding relief for each subsequent year will also be written off after a six-year interval.

As part of its policy for encouraging small businesses, the Government has raised the qualifying profits limits for the small companies rate of corporation tax to between £,60,000 and £,100,000.

Petroleum Revenue Tax Under the Oil Taxation Act 1975 a petroleum revenue tax (deducted in computing profits for corporation tax) is charged on profits from the winning, as opposed to refining or other form of processing, of hydrocarbons under licence in Britain and on its continental shelf. The tax was increased from 45 per cent to 60 per cent on 1 January 1979. Each licensee of an oilfield is charged on the profits for that field, computed for half-yearly periods.

Taxes on Capital

The Government is studying capital transfer tax and capital gains tax, with a view to making the taxation of capital simpler and less oppressive.

Capital Transfer Tax A comprehensive tax, capital transfer tax, applies to transfer of personal wealth in three main areas: lifetime gifts; transfers on death; and transfers relating to settled property (that is, any property held in trust). The tax is chargeable in respect of a person's lifetime transfers as they occur and on a cumulative basis. The final stage of cumulation is the inclusion of the property 'passing' on an assumed transfer of the whole of the deceased's estate immediately before the death. The rates of tax applicable are progressively higher on successive slices of the cumulative total of chargeable transfers, with a lower scale of tax for lifetime transfers than for transfers on death. Under both scales the first £25,000 of transfers is exempt; the rates on the remainder rise from 5 per cent on the slice between £25,000 and £30,000 to 75 per cent on the slice between £25,000 and £30,000 to 75 per cent on the slice between £25,000 and £30,000 to 75 per cent on the excess over £2.01 million for transfers on death.

Capital Gains Tax

Capital gains accruing 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 normally 30 per cent, but in the case of individuals may be less, depending on their circumstances. For small businesses the tax on gifts and certain deemed disposals of business assets may be deferred until the assets are sold. Certain assets may be exempt from tax, including the principal private residence, chattels worth less than £2,000 (and any chattels, except those used for the purpose of a trade, with a predictable life of less than 50 years), private motor cars and National

Savings Certificates. An individual is exempt from capital gains tax where the total net gains do not exceed £1,000 in any year; where the gains do not exceed £5,000, the excess over £1,000 is charged at a reduced rate of 15 per cent; where the gains exceed £5,000, liability is limited to tax of £600 plus half of the excess over £5,000. This marginal relief runs out at £9,500. In addition, the gains on gilt-edged securities are exempt from the tax if the securities were held for more than 12 months.

Development Land Tax

The Development Land Tax Act 1976 introduced a development land tax (DLT) on development value in place of the charge on development gains and on first letting introduced in the Finance Act 1974. For disposals taking place on or after 12 June 1979 the rate of DLT is 60 per cent but the first £50,000 of development value realised in any financial year is completely exempt. Exemptions from DLT include the sale or development of owner-occupied residences.

Taxes on Expenditure

The largest group of taxes on expenditure are those administered by the Board of Customs and Excise, namely VAT, car tax and the excise duties on tobacco, hydrocarbon oil, alcoholic drinks and betting and gaming, and the protective duties, chargeable as Community customs duty in accordance with the EEC Common Customs Tariff (no such duties are chargeable on goods which qualify as Community goods). These taxes are usually referred to as indirect taxes since they are normally paid by the importer, manufacturer or wholesaler, who adjusts the prices charged to customers accordingly.

All the excise duty goods (other than certain hydrocarbon oils) are subject to VAT. Light hydrocarbon oil (petrol) is taxable at 15 per cent. The Chancellor of the Exchequer has power to vary between Budgets the amounts of the VAT rates by up to 25 per cent, and the rate of any of the other main groups of excise duties (that is, tobacco, alcoholic drinks, oil and the minor excise duties) by up to 10 per cent. This power, known as the 'regulator', requires annual renewal for alcoholic drink, oil and the minor excise duties. The regulators for VAT and tobacco products duty are independently adjustable under powers not

requiring renewal.

Value Added Tax Value added tax (VAT) is charged at each stage in the production and distribution process. The final tax is borne by the consumer. A taxable person (generally, a trader carrying on a business with a turnover of more than f,10,000 a year) is charged by suppliers of goods and services with VAT ('input' tax). The trader then charges the customer with VAT on goods and services supplied ('output' tax). The trader pays to Customs and Excise the difference between output and input tax. Although VAT falls on imported goods, most exports are zero-rated and VAT entering directly into export costs can be reclaimed. VAT is chargeable at 15 per cent.

> VAT is a broadly based tax falling on final consumers' expenditure except where there are strong social or economic reasons for giving relief. There are two basic methods by which supplies of goods and services may get relief from VAT: zero-rating, when a trader does not have to charge tax to a customer, but can reclaim any input tax paid to suppliers, and exemption, when a trader does not have to charge a customer any output tax but is not entitled to deduct or reclaim any input tax relating to the goods or services which he sells. The most important supplies to which zero-rating applies are most types of food (except in the course of catering); books, newspapers and periodicals; fuel (except for petrol and other fuels for road use); construction of buildings; exports (goods

and many services); public transport fares; young children's clothing and foot-wear; and drugs and medicines supplied on prescription. Exemption applies to land (including rents), insurance, postal services, betting, gaming other than by means of a gaming machine and lotteries, finance, education, health and burial and cremation.

Car Tax

New cars and motor caravans, whether British made or imported, are chargeable with car tax at 10 per cent on the wholesale value. VAT falls on the price including car tax.

Betting and Gaming Duties

The principal betting duties are: the pool betting duty (which applies to football pools and betting by coupon at fixed odds) charged at a rate of 40 per cent of the stake money; and the general betting duty, which is charged at the rate of 7.5 per cent of stake money except for on-course betting, which is charged at 4 per cent. Gaming is taxed at different rates mainly by licence fees.

Vehicle Excise Duty The annual tax on motor vehicles is collected by the Department of Transport; the proceeds are paid into the Consolidated Fund. The licence duty on a private motor car is £50 a year; motor cycles and three-wheel vehicles, etc., pay £5, £10 or £20 a year according to engine capacity. Goods vehicles are taxed by unladen weight, and taxis and buses by seating capacity.

National Insurance Surcharge The national insurance surcharge took effect from the start of the 1977–78 financial year. It is in the form of a levy paid by employers, along with their national insurance contributions, in respect of their employees and is equal to 3.5 per cent of employees' earnings up to £135 per week (earnings of less than £19.50 per week are exempt). Generally it is assumed that the incidence of this tax will be passed forward into prices, so that it ranks as a tax on expenditure.

The National Debt On 31 March 1979 the total National Debt was estimated at £86,974 million, of which £4,283 million was repayable in currencies other than sterling, mainly to the United States Government. Of the £82,691 million of internal debt, £12,139 million was short-term debt, mainly in the form of 91-day Treasury bills, while the long-term loans included a variety of stocks, bonds, loans and certificates carrying fixed rates of interest and with fixed or indeterminate dates of repayment. The National Debt relates only to the liabilities of the National Loans Fund (see p 343) which includes official holdings of central Government debt by other central Government funds.

PUBLIC FINANCE IN NORTHERN IRELAND The general system of public finance in Northern Ireland is, in its main features, similar to that operating in Great Britain. The major sources of revenue are the main national taxes imposed by the United Kingdom Parliament over the whole country. The Northern Ireland share of the yield of United Kingdom taxes is paid out of the Consolidated Fund of the United Kingdom into that of Northern Ireland. Revenue also accrues from local resources such as the regional rate and from certain non-tax revenue. There is also an annual grant-in-aid voted by Parliament (£560 million in 1978–79 which, together with the attributed share of United Kingdom taxes, rates and miscellaneous sums, amounted to a total of £1,566 million). Loans from the United Kingdom National Loans Fund are available (up to a limit of £1,000 million) to finance capital expenditure programmes in Northern Ireland.

Various funds have been established in Northern Ireland, in addition to statutory Reserve and Sinking Funds, for specific purposes. In general, these

follow the pattern for Great Britain, the principal funds being those relating to national insurance and government loans. The latter constitutes a pool of money available mainly for local and public authority borrowings; on 31 March 1979 a sum of approximately £311 million was outstanding against such borrowers.

FINANCIAL INSTITUTIONS

THE BANKING SYSTEM The British banking system comprises a central bank; deposit banks which perform the usual main banking services; the British offices of domestic and overseas banks whose main business is in other countries; merchant banks and other specialised institutions.

The Central Bank 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. As the central bank, the Bank acts as banker to the Government, to overseas central banks and to deposit banks and is the lender of last resort to the banking system; it is the note-issuing authority and the registrar for some 200 government, nationalised industry, local authority, public board and Commonwealth government stocks. As agent for the Government, the Bank administers exchange control (now applicable to Rhodesia only, see p 366). On behalf of the Treasury it manages the Exchange Equalisation Account (EEA), which holds Britain's official reserves of gold, foreign exchange and Special Drawing Rights (SDRs) on the International Monetary Fund. Using the resources of the EEA, the Bank may intervene in the foreign exchange market both to prevent undue fluctuations in the exchange value of sterling and to conserve the means of making payments abroad.

As banker to the Government, the Bank examines and seeks to anticipate banking and financial problems and undertakes the appropriate operations in the money, capital and the foreign exchange markets; consequently it has a major responsibility for advising the Government on the formulation of monetary policy and for its subsequent execution. It is also the main channel of communication between the deposit banks and other financial institutions of the City of London on the one hand and the Government on the other.

The Bank's implementation of monetary policy is carried out primarily through control over interest rates and through direct controls over the banking system. It administers directly the official discount rate, known as Minimum Lending Rate (MLR), which is the rate at which the Bank will normally provide funds to the discount market as a lender of last resort. MLR in turn can be expected to have an influence on other short-term interest rates. In addition, the authorities can influence interest rates through their daily operations in the money market and the terms on which they offer gilt-edged stock.

The Bank's direct controls over the banking system include the setting of a 12·5 per cent minimum ratio of specified reserve assets to total eligible liabilities (broadly, sterling deposits drawn from outside the banking system with an original maturity of two years or less plus the banks' net foreign currency liability). Second, the Bank can call for special deposits as a percentage of total eligible liabilities, which generally bear interest at the Treasury bill rate but which do not count as reserve assets and which therefore contract the banks' ability to lend. In addition, a supplementary special deposits scheme can be operated; this requires a bank to place non-interest bearing supplementary special deposits with the Bank of England for every percentage growth in the interest-bearing element of its eligible liabilities beyond a certain specified rate

over a defined period. The Bank of England has also issued qualitative guidance on the direction of bank lending; this provides for priority to be given to the finance required by manufacturing industry, for the expansion of exports and for import saving.

Under the Banking Act 1979 all deposit-taking businesses which are not specifically excluded require authorisation from the Bank of England and are subject to its continuing supervision. Authorisation may take the form either of recognition as a bank or of a licence to take deposits. The Act also set up a

deposit protection scheme to protect the funds of depositors.

The Bank of England has the sole right in England and Wales of issuing bank notes. 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 an amount specified by legislation for each bank, must be fully covered by holdings of Bank of England notes. The provision of coin for circulation is the responsibility of the Royal Mint, a government department.

The Deposit Banks

The primary business of the deposit banks is the receipt, transfer and encashment of deposits. The principal deposit banks are the six London clearing banks, three Scottish clearing banks and two Northern Ireland banks. Mergers have resulted in the formation of six banking groups, four based in London and two in Scotland. The two Northern Ireland banks are owned by London clearing banks, but two groups of banks based in the Irish Republic also operate in Northern Ireland.

In August 1979 sterling sight and time deposits with these banks from non-bank customers in the British public and private sectors amounted to £32,639 million and accounted for 74 per cent of the total of such deposits with all banks in Britain, that is including the accepting houses, overseas banks, consortium banks and other British banks. Sight accounts are repayable on demand and no interest is generally paid on them, but on time deposits interest is paid (at a rate below individual banks' base rates). The deposit banks provide full banking services throughout Britain, and operate through some 14,000 branches. Several of them have interests in British overseas and Commonwealth banks, and in other banks which have been formed specially to compete in international markets. They have also acquired substantial interests in hire-purchase finance houses, and some have set up their own unit trusts and merchant banks.

The deposit banks' reserve 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. The banks also hold a proportion of their assets as portfolio (mainly longer-dated British government securities) or trade investments.

The banks' profits are largely earned through their advances to customers partly in the form of overdrafts¹ and partly in the form of loans (with or without collateral security). In August 1979 sterling advances by the London clearing

banks amounted to 67 per cent of their sterling deposits.

The bank giro, a credit transfer scheme, and the direct debiting by which a creditor with the prior approval of the debtor may claim money due to him direct from the latter's banking account, have helped to improve the money transmission services. An increasing number of banks have automatic cash dispensing machines and many are also introducing more automated banking facilities. Credit cards are in widespread use for the settlement of accounts in

¹ Overdrafts are a short-term financial facility enabling customers to overdraw their accounts and were developed to cover fluctuating working capital requirements.

retail shops; and cheque cards enable the card holder to cash a cheque up to a specified credit limit at any office of the major British and Irish banks and at offices of many banks overseas.

Membership of the London Bankers' Clearing House, which deals with the clearing of cheques and drafts, consists of the Bank of England and the London clearing banks, together with the Co-operative Bank and the Central Trustee Savings Bank, which became members in 1975. In 1978 cheques and drafts passing through the London clearing system averaged in value £237,000 million monthly.

National Girobank

The Post Office National Girobank (known as National Giro until 1978), which was introduced in 1968 to provide a low-cost current account banking and money transfer service, is operated through most post offices in Britain. All accounts and transactions are maintained by means of a computer complex at Bootle, Merseyside. In March 1979 Girobank had 670,000 accounts with balances of over £300 million. The number of transactions has risen from an annual rate of 80 million in March 1969 to one of about 300 million in September 1979. In addition to its services to individuals, Girobank's services to commerce, industry and the public utilities include a facility whereby organisations with dispersed branches, depots and representatives can rapidly channel receipts into their central account. Some 160 local authorities as well as voluntary housing associations use Girobank's rent collection services. Girobank's international services also provide money transfer facilities in Europe linking over 19 million account holders in the European Community and other countries in Western Europe.

The range of banking services provided by Girobank has been widened progressively to include personal loans, a cheque guarantee card, limited overdrawing for personal customers and overdrafts for corporate customers, deposit accounts, budget accounts, bridging loans, travellers' cheques and foreign currency, bureaux de change and the facility to draw cash at 75,000 post offices in Europe.

Overseas Banks

Altogether 395 overseas banks and financial institutions were represented in London in 1978, through branches, subsidiaries, representative offices and consortia. There were 308 banks directly represented in London, while 87 banks and financial institutions were represented through a stake in one or more of the 31 joint venture banks operating in London. Of those directly represented, 65 were from the United States, 24 from Japan and 107 from Europe, of which 56 were from the European Community. 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.

The Merchant Banks

Merchant banks have traditionally been primarily concerned with acceptance credits¹ and with the sponsoring of capital issues on behalf of their customers. Today they have a widely diversified and complex range of activities with an important role 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.

¹ Acceptance credits are usually short-term (90 days) arrangements to finance exports from, and imports to, Britain and other markets. The expression is derived from the method of financing trade by which commercial bills are 'accepted' or guaranteed by a merchant bank against documents, after which they may be discounted for cash by a discount house.

The Discount Market

The Discount Market is an institution which is unique to the City of London. Its function in the monetary system is to provide a financial mechanism designed to promote an orderly flow of short-term funds. The market consists of 11 discount houses, five money traders and two discount brokers, all of which borrow money 'at call' or short notice and lend for somewhat longer periods. The discount houses have recourse to the Bank of England as lender of last resort. The Bank lends to them generally overnight or for seven days at minimum lending rate, although it may charge a higher rate. Most of the market's borrowed funds come from the banks, which are thus provided with a flexible means of earning a yield on surplus funds which they have at any given time, although an increasing proportion is also coming from industry.

The assets of the discount houses mainly consist of Treasury and commercial bills, government and local authority securities and negotiable certificates of deposit denominated in both sterling and US dollars. The discount houses accept as a formal responsibility that they should cover the government's need

to borrow on Treasury bills which are offered on tender each week.

National Savings

The Department for National Savings is responsible for the administration of Government savings schemes: National Savings Bank accounts, National Savings Certificates, British Savings Bonds, Premium Savings Bonds and Save As You Earn contracts. Government policy is directed towards encouraging investment, primarily of personal savings, in these schemes, particularly as they represent a major source of funds for financing the public sector borrowing requirement. At November 1979 National Savings totalled £12,328 million. Facilities are provided by National Savings for the purchase of government stocks ('gilts'); a selection of about 50 stocks is held on the National Savings Stock Register. Gift Tokens are also available at most post offices.

National Savings Bank The National Savings Bank provides a countrywide system for depositing and withdrawing small savings at post offices. There are about 21 million active accounts. Ordinary Accounts bear interest at 5 per cent and the first £70 of annual interest is tax-free. Up to £50 can be withdrawn on demand at any savings bank post office, but a few days' notice is required for larger amounts. The money is lodged with the National Debt Commissioners and is invested in government securities. Deposits bearing a higher rate of interest may be made in Investment Accounts. All deposits carry a government guarantee. At the end of May 1979 the sum of the two accounts totalled £3,273 million.

National Savings Certificates National Savings Certificates, in units of £1 (minimum purchase £10), are encashable at par at any time. Interest, which is free of income tax and capital gains tax, is paid only on encashment. The maximum permitted holding of the current Eighteenth Issue is £1,500 (it will be superseded by the Nineteenth Issue, maximum holding also £1,500, in February 1980). Index-linked National Savings Certificates Retirement Issue are available only to men aged 65 and over and women aged 60 and over at £10 for each one unit certificate. Interest does not accrue periodically but instead, subject to the certificate being held for one year, the repayment value is related to the movement of the general index of retail prices. If held for five years a bonus of 4 per cent of the purchase price is added to the repayment value. The maximum permitted holding is £1,200.

British Savings Bonds British Savings Bonds, 9.5 per cent, are sold in units of £5. If the bonds are held to maturity (five years from the date of purchase) they are repaid with a tax-free bonus of 4 per cent. The maximum permitted holding is £10,000.

Premium Savings Bonds Premium Savings Bonds are in units of £1 (minimum purchase is £5) and individual holdings are limited to £3,000. After a qualifying period of three months the bonds give investors a chance to win tax-free prizes. There is a weekly draw for prizes of £100,000, £50,000 and £25,000 and a monthly draw offering thousands of prizes ranging in value from £50 to £10,000. Total net sales of bonds to mid-1979 were some £1,400 million.

Save As You Earn

The Third Issue of the Save As You Earn (SAYE) scheme introduced in 1975 is index linked. The scheme enables savings to be made in fixed regular monthly amounts over five years, with a minimum of £4 and a maximum of £20, by means of deductions from pay or by other regular payments. At the end of five years, the repayment value is the total contributions plus any increase due to index-linking of monthly contributions. Completed savings which are not withdrawn qualify for fresh index-linking and a bonus equal to two monthly contributions at the end of seven years. Savers who wish to stop payments are able to withdraw the total sum saved (but there cannot be partial withdrawals). Tax-free compound interest is then paid at the rate of 6 per cent a year on amounts withdrawn after the first year.

Ulster Savings

Northern Ireland issues separately Ulster Savings Certificates and Ulster Development Bonds on similar terms to the corresponding National Savings Certificates and British Savings Bonds.

Trustee Savings Banks

The Trustee Savings Banks (TSBs), most of which were founded in the nine-teenth century, operate under their own trustees but are subject, under the Trustee Savings Banks Acts 1969, 1976 and 1978, to the supervision of the Trustee Savings Banks Central Board and the Treasury. Following a planned programme of amalgamations, there were 18 individual banks in June 1979 (compared with 67 in 1975) with about 1,640 branches, 14 million accounts and total deposits in excess of £5,000 million. The 1976 Act empowered TSBs to provide a full range of banking services including credit services. The TSB credit services include personal loans, temporary overdrafts, bridging loans, and home improvement loans. The TSBs also have their own credit card, Trustcard, which operates within the VISA system. In addition, a range of life assurance and unit trust facilities are available. The TSBs have also introduced a pilot scheme offering small-scale commercial loans.

OTHER FINANCIAL INSTITUTIONS Many special financial facilities, which are supplementary to the credit facilities of the banks, are provided through institutions outside the banking system. These include institutions providing credit in specialised forms, such as hire purchase finance companies, and leasing and factoring companies; institutions which manage investments on behalf of the public, such as pension funds, life assurance companies, unit trusts and investment trusts; institutions which provide financial services, such as the Stock Exchange, with its associated stockbrokers; commodity markets; and the insurance market; and intermediaries which are less dependent on the financial markets in the City of London, such as building societies and credit unions.

Finance Houses Although there are a large number of firms engaged in the financing of hire purchase and other instalment credit transactions, about 90 per cent of all finance house business is accounted for by the 40 firms which constitute the Finance Houses Association (FHA). At the end of June 1979 the value of instalment credit debt outstanding to the members of FHA, including those recognised as banks,

amounted to £5,108 million. A substantial amount of new credit extended by finance houses related to cars and commercial vehicles, including motorcycles and caravans, the remainder relating to industrial and building equipment and other goods.

The leading finance houses comply with the authorities' policies on lending similar to those applied to banks, and all finance houses are required to observe term controls affecting the minimum deposits and maximum repayment period for specific goods financed by certain forms of lending. Finance houses with total eligible liabilities exceeding \pounds_5 million are subject to the same system of credit control as that applied to banks (see p 349).

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 is growing in importance, partly because the leasing companies can take advantage of investment incentives to the benefit of customers whose tax position would otherwise make them unavailable. In 1978 new assets leased by the 47 members of the Equipment Leasing Association amounted to £1,214 million, some 10 per cent of British investment in capital equipment.

Factoring Companies

Factoring companies purchase the trade debts due to a business and provide an accounting and debt collection service. Services available cover exports from and imports to Britain, as well as domestic trade. In 1978 the eight members of the Association of British Factors handled £1,335 million worth of turnover.

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.

Finance for Industry Limited (FFI) was formed in 1973 as the holding company for two previously separate but related corporations, the Finance Corporation for Industry (FCI) and the Industrial and Commercial Finance Corporation (ICFC). The purpose of the merger was to provide, in one specialist financial institution, the capacity to support investment programmes over the whole range of industry. The FCI provides medium-term funds at fixed and variable interest rates for large companies in excess of £2 million. During the year ended 31 March 1979 it advanced a total of £63 million and had commitments and guarantees at the end of the year of a further £40 million. A total of 20 customers were involved. The ICFC provides medium-and long-term funds at fixed interest rates for the small and medium sectors of industry. At the end of March 1979 the ICFC had gross facilities outstanding of £290 million in 2,723 companies. Its normal lending limits range from £5,000 to £2 million for periods between seven and 20 years. The shares in FFI are owned by the Bank of England (15 per cent) and the individual London and Scottish clearing banks.

Equity Capital for Industry Ltd (ECI) was formed in 1976 as a new specialist long-term institution with the primary purpose of providing equity or equity-type capital for industry in Britain which cannot appropriately be provided through the normal market mechanism. Its authorised capital is £50 million and the shares are largely held by insurance companies and life offices, investment trust companies, unit trusts and FFI. There is an unauthorised unit trust associated with ECI whose units are held by pension funds so as to enable them

to participate in the provision of capital.

The Agricultural Mortgage Corporation was established in 1928 for the purpose of making loans to farmers. Its authorised share capital is £1.5 million and at 31 March 1979 loans and investments amounted to £388 million.

The Commonwealth Development Finance Company (CDFC) is no longer confined to the Commonwealth in its activities. It supports business enterprise overseas by providing finance in the form of share capital and loans on mutually acceptable terms. Its authorised share capital is £30 million, of which about $14\frac{1}{2}$ million 'A' ordinary shares of £1 (£0·10 paid) are held by industrial, shipping, mining and banking interests in Britain, and $11\frac{3}{4}$ million 'B' ordinary shares of £1 (£0·50 paid) are held by the Bank of England and certain central banks in the Commonwealth. At 31 March 1979 the CDFC held investments of about £30 million spread over a wide range of industries in 40 countries.

The Commonwealth Development Corporation (CDC) was set up in 1948 and undertakes projects for the promotion and expansion of a wide range of enterprises within and outside of the Commonwealth. At the end of 1978 the

CDC had a total capital commitment of £397 million (see p 86).

The Crown Agents The Crown Agents for Oversca Governments and Administrations provide financial, professional and commercial services for some 100 governments, mostly of independent countries, and over 200 overseas public authorities and international bodies. Individual agents have been appointed by the Minister of Overseas Development. The office is not a government department but a public service which is responsible to its principals for its business operation.

When the Crown Agents Act 1979 comes into force on 1 January 1980 the unincorporated Crown Agents will be replaced by two statutory corporate bodies, sharing common management. The Crown Agents for Oversea Governments and Administrations will continue to operate as agents on behalf of government and public sector bodies in Britain and overseas in such areas as procurement, recruitment and investment management. They will carry on their existing range of activities such as consultancy work, in their own right, subject to specified ministerial controls. The Crown Agents Holding and Realisation Board will have the duty of holding and realising on the best possible terms the remaining investments in property and secondary banking entered into by the unincorporated agents on their own account.

Pension Funds

Pension funds are administered by trustees in order to invest members' pension contributions, either directly on the market or through intermediaries such as insurance companies. The total market value of funds managed, covering private employers and much of the public sector, was of the order of some £40,000 million at the end of 1978.

Investment
Trust
Companies
and Unit Trusts

Investment trust companies and unit trusts enable investors to spread their risks and obtain the benefit of skilled management.

The usual type of investment trust company is constituted as a public company registered under the Companies Acts with limited liability; its business is to invest its capital in a range of stocks and shares. Like other companies, it may issue several types of stocks or shares and may retain part of its profits to build up reserves. Investment trust companies grew to importance in the latter half of the nineteenth century and have been prominent in directing capital towards overseas investment. At the end of 1978, such companies held assets worth £6,700 million, of which 33 per cent were in overseas securities.

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 must invest the proceeds in a fairly wide range of stock exchange securities. The costs of running the trust are defrayed partly by an initial charge which forms part of the price of a unit and partly by a half-yearly

service charge which is usually taken out of the income of the trust. The level of both charges is controlled by the Department of Trade, from which authorisation is required before units can be offered to the public; this is only granted if the trust deed meets the Department's requirements.

The first British unit trust was formed in 1931 and at the end of 1978 there were almost 2 million unit holdings. The value of the funds invested in authorised trusts depends on the value of the underlying securities; from only £60 million at the end of 1958 they had risen to £3,873 million at the end of 1978. There is a wide variety of trusts, both in the range of investments covered and in the ways of catering for the differing needs of investors.

Building Societies

Building societies are non-profit-making mutual institutions which borrow mainly short-term from individual savers, who are generally able to withdraw their money on demand, and provide long-term loans at variable rates of interest on the security of private dwellings purchased for owner occupation. They also lend to a limited extent to house builders and on the security of business or commercial property. Most societies pay and charge interest on the basis of a structure of rates recommended periodically by the Building Societies Association, the movement's representative body.¹

Building societies have existed in Britain for some 200 years and have been subject to specific legislation governing their operations (now consolidated in the Building Societies Act 1962) since 1836. The present legislation is administered by the Chief Registrar of Friendly Societies, to whom the societies must provide regular statements of their financial position and who has discretionary powers to restrict or suspend a society's operations if he considers that the way in which its business is being conducted may put investors' money at risk.

Building societies account for about 90 per cent of all lending for house purchase in Britain and in recent years they have overtaken the banks as the principal repository for the personal sector's total liquid assets. This growth has been accompanied by a concentration of most of the business in the hands of a few large societies. At the end of 1978 there were 316 registered building societies with total assets of £39,538 million; over half this amount was accounted for by the five largest societies and about 83 per cent of it by the 20 largest. The amount lent on mortgages in 1978 was a record £8,808 million, a 31 per cent increase on 1977.

Credit Unions

A recent development in Great Britain has been the creation of credit unions, of which there are now over 50. Credit unions are small savings and loan clubs where members agree to pool part of their savings in order to provide themselves with low cost credit. The Credit Unions Act 1979 provides a legislative framework within which credit unions in Great Britain can operate. It requires that members of a credit union should have a 'common bond' such as working in the same factory, and provides a system for their registration and supervision by the Chief Registrar of Friendly Societies.

In Northern Ireland they have grown successfully since the Industrial and Provident Societies Act (Northern Ireland) was introduced in 1969.

The Insurance Market

The British insurance industry provides a comprehensive and competitive service domestically and internationally. It has been estimated that British insurers

¹ The income tax on interest is paid by the society on behalf of individual investors, at a rate equal to their average tax rate (22.5 per cent for 1978/79). This means that while those not liable to tax cannot reclaim the tax paid on their behalf, investors who pay at the basic rate receive a better return than would otherwise be the case.

handle some 20 per cent of business placed on the world market. The London market is the world's leading centre for insurance where, in addition to most British companies and Lloyd's, a large number of overseas companies are also represented. It is the world centre for the placement of international reinsurance and, partly as a consequence of this, many British companies have formed close relationships with overseas companies. A certain amount of insurance is provided by friendly societies, banks and trade unions but most insurance services in Britain are in the hands of mutual or joint stock insurance companies or Lloyd's underwriters.

Insurance Companies Although some British insurance companies confine their activities to domestic business, the majority of the large companies undertaking general business, together with underwriters at Lloyd's, regard themselves primarily as international insurers, the largest proportion of their premium income and claims being attributable to international risks. Without such a wide range of interest, the British market would not be able to respond to the high level of demand made on it in respect of very large single risks such as specially designed ships for carrying liquefied gas and offshore oil production platforms. There are about 800 insurance companies authorised to carry on one or more classes of insurance business in Britain, of which about 120 are overseas companies.

Some 310 companies belong to the British Insurance Association and these account for about 95 per cent of the world-wide business of the British insurance

companies market.

Life assurance is available from 300 authorised insurance companies and from certain friendly societies: and a very limited range of contracts is obtainable from certain Lloyd's underwriters. The main types of life policy are whole-life, endowment, unit-linked term assurance and annuities. Many life assurance policies are a form of savings contract as well as protection against losses incurred by premature death.

Lloyd's

Lloyd's, established in the seventeenth century, is an incorporated society of private insurers in London. Although its activities were originally confined to the conduct of marine insurance business, a very considerable world-wide market for the transaction of other classes of insurance business in non-marine, aviation and motor markets has been built up.

Lloyd's is regulated by a series of special Acts of Parliament starting in 1871. The affairs of the Society of Lloyd's in its corporate capacity are administered by the Committee of Lloyd's. The society does not accept insurance itself.

Lloyd's is not a company but a market for insurance, where business is transacted by individual underwriters for their own account and risk and in competition with each other. Insurance may only be placed through Lloyd's brokers, who negotiate with Lloyd's underwriters on behalf of the insured. Only elected underwriting members of Lloyd's, who must transact insurance with unlimited liability and who have met the most stringent financial regulations laid down by the Committee of Lloyd's, are permitted to transact business at Lloyd's; these financial safeguards give security to the Lloyd's policy.

There are some 14,000 underwriting members of Lloyd's grouped into about 360 syndicates and represented at Lloyd's by underwriting agents who accept risks on behalf of the members of their syndicates.

Alongside its marine insurance business Lloyd's has built up a world-wide organisation for the collection and diffusion of shipping intelligence.

Insurance Brokers The insurance market is completed by the insurance brokers, acting on behalf of the insured; brokers 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 of insurance brokers by a Registration Council.

International

Over 60 per cent of the general (that is, non-life) business of members of the Insurance Services British Insurance Association is carried on overseas, partly by reinsurance on the London market and partly through branches and agencies established in over 100 countries. The basic principle of this international business is that resources capable of meeting any potential loss are instantly available for use in any part of the world.

Behind this large and international volume of business stand the very substantial assets of the companies, in addition to substantial reserves of uncalled capital, and the deposits, underwriting trust funds and other resources of Lloyd's underwriters.

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, thus providing a 'common market', which would avoid distortion of competition. Directives in operation cover freedom of establishment to provide services in respect of reinsurance, compulsory motor insurance, freedom of establishment in non-life insurance, and insurance intermediaries. A further directive on the co-ordination of regulations relating to Community co-insurance operations is due to come into force in 1980.

The Stock Exchange

The stock exchanges of the United Kingdom and Irish Republic amalgamated in 1973 to become 'The Stock Exchange' with its main trading floor and central administration in London. There are also trading floors in Glasgow, Liverpool, Manchester, Birmingham and Dublin.

The number and variety of securities 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 European exchanges combined. Some 8,000 securities are quoted on the Stock Exchange; at the end of December 1978 these had a total market value of £,323,650 million. About 6,200 securities of companies were quoted, including a number of leading overseas securities (over 470 in December 1978 with a total market value of £193,420 million). Company issues represented more than four-fifths of the securities at market valuation, the remainder being British, Irish Republic and other overseas government and corporation stocks. Institutional investors, such as pension funds, now own a higher proportion of ordinary shares than individuals.

A market in traded share options opened in 1978 on the Stock Exchange. The market, initially in the shares of ten prominent British companies (now increased to 15), enables investors not only to buy options to purchase shares in future at pre-fixed prices but also to trade in the options themselves. Also in 1978 the Council for the Securities Industry was set up as a self-regulatory body for the securities industry. Its main function is to sustain proper conduct and high standards in the industry.

The Foreign Exchange Market

The market consists of banks and several firms of foreign exchange brokers which act as intermediaries between the banks. It provides those engaged in international trade with foreign currencies for their transactions. The foreign

exchange banks are in close contact with financial centres abroad and are able to quote buying and selling rates for both spot and future delivery. An important function of the market is to engage in arbitrage transactions which serve to eliminate differentials in exchange rates between different centres. 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 precise fixed exchange rate. The Bank of England is responsible for granting recognition to broking houses which wish to trade in the foreign exchange and currency deposit market for 'scheduled' currencies, that is, in those currencies for which a specific brokerage scale is laid down by the Bank.

The London Gold Market

All banks may deal in gold but, in practice, dealings are largely concentrated in the hands of the five members of the London gold market. The five members meet twice daily to establish a London fixing price for gold. This price provides a reference point for world-wide dealings in gold. Although much interest centres upon the fixings, active dealing takes place throughout the day. Forward prices may also be quoted on request.

Commodity 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 physical markets in the City of London. There are also futures markets in cocoa, coffee, grains (wheat and barley), rubber, soya bean meal, sugar, wool and non-ferrous metals (aluminium, copper, lead, nickel, silver, tin and zinc).

19 Overseas Trade and Payments

Although small in area and accounting for only about 1.4 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 more than one-third of all trade.

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, overseas trade has been of vital importance to the economy. Britain exports goods to the value of about £35,400 million, nearly one-quarter of the gross domestic product. It is a major supplier of machinery, vehicles, aircraft, metal manufactures, electrical apparatus, chemicals and textiles. Britain relies upon imports for almost half of its total consumption of foodstuffs, and for most of the raw materials needed for its industries. It is among the world's largest importers of foodstuffs, timber and paper, metals and ores, and other raw materials, petroleum and many other products. Invisible trade is also of great significance to the economy, and net earnings from invisible trade are second only to those of the United States.

A sound commercial banking system and a wide range of financial institutions ensure that commercial needs are met for both short- and long-term finance for international trade. The facilities provided by merchant banks and accepting houses, for example, have long been used to finance shipments of goods not only to and from Britain, but also between overseas countries.

This chapter describes the pattern of Britain's overseas trade (including its distribution by commodity and area). It also summarises the main aspects of Britain's invisible transactions, commercial policy, controls on trade and payments and government services to exporters. The chapter ends with a description of Britain's balance of payments and its external assets and liabilities.

OVERSEAS TRADE

PATTERN OF TRADE

Changes in the value, volume, composition and geographical distribution of exports and imports are outlined in the following paragraphs.

Value and Volume In 1978 Britain's exports of goods were valued at about £35,400 million and its imports of goods at about £36,600 million (both values are free on board—fob—defined below Table 29, and are on a balance of payments basis, as distinct from an overseas trade statistics basis, which for imports includes the costs of insurance and freight, and for both exports and imports includes returned goods). Between 1977 and 1978 the value of exports rose by 10 per cent while that of imports increased by 8 per cent. Over the same period the volume index of exports increased by 3·4 per cent and of imports by 5 per cent;

but the unit value index of exports rose by 3.3 per cent and of imports by 3.6 per cent.

The value and volume of exports and imports, together with the terms of trade index, from 1970 to 1978 are shown in Table 29.

TABLE 29: Exports and Imports: 1970-78^a

	1970	1975	1976	1977	1978
Value (f, million)					
Exports f.o.b.bc	8,121	19,463	25,411	32,148	35,432
Exports f.o.b.bd	8,170	20,198			37,363
Imports f.o.b.bc	8,163	22,699	29,012	33,892	36,607
Imports c.i.f. de	9,163	24,431	31.584	36,978	40,969
Volume Index Nos (1975 = 100)	- ,	,	01,001	00,770	10,707
Exports	80.3	100.0	109.7	118.9	122.9
Imports	82.6	100.0	105.6	107.2	112.6
Unit Value Index Nos (1975 = 100)	02 0	100 0	105 0	107-2	112.0
Exports	50.9	100.0	120.7	142.5	155.1
Imports	42.2	100.0	121.8	141.3	146.4
Terms of Trade (1975 = 100) ^{cf}	120.6	100.0	99.1	100.8	105.9

Source: Trade and Industry

a Figures for recent years are subject to slight revision from year to year.

^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.

^c On a balance of payments basis.

^d On an overseas trade statistics basis.

^e '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. Most of these expenses represent earnings by British firms.

f Export unit value index as a percentage of import unit value index.

Commodity Composition

Exports

About 80 per cent of Britain's exports consist of manufactured goods, both finished and semi-manufactured. By far the most important group of goods is machinery and transport equipment, which in 1978 accounted for 37 per cent of total exports. Exports of machinery alone accounted for 25 per cent of total exports in 1978. The share of chemicals has grown fairly steadily, to reach 11 per cent in 1978. The share of textiles has fallen from 18 per cent in 1948 to 7 per cent in 1960 and 3 per cent in 1978.

Imports

Although Britain is still one of the largest importers of food in the world the value of its imported food supplies has been growing less rapidly than the value of total imports and the ratio of imported food, beverages and tobacco to total imports, on an overseas trade statistics basis, has fallen from 39 per cent in 1954 to 15 per cent in 1978. There has been a similar downward trend in the proportion accounted for by basic materials—from 30 per cent in 1954 to about 8 per cent in 1978.

Imports of petroleum and petroleum products amounted to about 12 per cent of the total value of imports during 1978, when their value was £4,250 million on a balance of payments basis. This was 11 per cent lower than in 1977, with a fall in both price and volume, the latter reflecting increasing production of North Sea oil.

In recent years there has been a significant rise, in Britain as in other industrial countries, in the proportion of imports of finished manufactures. Such imports rose from about 5 per cent of total imports in 1954 to 35 per cent in 1978, when they were valued at £14,501 million. Imports of

semi-manufactures have also been increasing and since 1962 have formed a larger part of the total import bill than basic materials, partly the result of a shift of the early stages of the manufacturing processes to the supplying countries. Imports of chemicals and other semi-manufactures totalled £11,509 million in 1978 and accounted for 28 per cent of total imports.

TABLE 30: Commodity Composition of Trade 1978a

Exports (f.o.b.) ^b	£ million	Per cent
Food, beverages and tobacco	2,912	7.8
Basic materials	1,008	2.7
Fuels	2,375	6.4
Manufactures:	29,984	80.3
Machinery and transport equipment	13,762	36.8
Machinery	9,223	24.7
Road vehicles	3,070	8.2
Other transport equipment	1,470	3.9
Chemicals	4,201	11.2
Metals	3,114	8.3
Textiles	1,238	3.3
Other manufactures	7,669	20.5
Miscellaneous	1,083	2.9
Total	37,363	100.0
Imports (c.i.f.) ^c		7.0
Food, beverages and tobacco	6,142	15.0
Fuels	4,831	11.8
Industrial materials:	14,831	36.4
Basic materials	3,422	8.4
Chemicals	2,759	6.7
Other semi-manufactures	8,750	21.4
Manufactures:	14,501	35.4
Machinery and transport equipment	10,681	26.1
Machinery	6,338	15.5
Road vehicles	2,795	6.8
Other transport equipment	1,548	3.8
Other manufactures	3,820	9.3
Miscellaneous	564	1.4
Total	40,969	100-0

Source: Trade and Industry

Differences between totals and the sums of their component parts are due to rounding.

Geographical Distribution of Trade

Although Britain's trade has, in general, grown fastest in recent years with the rest of the European Community, there was a marked change in the pattern of British exports following the large rise in the price of oil at the end of 1973. As a result of this rise, which generated large reserves of foreign exchange for the oil-exporting countries, British exports to these countries rose in value by 52 per cent between 1973 and 1974, accounting for nearly one-tenth of the total growth in exports over this period. On the other hand, the slowdown in activity in most of the developed economies during 1974 and 1975 adversely affected British exports to these economies.

In 1976 and 1977 there was a return to growth in world trade and exports to the developed industrial countries continued the recovery which began in the latter part of 1975 as economic conditions in the European Community and

^a On an overseas trade statistics basis.

^b See footnote *b* under Table 29.

c See footnote e under Table 29.

the United States improved. Slower growth in world trade in 1978 was similarly reflected in Britain's export performance. Details of Britain's principal export markets and sources of supply in 1977 and 1978 are given in Tables 31 and 32.

Invisible Transactions

As far back as estimates have been made (for nearly two centuries) Britain has usually earned a surplus from its invisible transactions. These 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); and transfers between Britain and other countries (see p 368). Table 33 shows the breakdown of the figures from 1970 to 1978. Services of the private sector (and public corporations) include sea transport and civil aviation, travel, financial services (including insurance) and 'other services' which include commissions on imports, royalties, services between related companies, construction work overseas, agency expenses and many other services.

TABLE 31: Principal British Markets 1977-78

Exports to (f.o.b.) ^a	1977 (£ million)	1978 (£ million)	Percentage change 1977–78
United States ^b	3,095	3,477	+12
Federal Republic of			
Germany	2,526	3,105	+23
Netherlands	2,178	2,256	+ 4
France	2,166	2,530	+17
Belgium-Luxembourg	1,843	2,202	+19
Irish Republic	1,648	2,045	+24
Switzerland	1,435	1,914	+33c
Sweden	1,201	1,171	- 2
Nigeria	1,079	1,133	+ 5
Italy	987	1,124	+14
Denmark	804	841	+ 5
Norway	777	650	-16^{d}
Australia	763	856	+12
Canada	702	741	+ 6
Iran	659	751	+14
Developed countries	23,688	26,392	+11
European Community	12,152	14,103	+16
Rest of Western Europe	5,606	5,710	+ 2
North America	3,821	4,245	+11
Othere	2,110	2,334	+11
Developing countries	8,636	9,800	+13
Oil-exporting countries ^f	4,374	4,767	+ 9
Other	4,261	5,033	+18
Centrally planned			
economies ^g	911	1,070	+18

Source: Trade and Industry

a On an overseas trade statistics basis.

^b Including dependencies.

^c Mainly due to an increase in exports of precious stones.

d Largely due to substantial deliveries of oil rigs in 1977.

^e Australia, New Zealand, South Africa, Japan.

f Algeria, Bahrain, Brunei, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Oman, Qatar, Saudi Arabia, Trinidad and Tobago, United Arab Emirates, Venezuela.

⁹ Soviet Union, Poland, German Democratic Republic, Hungary, Czechoslovakia, Albania, Bulgaria, Romania, China, North Korea, Vietnam, Mongolia.

Differences between totals and the sums of their component parts are due to rounding.

The balance on invisibles in 1978 was £2,207 million. Gross earnings of £18,335 million from invisible exports were about half the total of £35,432 million from visible exports. The surplus in 1978 was higher than the surplus of £2,037 million in 1977 despite a sharp increase in the net contribution to the European Community, due to the continued buoyancy of some private services and a recovery in the surplus on interest, profits and dividends.

TABLE 32: Britain's Principal Sources of Supply 1977-78

Imports from (c.i.f.) ^a	1977 (£ million)	1978 (£ million)	Percentage change 1977–78
United States ^b Federal Republic of	3,695	4,223	+14
Germany	3,608	4,513	+25
France	2,694	3,212	+19
Netherlands	2,524	2,525	
Belgium-Luxembourg	1,685	1,831	+ 9
Italy	1,544	1,935	+25
Switzerland	1,333	2,156	+62
Irish Republic	1,299	1,606	+24
Sweden	1,268	1,344	+ 6
Canada	1,214	1,089	-10
Saudi Arabia	1,132	871	-23
Japan	1,064	1,283	+21
South Africa	877	768	-12
Norway	854	1,445	+69
Denmark	816	962	+18
Developed countries	27,393	31,752	+16
European Community	14,171	16,584	+17
Rest of Western Europe	5,576	6,991	+25
North America	4,948	5,341	+ 8
Otherc	2,698	2,834	+ 5
Developing countries	8,162	7,855	- 4
Oil-exporting countries ^d	3,800	3,470	- 9
Other	4,362	4,385	+ 1
Centrally planned	.,	,,505	1 1
economies ^e	1,371	1,300	- 5

Source: Trade and Industry

The deficits on government services have related predominantly to military services overseas, which have remained fairly steady in recent years, though currency changes have caused the sterling value to rise. Substantial government transfer payments relate to economic grants to developing countries (see p 86) and subscriptions to international organisations including, since 1973, Britain's contribution to the common budget for the financing of European Community expenditure.

COMMERCIAL POLICY

Britain has long been an advocate of the removal of artificial barriers to trade, and to this end has taken a leading part in the activities of such organisations as the General Agreement on Tariffs and Trade (GATT) (since 1973 as part of the European Community, which operates as a single unit), the International Monetary Fund (IMF), the Organisation for Economic Co-operation and Development (OECD) and the United Nations Conference on Trade and

^a On an overseas trade statistics basis.

^b Including dependencies.

c See footnote e under Table 31.

d See footnote f under Table 31.

e See footnote g under Table 31.

Devclopment (UNCTAD) (see p 88). As a member of the European Community Britain participates in the development of the Community's commercial policy. The Community's common customs tariff is, on average, at a similar level to the tariffs of other major industrial countries.

General Agreement on Tariffs and Trade Protective tariffs have been considerably modified in recent years as a result of negotiations held under the auspices of the GATT, which also seek to reduce tariffs and other barriers to trade and to eliminate discrimination in international commerce.

As a result of the 'Kennedy Round' (1964–67), a series of GATT tariff negotiations, average reductions of over 30 per cent were made by the major trading countries, including Britain, in their tariffs on industrial goods. In the 'Tokyo Round' (1973–79), yet to be fully ratified, agreements have been reached on matters including phased cuts in the industrial tariffs of the main industrial trading partners of the European Community, matched by equivalent reductions in the common customs tariff of the Community; an agreement on subsidies and countervailing duties (duties imposed by an importing country to offset the benefit of a subsidy on exports), whereby developed countries undertake not to grant export subsidies and all signatories undertake not to apply countervailing duties unless it can be demonstrated that a subsidy causes or threatens material injury to domestic industry; and an agreement aimed at prohibiting unfair and arbitrary methods of customs valuation.

TABLE 33: Britain's Invisible Overseas Transactions 1970-78

			20110 2710	, 0	£ million
	1970	1975	1976	1977	1978
Total invisibles					-
Credits	5,078	11,241	14,665	16,413	18,335
Debits	4,260	9,626	11,906	14,376	16,128
Invisible balance	+818	+1,615	+2,759	+2,037	+2,207
Constituent items					. ,
Services:					
General governmenta	-309	-570	-667	-731	-697
Private sector (and public corporations):					
SEA TRANSPORT	-80	+31	-13	-17	-171
CIVIL AVIATION	+50	+116	+241	+244	+348
TRAVEL	+50	+301	+700	+1,166	+955
FINANCIAL SERVICES	+439	+1,005	+1,286	+1,371	+1,488
OTHER SERVICES	+303	+480	+710	+958	+1,366
Interest, profits and dividends:	0.00	=4.4	4.10	4	
General government	-269	-514	-648	-688	-456
Private sector (and public corporations)	+828	+1,276	+1,947	1 000	1 1 202
Transfers:	-020	T1,270	十1,747	+889	+1,292
General government	-177	-367	-784	-1,111	-1,700
Private sector	-17	-143	-13	-44	-1,700 -218

Source: United Kingdom Balance of Payments 1979 Edition

a Central government and local authorities.

Anti-Dumping

The GATT Anti-Dumping Code, to which Britain is a party, together with the Customs Duties (Dumping and Subsidies) Act 1969 and a European Community regulation, control the anti-dumping action that may be taken to protect British industry against unfair competition and the criteria by which allegations of dumping are judged.

Community Preference

All tariffs on trade between Britain and the other European Community countries have been eliminated. Britain applies the common customs tariff to all countries neither belonging to, nor having any special arrangement with, the Community, subject to special arrangements for some industrial materials. Virtually all industrial tariff barriers between the European Community and the remaining member countries of the European Free Trade Association (EFTA), to which Britain belonged between 1960 and 1972, have been dismantled.

and Developing Countries

Commonwealth Preferential tariff treatment for British imports from other independent Commonwealth countries dating from the Ottawa Conference of 1932 has been phased out since accession to the European Community. In the case of 28 developing Commonwealth countries in Africa, the Caribbean and the Pacific (ACP), Commonwealth preference has been replaced by the trade provisions of the Convention of Lomé, which came into effect on 1 July 1975 (see p 73).

Developing and industrial countries, including Britain, have agreed to establish a common fund to help to maintain stabilised prices of raw materials (see p 88). Work is in hand in UNCTAD to finalise the detailed arrangements for this new institution. It is envisaged that the fund will have capital of up to \$750 million, to which Britain's contribution will be approximately \$20 million.

CONTROLS ON PAYMENTS AND TRADE

There are now very few restrictions maintained by Britain on overseas transactions. Exchange controls on capital movements, except in relation to Rhodesia, were abolished in October 1979, following partial relaxations earlier in the year. As a result of the abolition of these controls (originally introduced as an emergency measure at the beginning of the second world war) British residents are completely free to purchase and use foreign currency for any purpose, including direct or portfolio investment abroad, and remittances and gifts abroad, and to maintain foreign currency bank accounts. Controls on the lending of sterling abroad have also been removed. Gold may be freely bought and sold. These measures enable Britain to meet in full its obligations on capital movements under European Community provisions and also those under the OECD Code on Capital Movements. Controls on trade in goods are described below.

Import and **Export Control**

Under the Import, Export and Customs Powers (Defence) Act 1939 the Department of Trade is empowered to require an individual import licence. Only a narrow range of goods is subject to export control. Several other departments have separate powers to control imports and exports for specific purposes.

Import Controls

In accordance with its international obligations under the GATT, and to the IMF and the European Community, Britain has progressively removed quantitative restrictions from almost all its imports from the market economies; those controls that remain (for example the GATT Multi-Fibre Arrangement, approved by the European Community in December 1977) predominantly affect textile goods. There are comparatively few quantitative restrictions on imports from centrally planned economies, and progress towards liberalisation continues to be made wherever possible. In accordance with its obligations to the European Community, Britain has also removed all quantitative restrictions on imports of goods of Community origin, with the exception of certain internationally recognised restrictions on a few goods such as arms, ammunition and radioactive materials and those on coffee, cocoa and cocoa products. Some further restrictions or prohibitions are applied by other departments under separate legislation for the prohibition of goods bearing false or misleading indications of origin or improperly bearing a registered trade mark, for the protection of

health or public safety, in the interest of conservation, and for other non-economic reasons (for example, on animals, drugs and explosives).

There is a general import restriction on goods from Rhodesia as part of the Government's sanctions policy against the illegal régime.

Export Controls

The great majority of British exports are not subject to any government control or direction. The controls that are in operation are imposed to supervise exports of military and strategic significance. They also apply to certain metals, metal products (including certain British coins), waste and scrap; on cattle, sheep, pigs, horses, asses and mules, for humanitarian purposes and on cattle, swine and certain meat exported to another member State of the European Community, for health certification purposes; on cocoa and cocoa products and on endangered species of animals and plants, in accordance with international agreements; on photographic material over 60 years old and valued at £200 or more per item and all other items over 50 years old, to restrict the export of items of national importance; on salmon and trout, to inhibit out-of-season fishing; on controlled (dangerous) drugs; on British spirits (beverages) in casks of less than nine gallons; and on European Community Common Agricultural Policy (CAP) products. All exports to Rhodesia are subject to control.

GOVERNMENT SERVICES The Government assists exporters by its efforts to create conditions favourable to the export trade and by providing information and advice about opportunities for trade in other countries and credit insurance facilities. Export promotion is also assisted by the Scottish Council (Development and Industry), the Development Corporation for Wales and in Northern Ireland by the Department of Commerce.

British Overseas Trade Board

The British Overseas Trade Board (BOTB) directs Britain's official export promotion services, which include the provision of export intelligence, assistance to British exporters in appointing agents and locating potential importers, help to exporters at trade fairs and other promotional events overseas, and support for firms participating in missions overseas and for inward commercial visits to Britain. It includes representatives of commerce and industry, the Trades Union Congress, the Department of Trade and the Foreign and Commonwealth Office and operates under the general authority of the Secretary of State for Trade, who is the president.

Information and Advice to Exporters

Exporters wanting assistance and advice can consult the offices of the BOTB throughout Britain and, through these offices, the commercial posts of the British Diplomatic Service overseas.

Overseas officers work closely with the BOTB in the provision of services for exporters. They regularly report on local economic and commercial conditions and generally assist the exporter to overcome any difficulties he encounters in trade with the country in question, particularly those arising out of governmental regulations.

Export Credit Insurance The Export Credits Guarantee Department (ECGD) provides credit insurance for about a third of the country's export trade and insures exports of both goods and services.

The main risks covered include insolvency or protracted default of the buyer, governmental action which stops the British exporter receiving payment, new import restrictions, war or civil disturbance in the buyer's country. Cover

may commence from the date of contract or (at lower premiums) from the date of shipment.

This insurance may be supplemented by unconditional guarantees of repayment given direct to banks financing the exporter. Alternatively, for contracts over £1 million 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.

A fixed-rate foreign currency financing scheme was introduced in February 1977 in order to maximise foreign currency financing. ECGD is normally prepared to underwrite contracts for sales of capital goods and services valued at £5 million or more on credit terms of two years or more only where the contents are financed in foreign currency. Sterling financing, for export to European Community countries and certain other overseas markets, is optionally available.

Since 1975 ECGD has offered a measure of cover against high and unpredictable cost escalation to exporters with capital goods contracts worth over £2 million which involve a manufacturing period of over two years. 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 also provided for new British investment against expropriation, war damage and restrictions on remittances.

Trade Fairs

Britain stages many exhibitions and trade fairs and British products are shown at most of the large international trade fairs throughout the world.

Participation in trade fairs and store promotions overseas are forms of export promotion for which the Government provides information and financial assistance to exporters.

BALANCE OF PAYMENTS

Britain's balance of payments has usually been characterised by a deficit on visible trade partially offset by a surplus on invisible earnings. Estimates of the balance of payments and its main constituent items from 1970 to 1978 are given in summary in Table 34 and in greater detail since 1976 in Tables 35 and 36. The balance of payments statistics contain two indicators of particular importance. The first is the balance on current account, covering both visible (exports and imports of goods) and invisible (trade in services, investment income and transfers) transactions. This, together with capital transfers, provides a measure of how far Britain is paying its way abroad and thus adding to or using up overseas assets. The second indicator is the balance for official financing. This is the net result of all external transactions, that is the current account, capital transfers, investment and other capital transactions (including official long-term capital transactions, investment flows, trade credit, and changes in non-residents' balances held in London in sterling and in overseas currencies) and other flows, including unidentified transactions reflected in the balancing item. The balance for official financing shows the impact of all external transactions on the reserves and official debt position, that is how much is available to add to the reserves and repay any official borrowing in the case of a net surplus, or how much must be financed by drawing on the reserves or by borrowing if there is a net deficit. Table 35 gives details of the current account since 1976. A slight worsening in the terms of trade in 1976 caused the visible deficit to rise to £3,601 million, compared with £3,236 million in 1975, the current deficit being £842 million. Increased production of North Sea oil was largely responsible for the fall in the visible deficit to £1,744 million in 1977, when the current surplus was £293 million. Further improvement in the balance on oil caused the visible deficit to fall again in 1978 to £1,175 million and, with some recovery in the surplus on invisibles, the current surplus rose to £1,032 million.

TABLE 34: Britain's Balance of Payments 1970-78

f. million

-						~
		Balance	SDR al- location -	Of	ficial financ	ing
	Current balance	official financing	Gold sub- scription to IMF ^a	Total	Official borrowing ^b	Official reserves ^c
1970	+776	+1,287	+133	-1,420	-1,295	-125
1971	+1,150	+3,146	+125	-3,271	-1.735	-1.536
1972	+208	-1,265	+124	+1,141	+449	+692
1973	-875	-771	_	+771	+999	-228
1974	-3,307	-1,646	_	+1,646	+1,751	-105
1975	-1,621	-1,465		+1,465	+810	+655
1976	-842	-3,629		+3,629	$+2,776^{d}$	+853
1977	+293	+7,361		-7,361	+2,227	-9,588
1978	+1,032	-1,126		+1,126	-1,203	+2,329

Source: United Kingdom Balance of Payments 1979 Edition

^a Gold subscription to IMF in 1970 was −£38 million.

^b Drawings (+)/repayments (-).

^c Drawings on (+)/additions to (-).

d Includes a credit of £1,113 million from the IMF.

TABLE 35: Britain's Current Account 1976-78

			£, million
	1976	1977	1978
Visible trade: Exports (f.o.b.) Imports (f.o.b.)	25,411 29,012	32,148 33,892	35,432 36,607
Visible balance	-3,601	-1,744	-1,175
Invisibles: Credits Debits	14,665 11,906	16,413 14,376	18,335 16,128
Invisible balance	+2,759	+2,037	+2,207
Of which: Services Interest, profits and dividends Transfers Current balance	+2,257 +1,299 -797 -842	+2,991 +201 -1,155 +293	+3,289 +836 -1,918 +1,032

Source: United Kingdom Balance of Payments 1979 Edition

There was a net outflow in 1978 on identified investment and other capital transactions of £2,931 million and a balancing item of £773 million. The outflow in 1978 contrasted with the record net identified inflow of £4,406 million in 1977 and reflected changes in the demand for sterling between the two years. In 1978 overseas residents increased their holdings of sterling by a much

smaller amount than in 1977; sterling lending by British banks to overseas residents also rose in 1978; and substantial net purchases of government securities

by overseas residents in 1977 became small net sales in 1978.

The direct benefit of the UK Continental Shelf oil and gas programme to the balance of payments has increased substantially. Sales of oil and gas (the latter valued at oil-equivalent prices) plus identified net balance of payments items totalled about £3,500 million to £3,750 million in 1978 compared with

about £2,500 million in 1976.

Britain participates in the Special Drawing Rights (SDRs) scheme which came into effect in 1970 in order to supplement world reserves. SDRs are reserve assets created and distributed by decision of the members of the IMF. Any member of the IMF may join the scheme, and its share is based on its IMF quota. Participants in the scheme accept an obligation to provide convertible currency, when designated by the IMF to do so, to another participant in exchange for SDRs up to a total amount equal to twice the net amount of their own allocation of SDRs. Only those countries with a sufficiently strong balance of payments are so designated by the IMF. SDRs may also be used in certain direct payments between participants in the scheme and for payments of various kinds to the IMF. The role of SDRs as a central standard of value in international transactions (see p 204) is being enhanced.

EXTERNAL ASSETS AND LIABILITIES

The significance of any inventory of Britain's aggregate external assets and liabilities¹ 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. By the end of 1978 Britain had external assets and liabilities virtually in equilibrium after being in a net debtor position for the previous three years.

External Assets

Britain's assets arising from private investment overseas are estimated to have been £28,870 million at the end of 1978. Direct investment² excluding oil, banking and insurance accounted for £16,370 million of the total figure for end 1978, portfolio investment for £8,200 million and oil for £4,300 million.

British banking and commercial claims at the end of 1978 totalled £9,917 million. Within this total banking claims were £5,408 million; suppliers' export credit to unrelated firms was £3,769 million. Official external assets, including re-financed export credit, amounted at the end of 1978 to £4,878 million, which included outstanding inter-government loans by Britain of £1,270 million.

These assets, with official reserves of £8,362 million, resulted in aggregate identified external assets at the end of 1978 of some £52,000 million.

Outward Private Investment The dismantling of the exchange control regulations, described on page 366, means that foreign currency is now available without limit for direct and portfolio investment overseas. The weight of evidence is that overseas investment strengthens the current account of the balance of payments by helping to keep and expand markets for British exports (many investments are in distribution and similar export-promoting sectors, or create demand abroad for other British goods and services) to the benefit of output and jobs at home. The balance of payments will also be strengthened by invisible earnings flowing from additional overseas investment; this will be particularly important in the future when the overseas earnings from North Sea oil begin to decline.

while portfolio investment refers to investment in company securities.

Figures for the end of 1978 and for earlier years are published in the *United Kingdom Balance of Payments 1979 Edition* produced by the Central Statistical Office (see Bibliography.

Direct investment refers mainly to the establishment of subsidiary companies and banks,

TABLE 36: Analysis of Capital Flows and Official Financing 1976-78

		J	£ million
	1976	1977	1978
Current balance	-842	+293	+1,032
Investment and other capital transactions: Official long-term capital Overseas investment in the British public	-165	-319	-348
sector ^a Overseas investment in the British private	+203	+2,182	—81
sector British private investment overseas Overseas currency borrowing or lending	$^{+2,070}_{-2,232}$	$^{+3,067}_{-2,222}$	$^{+2,770}_{-4,087}$
(net) by British banks 4,0,0: Borrowing to finance British investment overseas	+165	+520	1 025
Other borrowing or lending (net) Exchange reserves in sterling ^d :	-271	+320 -136	$^{+835}_{-1,354}$
British government stocks Banking and money market liabilities	$^{+14}_{-1,421}$	+5 -24	-115 -4
Other external banking and money market liabilities in sterling Import credit ^e	+255 +76	$+1,481 \\ +351$	+301 +243
Export credit ^e Other short-term transactions	$-1,100 \\ -610$	$-613 \\ +114$	-685 -406
Total investment and other capital transactions Balancing item	$-3,016 \\ +229$	+4,406	-2,931
	+229	+2,662	+773
Balance for official financing Net transactions with:	-3,629	+7,361	-1,126
Other monetary authorities	$+1,018 \\ -34$	+1,113	-1,016
Foreign currency borrowing (net): By the British Government, By public bodies under the	-	+871	+191
exchange cover scheme Drawings on (+)/additions to (-) official	+1,792	+243	-378
reserves ^g	+853	-9,588	+2,329
Total official financing	+3,629	-7,361	+1,126

Source: United Kingdom Balance of Payments 1979 Edition

Direct investment outflow, excluding oil, was £2,178 million in 1978 compared with £1,790 million in 1977. (The latest available area analysis indicates that of the 1977 figure, £378 million was placed in developing countries, £374 million in other member countries of the European Community and £538

^a Excluding foreign currency borrowing by public bodies under the exchange cover scheme.

^b Including certain other financial institutions.

^c Excluding changes in levels resulting from changes in sterling valuation.

^d Sterling reserves of overseas countries and international organisations, other than the IMF, reported by banks, etc. in Britain.

 $^{^{\}varepsilon}$ Excluding trade credit between related firms; after deducting advance and progress payments to suppliers.

f Drawings on two euro-dollar facilities for the Government to borrow \$2,500 million and \$1,500 million, and a \$350 million bond issue in New York.

g Valued in sterling at market-related rates of exchange.

million in North America.) With the inclusion of oil, portfolio and other investment, aggregate private investment outflows totalled £4,087 million in 1978 compared with £2,222 million in 1977.

External Liabilities

Identified external liabilities at the end of 1978 are estimated to have been some £,52,036 million. Net drawing on the IMF accounted for £,1,142 million of this sum and foreign currency borrowing by the Government for a further £2,131 million. Foreign currency borrowing by public bodies under the exchange cover scheme¹ totalled £4,851 million. Inter-governmental loans to Britain, mainly a consequence of the second world war and its aftermath, totalled £1,804 million at the end of 1978 of which £1,427 million was owed to the United States and £315 million to Canada, with a further £61 million owed to the Federal Republic of Germany under the 1969 Anglo-German Offset Agreement. Other public sector liabilities of £5,954 million comprised mainly overseas holdings of British government securities, Treasury bills and notes and other borrowing by British public corporations and local authorities from overseas. British banking and commercial liabilities, including liabilities in sterling and in foreign currencies, totalled £12,539 million. Liabilities in the form of direct overseas investment in Britain's private sector excluding banking and insurance totalled £23,615 million at the end of 1978.

Since the 1960s London has been the centre of the euro-currency business, whereby banks and other institutions accept deposits and extend credit in foreign currencies. At the end of 1978 liabilities of British banks in foreign currencies amounted to £104,566 million (of which the equivalent of £81,943)

million was in US dollars) and claims were £,99,387 million.

The 'sterling balances', or foreign holdings in Britain of sterling in the form of British government securities, bank deposits, deposits with local authorities and finance houses, and Treasury bills totalled £7,876 million at the end of 1978. Of this, £1,990 million was held by residents of oil-exporting countries, £1,436 million by residents of other member countries of the European Community and £4,450 million by other holders. About 33 per cent of the balances were official holdings (mostly those of central monetary institutions) and 67 per cent were private holdings used by overseas residents to finance their international transactions. The total of these liabilities (excluding the counterpart of borrowing) remained broadly constant between the end of 1945 and 1970, then rose sharply in the early 1970s. As trade and payments arrangements have become more diversified in recent years the relative importance of sterling as a reserve currency has declined.

Inward Private
Investment

Overseas liabilities arising from investment in the private sector of the British economy rose from £7,385 million in 1970 to £23,615 million at the end of 1978.

Overseas investors in Britain are free to repatriate the proceeds of the sale of their investments, including any capital gains that may have accrued. Earnings and dividends are transferable irrespective of their size. In 1978 the inflow of direct, portfolio and other private investment, including oil, amounted to £2,770 million.

The value of overseas investment in the private sector at the end of 1978 comprised: the book value of direct investment in Britain by companies incor-

¹ A scheme first introduced in 1969 whereby local authorities and public corporations raise foreign currency from overseas residents either directly or through British banks and surrender it to the Exchange Equalisation Account in exchange for sterling for use to finance expenditure in Britain. The Treasury sells the borrower foreign currency to service and repay the loan at the exchange rate that applied when the loan was taken out.

porated abroad (excluding oil, banking and insurance)—£9,900 million (this figure has been extrapolated from the book value at the end of 1974, taking account of subsequent annual transactions); portfolio holdings of British securities—£4,640 million; the book value of the net assets in Britain of overseas oil companies—£5,750 million; and borrowing by British companies overseas—£3,325 million.

Of the £1,257 million inflow of direct investment excluding oil into Britain in 1977 (the latest year for which detailed figures are available), £646 million originated in North America and £292 million in other member countries of the European Community. Foreign investment inflow brings a number of benefits to British industry, including technological development, which in turn will

strengthen the economy and its balance of payments position.

20 Promotion of the Sciences

Britain has for centuries provided an atmosphere of learning congenial to its scientists, whose record of achievements in relation to size of population is in many respects unsurpassed. This record has been maintained throughout the twentieth century. One recent example was the research carried out by two British scientists which made possible the birth of the world's first 'test-tube' baby in Britain in July 1978. Nobel prizes for science have been won by 63 British citizens—more per head of population than in any other country.

The Government keeps under review facilities for training scientists and ensures that adequate research is devoted to matters of national interest, which include defence (see Chapter 4), industrial innovation, health, environmental protection, use and conservation of natural resources, the provision of good food, shelter and energy and of efficient transport and communications.

Expenditure

Total expenditure in Britain on scientific research and development in 1975-76 (the latest year for which complete estimates are available) was £2,151 million, or 2.2 per cent of the gross national product. Some 55 per cent was carried out by private sector industry, 26 per cent by government organisations, 8 per cent by universities and higher education establishments, 6 per cent by public corporations and 5 per cent by research associations and other bodies. The Government finances just over half of Britain's research and development. Funds are also provided by private and public enterprises and by private endowments and trusts.

THE GOVERN-MENT AND SCIENTIFIC RESEARCH Central responsibility for basic civil science rests with the Secretary of State for Education and Science, while responsibility for technology rests mainly with the Secretary of State for Industry. Other government departments are responsible for research and development related to their executive responsibilities. In 1972 the Government extended the customer-contractor approach to all its applied research and development, whereby each department as customer, with advice from its Chief Scientist, defines requirements and the work is undertaken by contractors (government laboratories, research councils, research associations, industry and the universities). Most departments have a Chief Scientist's Organisation, which formulates detailed requirements, selects the most suitable contractor and co-operates with contractors to obtain the best value for money.

An Advisory Council for Applied Research and Development provides a central forum of external advice to ministers on the deployment of applied research and development in both the public and private sectors and on the role of Britain in international collaboration in such activities. It has published reports on microelectronics and industrial innovation.

A Committee of Chief Scientists and Permanent Secretaries is responsible for ensuring that scientific questions are brought before ministers as appropriate and that scientific priorities reflect those of the Government as a whole.

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 (the budget totals £316.9 million in 1979-80). The councils and their allocations are: the Agricultural Research Council (£,28.8 million), the Medical Research Council (£,54.4 million), the Natural Environment Research Council (£35.1 million), the Science Research Council (£174·1 million) and the Social Science Research Council (£16·3 million). Science budget grants are also made to the British Museum (Natural History) and to the Royal Society. About one-fifth of the budget is expected to go on research grants and contracts to universities, polytechnics and elsewhere, over two-fifths to research units and other establishments of the research councils, about one-seventh to postgraduate support and one-sixth to 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.

The Advisory Board for the

The Advisory Board for the Research Councils advises the Secretary of State on responsibilities for civil science with special reference to the research council Research Councils system, the support of postgraduate students and the proper balance between national and international scientific activities, and on the allocation of the science budget between research councils and other bodies; and promotes close liaison between the councils and users of their research. Its membership includes the chairman or secretary of each of the research councils, the chairman of the University Grants Committee, the Chief Scientists from departments with a major interest in the work of the research councils, the Chief Scientist to the Central Policy Review Staff, and independent members drawn from universities, industry and the Royal Society.

RESEARCH COUNCILS' **FUNCTIONS**

Each of the five research councils is an autonomous body established under Royal Charter with membership drawn from the universities, professions, industry and the Government. They conduct research through their own research establishments and by supporting selective research in universities and other higher education bodies. As well as being financed from the science budget, three of the councils receive commissions, estimated at £,62 million in 1979-80, from departments under the customer-contractor principle. The Agricultural Research Council receives 55 per cent of its income from commissions, the Natural Environment Research Council 39 per cent and the Medical Research Council 21 per cent.

Agricultural Research Council

The Agricultural Research Council (ARC) has eight institutes under its direct control: the Animal Breeding Research Organisation, at Edinburgh; the Institute for Research on Animal Diseases, at Newbury (Berkshire); the Institute of Animal Physiology, at Cambridge; the Food Research Institute, at Norwich; the Letcombe Laboratory, at Wantage (Oxfordshire), dealing with the growth of crops in relation to soil conditions and cultivation; the Meat Research Institute, at Bristol; the Poultry Research Centre, at Edinburgh; and the Weed Research Organisation, at Yarnton, near Oxford. There are six ARC units under distinguished scientists associated with universities. The ARC is also responsible for 15 independent state-aided agricultural research institutes, notably the Rothamsted Experimental Station, at Harpenden (Hertfordshire), which is the largest agricultural research institute in Britain and deals with research on soils, fertilisers, crop physiology and crop husbandry; and the National Institute of Agricultural Engineering, at Silsoe (Bedfordshire). There are also eight

independent institutes in Scotland financed by the Department of Agriculture and Fisheries for Scotland with advice from the ARC on their scientific programmes, staffing and equipment.

The ARC is planning to devote additional sums to research in a number of areas including the study of photosynthesis with the aim of increasing crop yields, the breeding of plants which could make their own nitrogen and so bring savings in the use of fertilisers, and work on studying animal behaviour and diseases to obtain healthier and more productive livestock.

Medical Research Council The main research establishments of the Medical Research Council (MRC) are the National Institute for Medical Research at Mill Hill, London, which carries out fundamental research relevant to medicine and has recently given special emphasis to neurobiology, and the Clinical Research Centre at Northwick Park, London, which forms an integral part of Northwick Park Hospital. In addition, the Council has over 60 research units, mostly located in university departments, medical schools and hospitals in Britain. Subjects to which the MRC is giving more support include cancer and its treatment, neurological disorders (strokes and brain tumours), immunology and clinical problems. Approval has been given for the establishment of a new unit of environmental epidemiology to look at the long-term effects of pollution on population.

The MRC also undertakes work overseas and, with additional support from the Overseas Development Administration, maintains laboratories in The Gambia

and in Jamaica.

The Council is assisted by four advisory boards: the Neurobiology and Mental Health Board; the Cell Biology and Disorders Board; the Physiological Systems and Disorders Board; and the Tropical Medicine Research Board. In addition, the MRC is advised by committees concerned with particular aspects of its work and with research grants. The MRC's arrangements for the support of research fall under four main headings: investigations by members of its scientific staff, mostly working in its own establishments; short-term ('project') grants to workers in universities and elsewhere; long-term grants in support of specific research programmes in university departments ('programme grants'); and research training awards (fellowships and studentships) tenable both at home and overseas.

The Natural Environment Research Council The Natural Environment Research Council (NERC) is responsible for encouraging, planning and executing research in sciences, physical and biological, relating to man's natural environment and its resources. These researches are broadly grouped and defined as: the Solid Earth—its physical properties and mineral resources; Seas and Oceans—their behaviour and living and mineral resources; Inland Waters—their behaviour and living resources; Terrestrial Environments—wildlife communities and their resources; Atmosphere—its structure and interactions; and a number of interdisciplinary studies including pollution and the physical and biological properties of the Antarctic environment. Research programmes which the NERC is planning to expand include those on geological work in connection with deep drilling and mapping, which is important for future mineral and energy exploration; new means of insect pest control using viruses harmless to man; better understanding of the climate; remote sensing by satellite, for resource and ecological surveys; and modelling the behaviour of British estuaries.

The Council's research institutes are: the British Antarctic Survey, the Institute of Geological Sciences, the Institute of Hydrology, the Institute of Marine Biochemistry, the Institute for Marine Environmental Research, the

Institute of Oceanographic Sciences, the Institute of Terrestrial Ecology, the Sea Mammal Research Unit and the Unit of Invertebrate Virology. The Council also maintains central service units which include the Research Vessel Services and the Experimental Cartography Unit.

Research institutes aided by council grants are: the Freshwater Biological Association, the Marine Biological Association of the United Kingdom, the Scottish Marine Biological Association, the Unit of Marine Invertebrate Biology, the Unit of Comparative Plant Ecology and other units attached to universities.

Science Research Council The Science Research Council (SRC) supports basic research in astronomy, geophysics, the biological sciences, chemistry, mathematics, physics, engineering and applied sciences, in furthering its primary purpose of sustaining standards of education and research in the universities. Most of the SRC's resources are devoted to helping university and polytechnic staff to carry out basic research at the forefront of their subjects, in their institution, in one of the Council's research establishments, or elsewhere; to encouraging active collaboration in research between the higher education institutions and industry; to identifying and supporting areas of special importance and to enabling suitable graduates to receive further training in methods of research or a specialised branch of science or engineering of importance to British industry. The SRC provides grants for research projects and awards studentships for training in methods of research or advanced courses of study, and fellowships to promising scientists or engineers to enable them to carry out independent research programmes that they themselves have put forward.

Research Establishments The SRC maintains five research establishments: the Daresbury Laboratory at Warrington (Cheshire), the Royal Greenwich Observatory at Herstmonceux (East Sussex), the Royal Observatory, Edinburgh, the Rutherford Laboratory at Chilton (Oxfordshire), and the Appleton Laboratory (at Slough in Berkshire) which is to be merged with the Rutherford Laboratory. The five establishments are each centres of specialised research, but are also used for the development and operation of research equipment beyond the resources of a university. 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 Organisation for Nuclear Research (CERN) and the high-flux neutron source at the Institut Laue-Langevin (ILL).

International Collaboration The SRC provides national contributions to CERN, the civil science programme of the North Atlantic Treaty Organisation, the Anglo Australian Telescope, the European Incoherent Scatter Project and part of the European Space Agency contribution. It also contributes to, and shares with its French and German partners, the control of the ILL reactor at Grenoble.

Engineering

Developments in engineering research and training geared to the needs of industry are a major priority of the SRC. Special programmes are being supported in three areas—polymer engineering, marine technology and production engineering—within a general effort to develop research and postgraduate training in university engineering departments. Other subjects receiving major support include microelectronics and computer applications (such as industrial robotics), materials and energy conservation, medical engineering and coal technology. A network to provide an interactive computing facility to universities has been built up and is serviced by the Rutherford Laboratory.

Astronomy

Astronomy uses both ground-based techniques, such as optical and radio telescopes, and space-based methods (see p 390). Optical astronomy is carried out in university departments and, within the SRC, at the Royal Greenwich Observatory and the Royal Observatory, Edinburgh. Instruments include the Royal Greenwich Observatory's Isaac Newton Telescope, of diameter 2·5 metres (8 feet), which is being installed at a new site on the island of La Palma in the Canary Islands; the Anglo Australian Telescope, of diameter 3·9 metres (13 feet), at Siding Spring, Australia, in a joint project with the Australian Government; a 1·2-metre (4-ft) Schmidt telescope on the same site; and optical telescopes operated by the South African Astronomical Observatory, to which the SRC contributes. A 3·8-metre (12-ft) infra-red telescope at Mauna Kea, Hawaii was inaugurated in October 1979.

Cambridge and Manchester Universities are the main centres for research

in radio astronomy with substantial support from the SRC.

Nuclear Physics

The SRC establishments concerned with the provision of facilities for university research in nuclear physics are the Rutherford Laboratory, which supports university teams engaged in experiments in particle physics at CERN and other centres, and the Daresbury Laboratory, where a 30 million volt tandem accelerator for research into nuclear structure is under construction.

Other Activities

At the Daresbury Laboratory the Council is building a source of high intensity electromagnetic radiation based on an electron storage ring, which will come into operation in 1980. At the Rutherford Laboratory an intense source of pulsed neutrons based on a proton accelerator is being constructed and is due for completion in 1982. A high-powered laser facility at the Rutherford Laboratory is used in the study of plasmas and in the development of new lasers.

The Social Science Research Council The Social Science Research Council (SSRC) encourages, supports and carries out research in, and disseminates knowledge about, the social sciences. It initiates research into such topics as health policy, energy policy, population studies, central and local government, young people in society, transmitted deprivation, and the social impact of North Sea oil. Grants are provided for research projects at universities and other institutions, and awards made to postgraduate students. The SSRC also has four research units: the Industrial Relations Unit, the Cambridge Population Unit, the Ethnic Relations Unit, and the Socio-legal Studies Centre. The SSRC's areas of interest include economics; political science; psychology; social anthropology; social and economic history; sociology and social administration; social sciences and the law; education; management and industrial relations; human geography; linguistics; planning; and various aspects of a wide range of other disciplines.

THE UNIVERSITIES AND INSTITUTIONS OF UNIVERSITY STATUS

Of the total estimated university expenditure on scientific research in the academic year 1977–78 (over £212 million), the largest government contribution (over £125 million) was through the University Grants Committee (UGC).

Scientific research in the universities (and other institutions of higher education) is also supported through the research councils. This support takes two forms. First, nearly two-thirds of the postgraduate students in science and technology in the universities and other institutions receive maintenance awards from the research councils, through postgraduate studentships. These awards are in some cases for periods of up to three years of training in research work and in others for shorter periods for advanced studies. In 1978–79 the research councils made 7,349 awards at a total cost of £37·1 million. Second, 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. These total about £60 million a year. The ARC, MRC and SSRC maintain a number of research units within universities. In addition, the research councils provide central facilities in their own establishments for use by university research workers.

The other main channels of support for scientific research in the universities are various government departments, the Royal Society, industry and the independent foundations.

Universities in industrial centres have tended to acquire outstanding reputations in studies relating to their local industries, and on a national scale close relationships are fostered between the universities, industries and the Government in numerous joint projects.

In 1976 there were some 585,000 people with qualifications in engineering, technology and science in Great Britain, of whom 307,000 were qualified in science and 278,000 in engineering and technology. Of those economically active in 1975 (465,000), about half (237,000) held engineering qualifications.

DEPARTMENTAL RESEARCH AND DEVELOPMENT

In 1977–78 total Government research and development expenditure amounted to about £1,700 million, of which some £1,100 million was spent by departments on commissioned research and development. Expenditure is estimated to rise to some £2,100 million in 1979–80. The largest departmental research and development budget is that of the Ministry of Defence (see p 97). The main civil departments involved are the Department of Education and Science, whose estimated research expenditure of £474 million in 1979–80 is mostly related to expenditure by the research councils and the universities; the Department of Energy (£155 million in 1979–80); the Department of Industry (£132 million); the Ministry of Agriculture, Fisheries and Food and the Department of Agriculture and Fisheries for Scotland (a total of £70 million); and the Department of the Environment and the Department of Transport (a total of £56 million).

The Department of Energy

The Department of Energy is responsible for the United Kingdom Atomic Energy Authority (UKAEA); research in support of the exploitation of North Sea oil and gas; research into alternative sources of energy and conservation of energy; co-ordination of energy research within government departments; general approval of the research programmes of the coal, gas and electricity supply industries; and co-ordination of British contributions to energy research and development programmes sponsored by international organisations.

An Advisory Council on Research and Development for Fuel and Power advises the Secretary of State on the general programme of research and development of the nationalised energy industries and on other matters related to energy research and development. An Energy Technology Support Unit at Harwell (Oxfordshire) assists the Department in assessing technological possibilities in energy policy, advises on long-term research and development programmes, and assists in their management.

An Offshore Energy Technology Board advises the Secretary of State for Energy on research and development in offshore oil and gas technology and is responsible for programmes designed to ensure the safety and efficiency of offshore operations and improve the competitive efficiency of the offshore equipment industry in Britain.

Nuclear Energy

The Secretary of State for Energy is responsible for promoting and controlling the development of nuclear energy and ensuring that the proper degrees of importance are attached to its various applications. The UKAEA is the main body carrying out relevant research and development. Its programme includes work in support of the Government's nuclear power programme, and it builds and operates experimental and prototype reactors (see p 268). The Authority also works outside the nuclear field. Research and development work is undertaken at the Atomic Energy Research Establishment at Harwell and at the Culham Laboratory, also in Oxfordshire; at the Atomic Energy Establishment at Winfrith (Dorset) and at establishments of the Authority's northern division at Warrington (Cheshire), Dounreay (Highland), Springfields (Lancashire) and Windscale (Cumbria). The Safety and Reliability Directorate at Culcheth (Cheshire) is the focal point of the UKAEA's work in relation to the safety of nuclear reactors and related plants and processes.

Co-operation in nuclear energy between Britain and other countries takes place within a framework of intergovernmental agreements and membership of bodies such as the International Atomic Energy Agency (which operates under the aegis of the United Nations) and the Nuclear Energy Agency of the Organisation for Economic Co-operation and Development, and through direct research links between the UKAEA and counterpart organisations in other countries.

Euratom

Britain takes part in the co-operative research programmes of the European Atomic Energy Community (Euratom, see p 70) including that concerned with establishing the feasibility of achieving controlled thermonuclear fusion. Britain's centre for fusion research is the UKAEA's Culham Laboratory whose work forms part of a co-ordinated European programme under the auspices of Euratom. A major component of this programme is the Joint European Torus project which is being built at Culham where the design team has been working since 1973. This project is intended to carry forward research into a completely new source of energy through the fusion of the nuclei of light elements, using cheap, readily available and hitherto untapped resources.

The Department of the Environment and the Department of Transport

The Departments' research programmes are the responsibility of the Directorate General of Research which provides a common service to both Departments. Programmes are formulated by seven research requirement committees, which bring together the main customer-contractor and research policy interests.

About 40 per cent of the Departments' programmes are carried out at their research establishments: the Building Research Establishment (see p 247), the Transport and Road Research Laboratory (see p 296) and the Hydraulics Research Station. The remainder is the subject of contracts placed with, or grants given to, a wide range of organisations. About half of the Department of the Environment's programme is devoted to environmental protection (including water resources and pollution), a third to housing and construction, and the remainder to land use planning, the location of mineral resources and the countryside. A third of the Department of Transport's programme is concerned with transport policy and planning, 18 per cent with road safety and the remainder with other road research. Research associations receiving financial assistance from the Department include the Construction Industry Research and Information Association, the Building Services Research and Information Association, the Timber Research and Development Association and the Water Research Centre.

The Department of Industry

The Department of Industry is responsible for the sponsorship of manufacturing industries and for technical services to industry, and for six research establishments. Of these, the National Physical Laboratory has responsibilities for

the national system of measurement, for technical aspects of standards (including the British Calibration Service) and for research in computing, numerical analysis, chemical standards and materials applications. The National Engineering Laboratory carries out research in mechanical engineering aimed at helping industry improve designs and production processes by the application of improved technology. The Warren Spring Laboratory undertakes research in control engineering, materials handling, metals extraction, mineral processing, waste materials processing and environmental technology. The National Maritime Institute has special facilities and expertise relating to the characteristics and performance of ships and offshore structures, marine traffic and navigation safety, wind and water forces on structures and in conducting marine trials and measurements at sea. The Computer Aided Design Centre is concerned with increasing and optimising the use of computer aided design by industry. The Laboratory of the Government Chemist offers analytical services and scientific advice to government departments. These establishments undertake contract research for British industry and overseas firms.

The Department sponsors research by extra-mural contracts with industry, universities and research associations. In accordance with the Government's customer-contractor principle, the Department administers a number of requirements boards to determine the objectives and balance of the relevant research and development programmes, to further the practical application of technology and to advise on science and technology matters in their fields. They cover ship and marine technology; mechanical engineering and machine tools; engineering materials; computers, systems and electronics; chemicals and minerals; metrology and standards; garment and allied industries; and electrical technology. They are responsible to the Secretary of State for Industry and include representatives from other departments, industry and bodies in the public sector. The Chief Scientist and Engineer's Board covers other relevant branches of technology.

Agricultural, Food, Fisheries and Forestry Research Agricultural research is carried out mainly by the Agricultural Research Council, the government agricultural departments and by private industry. Fisheries research is conducted by the government fisheries departments, the White Fish Authority, and the Natural Environment Research Council.

Advice is given to the government agricultural departments and to the ARC on priorities for all state-aided research and development in agriculture and food in England, Wales and Scotland by the Joint Consultative Organisation (JCO). The JCO comprises members of the farming and food industries, scientists, economists and members of the departments' professional, technical and administrative services and consists of five advisory boards concerned with animals; arable crops and forage; horticulture; food science and technology; and engineering and buildings. The Scottish Agricultural Development Council, comprising members of the farming industry, advises the Secretary of State for Scotland on agricultural research and development priorities in Scotland.

Government Agricultural and Food Departments The Agricultural Development and Advisory Service of the Ministry of Agriculture, Fisheries and Food does both applied and basic research. At its Central Veterinary Laboratory at Weybridge, research and laboratory investigations are carried out into the causes, pathology, epidemiology and control of diseases of farm livestock, including poultry; the diagnosis of animal and poultry diseases (other than foot-and-mouth disease); and the making and testing of certain biological products. The Harpenden Laboratory provides the scientific basis for essential legislation against plant pests and diseases, and acts as a

liaison centre for the collection and dissemination of information on pests and diseases of crops and plants and on the uses and toxic hazards of pesticides used in agriculture and horticulture. It carries out research and development on plant health problems, and also on the detection of pesticide residues in treated crops and crop products, and on the formulation of pesticides. Research work on insects, mites and fungi affecting food storage and on harmful mammals and birds is carried out at laboratories at Slough (Berkshire), and Tolworth and Worplesdon (both in Surrey). This provides the scientific basis for advisory work on their detection and control. They are also concerned with the safe use of pesticides in food storage and in animal husbandry, and with the effect on wildlife of pesticides of all kinds.

The Chief Scientific Adviser (Food) and the Food Science Division provide advice on scientific and technical aspects of food. Particular attention is paid to the safety, quality and nutritive value of food, including consideration of food additives and contaminants. Close liaison is maintained with the Department of Health and Social Security and with other government departments and agencies. The Division has laboratories in Norwich and London.

In Scotland research work at East Craigs, Edinburgh, by the Department of Agriculture and Fisheries, is mainly concerned with the problems of cultivar taxonomy, seed testing, healthy seed potato production, plant pathology, and the ecology of birds, mammals and insects harmful to agriculture and stored products. In Northern Ireland the Department of Agriculture is responsible for promotion of research in food produced by agriculture and in veterinary sciences with the aim of improving efficiency of production, marketability of foods and the health of plants and animals. The Department is also responsible for work on forest science, ecology of freshwater and marine fish as well as on the biology of freshwater resources.

Government Fisheries Departments The Ministry of Agriculture, Fisheries and Food's research work is carried out by the Directorate of Fisheries Research at Lowestoft and by the Torry Research Station in Aberdeen. The former includes a Marine Fisheries Laboratory and Fisheries Radiobiological Laboratory at Lowestoft, a Shellfish and Marine Pollution Laboratory at Burnham-on-Crouch (Essex), a Salmon and Freshwater Fisheries Laboratory in London, a Shellfish Cultivation Station at Conwy (Gwynedd) and a Fish Disease Centre at Weymouth. Torry Research Station and an outstation at Hull are concerned with the investigation of all aspects of fish technology. There are seven research vessels engaged on sea-going, inshore and estuarine work. The Department of Agriculture and Fisheries for Scotland maintains a marine research laboratory and six sea-going research ships at Aberdeen, and a freshwater fisheries research laboratory at Pitlochry.

A Fisheries Research and Development Board, representative of government departments and the industry, advises fisheries ministers on research programmes, objectives and priorities. A Controller of Fisheries Research and Development, responsible jointly to the Minister of Agriculture, Fisheries and Food and the Secretary of State for Scotland, co-ordinates the programmes of

the research laboratories.

Forestry

Forestry research is carried out by the Forestry Commission at the Forest Research Station, Alice Holt Lodge, Surrey, and the Northern Research Station, Roslin, near Edinburgh. By means of grants, aid is also given for forestry research work undertaken by various universities and other institutions, including the Commonwealth Forestry Institute, Oxford. Expenditure by the Commission on research work in Great Britain amounted to £4 million

in 1978-79. Research into the quality and uses of home-grown timber is carried out by Princes Risborough Laboratory in Buckinghamshire, and also by grantaided associations. An extensive research programme on Dutch elm disease has been carried out by the Commission since the outbreak of the disease in 1969.

Botany

The Royal Botanic Gardens at Kew (founded in 1759), covering 120 hectares (300 acres), and its 200-hectare (500-acre) estate at Wakehurst Place, Ardingly (West Sussex) are part of the Ministry of Agriculture, Fisheries and Food. The Herbarium houses one of the largest collections of specimens in the world and is primarily concerned with research into classification of plants and the preparation of plant lists; it also classifies about 50,000 specimens a year from overseas. A Survey Unit gathers and provides information on endangered species of plant on a worldwide basis. The gardens have an important library and four museums open to the public. The study of plant anatomy, plant biochemistry, cytology and genetics is undertaken in the Jodrell Laboratory. The laboratory's Plant Physiology Section is based at Wakehurst Place where research is being carried out into seed germination and storage. A wide range of living plants, comprising 3,100 types representing 340 families of plant. is displayed at Kew.

The Royal Botanic Garden at Edinburgh was founded in 1670 and is auministered by the Department of Agriculture and Fisheries for Scotland. Together with the associated Logan Botanic Garden at Ardwell near Stranraer, the Younger Botanic Garden at Benmore, near Dunoon, and Dawyck Garden at Stobo (Borders), it maintains large collections of living plants (both temperate and tropical) used for taxonomic research (into classification of plants), including

tropical plants.

Other Governmentsponsored Research The Procurement Executive of the Ministry of Defence engages in research for defence purposes at its research and development establishments and through contracts placed with industry and universities (see p 96). It also undertakes certain research for civil purposes, including meteorology (being responsible for financing the Meteorological Office at Bracknell in Berkshire, which compiles weather forecasts and undertakes research in meteorology and some aspects of geophysics), civil aviation and space research.

The Department of Health and Social Security spent nearly £26 million on research and development in 1978–79 of which £10.7 million was on biomedical research through the Medical Research Council. The Department's Chief Scientist is supported by a group of independent advisers covering a wide range of scientific disciplines. The Department is involved in international research and development, and is participating in the European Community's medical

and public health research programme.

The Health and Safety Executive, working mainly through its Health and Safety Laboratories, carries out research into matters affecting the health and safety of people at work. Fields of study include explosion risks, fires, protective equipment, methods for monitoring and measuring airborne contaminants, the

safety of engineering systems and fluid mechanics.

The Department of Employment has a Research and Planning Division to conduct and advise on its programme of research on socio-economic problems including industrial relations, incomes and general manpower issues. Assistance is given to the Department in social research by the Office of Population Censuses and Surveys and close contact is maintained with the Social Science Research Council.

Nearly all of the Home Office's expenditure on research and development, of about £7 million a year, is concerned with law and order.

PUBLIC SECTOR RESEARCH

Some of the public corporations which run the nationalised industries have their own research organisations, in particular those concerned with energy (see Chapter 14), steel and transport. These organisations also give support to other organisations concerned with research on matters of interest to them.

PRIVATELY FINANCED RESEARCH

A considerable amount of research is undertaken and financed by private sector firms and learned bodies (see below). Virtually all industrial research work is carried out within industry by firms in their own laboratories and by research associations. Important contributions to the support of medical research in particular subjects are made by industry, especially the pharmaceutical industry, and by the many private charities or voluntary organisations which raise money for particular branches of research. Charities and voluntary bodies contribute some £25 million a year to medical research.

Industrial Research

Within the total expenditure of £1,340 million on research and development carried out within private industry in 1975–76, expenditure by private industry accounted for £1,185 million, public corporations for £124 million and research associations for £31 million. The main industries involved included aerospace (which spent £292 million), electronics, including computers (£251 million), pharmaceutical products (£79 million), other chemical products (£159 million), other electrical engineering (£64 million), motor vehicles (£87 million) and mechanical engineering (£71 million). Firms in science-based industries commit large private funds to research and development in the course of business.

A number of institutes for sponsored research have been established to extend the facilities for private research for industrial firms by studying problems which are not within the scope of the average industrial laboratory.

Research Associations

A scheme by which the Government helped firms with similar interests to form organisations known as research associations, to carry out industrial research co-operatively, was started in 1917. Encouragement by government grants, related to the contributions made by the industries concerned, has lately been phased out in favour of extra-mural contract support, such as that offered by the Department of Industry's Research and Development Requirements Boards (see p 381). About 30 of these research associations operate in areas of interest to the Department of Industry. In addition there are four (buildings services; construction industry; timber; and water) linked with the Department of the Environment and four (Flour Milling and Baking; Campden Food Preservation; British Food Manufacturing Industries; and British Industrial Biological Research) linked with the Ministry of Agriculture, Fisheries and Food. Among the largest of the industrial research associations are those dealing with production engineering, welding, electrical manufacturing, cotton and man-made fibres, non-ferrous metals and motor manufacturing. (See also Chapter 13.)

THE LEARNED SOCIETIES

Although today most research is conducted under other auspices, the learned societies, of which there are more than 300, have retained their traditional function of facilitating the spread of knowledge. The most eminent of those concerned with science in its broadest aspects (as distinct from those societies with specialised interests and activities) are the Royal Society, Royal Society of Arts, Royal Institution and British Association.

Royal Society

The Royal Society, or, more fully, the Royal Society of London for Improving Natural Knowledge, founded in 1660, occupies a unique place in Britain's scientific affairs and is equivalent to national academies of sciences in other countries. It is the oldest such academy in the world to have enjoyed continuous existence. There are today three main categories of Fellowship: Royal Fellows, Foreign Members, of whom there are about 80, and the main body of Fellows numbering about 880. Election to the Fellowship, which is for life, is restricted to 40 persons a year. The Royal Society is governed by a council of 21 members. The President of the Society is consulted on scientific appointments to research councils and Fellows serve on most governmental advisory councils and committees concerned with research.

The Royal Society provides grants for scientific investigations and expeditions, for travel by individual scientists, for studies in the history of science, and for scientific publications. Its activities also include the holding of scientific meetings and the publishing of scientific papers, the presentation of medals, the giving of endowed lectures and the award of research appointments. It administers 18 research professorships, four supported from private funds and 14 from its parliamentary grant, and a further 45 research fellowships in British universities. The highest medal awarded is the Copley Medal, for which scientists from all countries are eligible; there are also three Royal Medals, and the Rumford, Davy, Darwin, Buchanan, Sylvester, Hughes, Leverhulme and Mullard Medals, and the Esso Award for the conservation of energy. There are seven lectureships: the Croonian (biology); the Bakerian (physical sciences); the Ferrier (nervous system); the Wilkins (history of science); the Leeuwenhoek (microbiology); the Bernal (social functions of science); and the Clifford Paterson (for electrical science and technology). There are also the Rutherford Memorial, the Blackett Memorial and the Isaac Newton Lectures which are given overseas. The Council has set up committees, some of them jointly with other bodies, to promote improvements in education in science and to emphasise the importance of applied sciences, especially engineering.

The international relations of the Royal Society are extensive. It represents Britain in the international unions comprising the International Council of Scientific Unions and appoints national committees for each of them. The Society represents Britain on the Council of the International Institute for Applied Systems Analysis, and is a member of the European Science Foundation and certain other organisations. It also plays a leading part in international scientific programmes and promotes exchange visits of scientists and co-operative research through agreements with many academies throughout the world. The largest scheme is the European Science Exchange Programme, which provides for fellowships (usually of one year) and study visits (lasting about two months) with 16 other countries in Western Europe.

Royal Society of Arts

The Royal Society of Arts (properly, the Royal Society for the Encouragement of Arts, Manufactures and Commerce) is concerned with arts, architecture and design, science and technology, industry and commerce, the environment and education. Since its foundation in 1754, one of the Society's principal objects has been to promote the progress of all branches of practical knowledge, chiefly by means of lectures and conferences, and by the publication of a monthly journal designed to enable leading authorities to report on developments of public as well as specialist interest.

Royal Institution The Royal Institution was founded in 1799 as a public body for facilitating the introduction of useful mechanical inventions and improvements, and for teaching the application of science to everyday life. Later it undertook the 'promotion of chemical science by experiments and lectures for improving arts and manufactures', and 'the diffusion and extension of useful knowledge'. Its character, however, was largely determined by the work of Sir Humphry Davy and Michael Faraday, who established a tradition of research. Today, the Royal Institution has extensive research laboratories, and lectures are given on recent developments in science and other branches of knowledge.

British Association

The British Association for the Advancement of Science was founded in 1831 to promote general interest in science and its applications. One of its chief activities is the annual meeting, attended by many young students as well as by eminent scientists. In addition the Association plans special lectures, exhibitions and discussions (some designed for young audiences), the publication of pamphlets, the organisation of conferences, the appointment of study groups and liaison with the Press and with sound and television broadcasting services. The Association has area committees and three lectureships for young scientists (the Kelvin, the Darwin and the Lister lectureships, dealing respectively with the physical, biological and sociological sciences) to encourage scientists to make their activities known to wider audiences. The British Association has made an important contribution to the development of science by taking or recommending action to remove obstacles to the discovery and application of scientific knowledge.

Professional Institutions

There are numerous technical institutions and professional associations, many of which are playing a distinguished part in promoting their own disciplines or are interested in the education and professional well-being of their members. The Council of Engineering Institutions, the federal body for the chartered engineering institutions, promotes the co-ordination of the engineering profession. The Council of Science and Technology Institutes is a federal body with five member institutes representing biologists, chemists, mathematicians, metallurgists and physicists.

A Fellowship of Engineering, envisaged as complementary to the Royal Society and forming an independent and authoritative forum of eminent engineering opinion, was set up in 1976. The founder members were Fellows of the Royal Society, together with a number of other distinguished engineers who were selected by the chairman of the Council of Engineering Institutions and the presidents of the individual engineering institutions. Further Fellows, up to a total of 1,000, but not more than 60 in one year, are being elected.

Major Awards

MacRobert Awards have been presented since 1969 by the Council of Engineering Institutions on behalf of MacRoberts Trusts, for successful technological innovations contributing to the national prestige and prosperity of Britain. A fund was endowed in 1972 by the late Lord Rank to be used to reward outstanding contributions to human nutrition and crop husbandry, and to optoelectronics and nearly related phenomena. The first Rank prizes were announced in 1976. In giving awards for technological innovation, the Queen's Award to Industry scheme concentrates on the potential application in industry of outstanding achievements in advanced technology in the form of processes or products.

Science and Society

There are at least two bodies concerned with the relationship between science and society: the British Society for Social Responsibility in Science; and the Council for Science and Society, formed by specialists in the natural and social

sciences, the law, and medicine to support and stimulate research into the social effects of scientific and technological development.

Zoological Gardens

The Zoological Society of London, whose main function is as a scientific organisation, runs the world-famous London Zoo, opened in 1828, which occupies 14 hectares (36 acres) of Regent's Park, London. In 1931 the Society opened Whipsnade Park Zoo near Dunstable (Bedfordshire) where over 2,000 animals roam a 200-hectare (500-acre) park. Comparative studies are undertaken in pathology, biochemistry, radiology and infectious diseases, and in the reproductive processes of mammals. The Society also organises scientific meetings and symposia for zoologists, publishes scientific journals and maintains one of the largest zoological libraries in the world. At the end of 1978 the Society's collections at London Zoo and Whipsnade included 2,102 mammals, 2,118 birds, 383 reptiles, 268 amphibians, 2,920 fishes and 3,238 invertebrates. Other well-known zoos are those at Edinburgh, Bristol, Chester, Dudley, Chessington and Jersey. There are also a number of 'safari parks' containing reservations of wild animals through which the public can pass in closed motor cars.

Scientific Museums

The British Museum (Natural History) is one of the world's principal centres for the general study of natural history, particularly for specialised research into taxonomy. It has five scientific departments: botany, entomology, mineralogy, palaeontology and zoology. It possesses extensive collections of extant and fossil animals and plants and of minerals, rocks and meteorites. The Science Museum illustrates the development of pure and applied science in all countries, but chiefly in Britain, which has always held a leading place in engineering, agriculture, navigation, mining, aeronautics, and in the development of industrial machinery and processes. The geology of Britain is probably known in more exact detail than that of any other country in the world, and the Institute of Geological Sciences has an outstanding collection of exhibits in its Geological Museum. These three museums are in South Kensington, London. Other important collections are those of the Museum of Science and Industry, in Birmingham, and the Museum of the History of Science, at Oxford.

NATIONAL RESEARCH DEVELOPMENT CORPORATION

The functions of the National Research Development Corporation (NRDC), an independent public corporation set up in 1949, are to promote the manufacture by industry, under NRDC licence, of new products and processes invented in government laboratories, universities and elsewhere, advancing money where necessary to bring them to a commercially viable stage, and to speed up technological advance by investing money with British industrial firms, principally on a joint venture basis, for the development of their own inventions and projects. The NRDC can deal with innovations in almost any area of technology except atomic energy and defence. It is engaged in 508 development projects, of which 216 are joint ventures with industry. Major projects to date include cephalosporin antibiotics, hovercraft, pyrethroid insecticides, computers and computer software, pharmaceuticals, alkali-resistant glass fibres, fuel cells, electric motors, dental cement, electronics and carbon fibres.

INTER-NATIONAL SCIENTIFIC RELATIONS

Britain is represented on the European Economic Community's Scientific and Technical Research Committee, the object of which is to co-ordinate national policies on these matters and to implement joint projects of interest to the Community, and the Committee for Scientific and Technological Policy of the Organisation for Economic Co-operation and Development (OECD). Other

intergovernmental organisations involved in scientific co-operation with which Britain is concerned include: European Co-operation in Science and Technology; specialised agencies of the United Nations such as the United Nations Educational, Scientific and Cultural Organisation; the International Atomic Energy Agency; the Nuclear Energy Agency and the International Energy Agency of the OECD; the European Organisation for Nuclear Research; the European Space Agency; the European Molecular Biology Conference; the European Molecular Biology Laboratory; the International Agency for Research on Cancer; and the North Atlantic Treaty Organisation Science Committee. Among non-governmental organisations Britain is represented in the international unions comprising the International Council of Scientific Unions (see p 385). The five research councils, the Royal Society and the British Academy became founding members of the European Science Foundation set up in 1974. In nuclear energy Britain also co-operates within the framework of international agreements; through direct links between the UKAEA and its counterparts; and through joint companies in, for example, nuclear fuel and radioisotope manufacture.

There are scientific counsellors in the British Embassies in Washington, Paris, Bonn, Moscow and Tokyo who among other things promote contacts in science and technology between Britain and the countries to which they are accredited. These counsellors serve all central government departments concerned in overseas scientific affairs, as well as the research councils and the Royal Society, which is the main representative of Britain in areas of non-governmental collaboration. Administrative support for the counsellors is provided in Britain by the Department of Industry's Overseas Technical Information Unit.

The Overseas Development Administration

The Overseas Development Administration (ODA) of the Foreign and Commonwealth Office promotes scientific activities in the interests of developing countries. These include research covering a wide range of disciplines, specialist advice from Britain, advisory visits, conferences for exchange of information, training scientists from overseas in universities and research institutions in Britain, recruiting scientific staff from Britain, and providing support for existing research services and research projects overseas. Equipment is sometimes provided for research purposes and to encourage scientific training. There are two organisations forming part of the ODA which are wholly engaged on scientific work to assist developing countries. They are the Tropical Products Institute, which specialises in the post-harvest aspects of agricultural, fish and animal products, and the Centre for Overseas Pest Research, which is concerned with the development and application of pest control techniques relevant to tropical agriculture. In addition, the ODA meets the cost of a number of scientific units which do substantial research work of benefit to developing countries. The ODA also supports the International Agricultural Research Centres under the aegis of the Consultative Group for International Agricultural Research. In 1978 the ODA spent f10.2 million on scientific activities including research for the benefit of developing countries. Some 700 research and development projects to improve life in the developing countries are being supported, including many projects concerned with agriculture or medicine.

The British Council

The principal aims of the British Council (see p 69) in science (including agriculture, medicine and technology) are to foster co-operation between British scientists and scientists of other 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.

There are 70 staff overseas with science qualifications who work to advance technological, educational and scientific development, and collaboration with Britain. One of their priorities is to make British expertise available, increasingly through consultancy schemes; others are to establish research and development facilities, to provide trained manpower, and to assist with the establishment of technical teaching institutes.

Interchange of scientists, technologists and educationalists is considered to be of prime importance. British specialists in a very wide range of subjects are sent overseas to advise on research and development and on teaching, and to give courses of lectures, while scientists, technologists and technical teachers are recruited or seconded to posts in overseas universities, technical teaching institutes, teacher training colleges, education authorities, schools or curriculum reform centres.

The Council invites senior overseas people to Britain and arranges programmes of visits or attachments. It makes its own awards for postgraduate study in Britain and supervises programmes for senior specialists and students who come to Britain through the United Nations agencies or bilateral technical assistance schemes. The Council administers the Academic Interchange with Europe Scheme, the European Academic Links Scheme, the Younger Research Workers' Interchange Scheme, the Commonwealth University Interchange Scheme and scientific exchange with Eastern Europe. Professional courses organised by the Council in various parts of Britain for overseas specialists include science and medicine. At the Council's headquarters in London, extensive professional, advisory and information facilities within specialist departments and libraries covering education, medicine, science, technology and science education are available to overseas people.

SPACE ACTIVITIES Government responsibility for space activities is undertaken by the Secretary of State for Education and Science (through the Science Research Council), the Secretary of State for Defence and the Secretary of State for Industry according to the nature of the project. Expenditure on space activities in 1978 was about £65 million.

Britain is a member of the European Space Agency (ESA) together with Belgium, Denmark, France, the Federal Republic of Germany, the Irish Republic, Italy, the Netherlands, Spain, Sweden and Switzerland. The Department of Industry is responsible for leading the British delegation to the ESA and for British participation in the space application programmes of the Agency consisting of the development of telecommunication, meteorological and maritime satellites and the Space Laboratory, a manned laboratory to be carried aboard the United States Space Shuttle. Development and production of equipment for the ESA's 'Ariane' launcher is undertaken through a bilateral agreement with France. The Department of Industry is also responsible for industrial sponsorship of Britain's space industry. It participates in a joint departmental industry technology programme designed to improve Britain's industrial capability in space application systems; the programme is supervised on behalf of the Department by the Procurement Executive of the Ministry of Defence. The Space Department of the Royal Aircraft Establishment at Farnborough also undertakes long-term research and development to assist industry.

The Department of Industry, through the Post Office, is responsible for the use of satellites for civil communications purposes and undertakes research work

in connection with communications systems using satellites, including those of

Intelsat (see p 314).

The British civil scientific space research programme is the responsibility of the Department of Education and Science through the SRC. The latter provides Britain's representatives and financial contribution for the ESA's scientific satellite programme. Scientific research, notably in astronomy, space and the earth's atmosphere, using satellites, rockets and balloons, is supported by the SRC (see p 378). The scientific programmes of the ESA and bilateral arrangements with other countries, such as the United States through its National Aeronautics and Space Administration (NASA), has made or is making possible flight opportunities for both European and British experiments (as on the International Solar Polar Mission planned for 1983), American launching of the British Ariel series of scientific satellites (the sixth of which was launched in June 1979), the incorporation of British experiments in American satellites, and the analysis of lunar surface samples. British experiments have provided information which has helped to increase scientific knowledge, especially in astronomy and astrophysics, and to interpret climatic patterns. The SRC's Appleton Laboratory provides support and services for the universities' spacebased experiments and also operates the NASA Spaceflight Tracking and Data Network station at Winkfield (Berkshire). The orbital prediction and coordination centre is at the Appleton Laboratory, which is also the home of one of the three World Data Centres for space research.

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 music, drama, opera and dance; and festivals held in Bath, Cheltenham, Edinburgh and other towns are also well known. Many British playwrights, composers, sculptors, painters, writers, actors, singers, choreographers and dancers enjoy international reputations. At an amateur level, activities which make use of local talent and resources take many forms. Amateur choral, orchestral, operatic, dramatic and other societies for the arts abound; and increasing numbers of people take an interest in crafts such as pottery, weaving and woodwork.

Promotion and patronage of the arts are the concern of both official and unofficial bodies. The Government and local authorities take an active part, and a substantial amount of help also comes from private sources, including trusts and commercial concerns. Policies towards support for the arts are broadly similar, however, and there are two main aims. One is to maintain and improve the traditional arts and cultural heritage, and to make them more accessible to greater numbers of people. The other is to provide financial aid to working artists and craftsmen, and to encourage more people to take part in creative leisure

pursuits.

Ministerial responsibility for general arts policy is borne by the Chancellor of the Duchy of Lancaster, a member of the Cabinet, at the Office of Arts and Libraries (set up In June 1979), the Secretaries of State for Wales, Scotland and Northern Ireland are also concerned with cultural matters. In addition, the Government is responsible for the upkeep of ancient monuments and historic buildings, and grants are made towards the maintenance of privately owned historic buildings (see p 172).

The main educational functions concerning the arts are carried out through the central government education departments. They are concerned, in partnership with local education authorities and voluntary bodies, with arts education in schools, further education colleges, polytechnics, evening institutes and

community centres, and with the public library service.

Arts Councils

Most government support for the arts takes the form of grants to independent agencies. The most important of these is the Arts Council of Great Britain, established by Royal Charter in 1946, whose main objects are to develop and improve the knowledge, understanding and practice of the arts, to increase their accessibility to the public, and to advise and co-operate with government departments, local authorities and other organisations.

Government allocations to the Arts Council in 1979–80 amount to £60 million. The Council gives financial help and advice to over 1,200 organisations, from the major opera, dance and drama companies, orchestras and festivals, to

the smallest touring theatres and experimental groups.

The Council encourages such diverse interests as contemporary dance, photography and art films, and helps professional creative writers, choreographers,

composers, artists and photographers by means of bursary and award schemes. It promotes art exhibitions and tours of opera, dance and drama companies. Funds are provided for specialist training courses in the arts and for helping with the construction of new buildings or improvements to existing theatres, concert halls and other arts buildings under its 'Housing the Arts' scheme.

Members of the Council are appointed by the Chancellor of the Duchy of Lancaster. Advised by panels responsible for different aspects of the arts, the Council itself allocates subsidies to the main professional arts-promoting organisations. Organisations in Scotland and Wales receive their subsidies from the Scottish and Welsh Arts Councils which are committees of the Arts Council of Great Britain with a large measure of autonomy.

In Northern Ireland there is an independent Arts Council with aims and functions similar to those of the Arts Council of Great Britain. It receives an

annual grant from the Northern Ireland Department of Education.

British Council

The British Council promotes knowledge of British culture and literature overseas (see p 69), and maintains libraries in most of the countries in which it is represented. The Council may initiate or support 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, and organises British participation in international exhibitions. The Council distributes overseas a wide range of specialised films, many of them on the arts, and encourages professional interchange in all cultural fields between Britain and other countries.

Broadcasting Organisations

A major contribution to the arts (particularly music and drama) is made by the British Broadcasting Corporation (BBC) and, to a lesser extent, by the independent television and radio programme companies and the Independent Broadcasting Authority (IBA). The BBC has orchestras employing about a third of the country's full-time professional musicians, and each week it broadcasts some 90 hours of serious music (both live and recorded) on its Radio 3 channel. It regularly commissions new music, particularly by British composers, and sponsors concerts, competitions and festivals. Independent television companies make grants for the promotion of the arts in their regions, particularly to regional arts associations, and transmit general magazine programmes on the arts. Both the BBC and IBA broadcast a wide range of new drama together with adaptations of novels and stage plays. They also screen a variety of feature films including British and overseas productions.

Local Support

Local authorities support the arts in many ways. In addition to their responsibilities for education (including specialised art education) and the public library service, many provide and maintain local museums and art galleries. In Great Britain the authorities have power to incur expenditure on entertainment in all its forms. Many authorities make contributions to regional arts associations (see below) and towards the expense of professional symphony orchestras and local theatre companies. Grants are often made towards the capital cost of new arts buildings, especially theatres; the Greater London Council, for example, made a substantial contribution towards the cost of the National Theatre.

Private Contributions

Valuable support for the arts comes from many voluntary sources including charitable trusts and foundations, and supporters' organisations of the major national institutions. Industrial and commercial concerns offer a growing source of patronage, and an Association for Business Sponsorship of the Arts has been

formed to advise interested companies. Sponsorship may take the form of grants to regional arts associations, local arts festivals and orchestras, and donations towards individual cultural events. Tax advantages and exemptions are available to encourage such support.

Regional Arts

The Government encourages regional co-operation in arts patronage through 15 regional arts associations in England and Wales whose aim it is to ensure that the whole range of the arts is more widely available to people throughout their areas. They can offer financial assistance to local and other regional arts organisations and advise on and promote all sorts of local arts activities. They are financed by a combination of local authority, Arts Council and private funds; local authorities and a wide range of other interests are represented on the associations. Other examples of co-operative patronage are the orchestra boards which support symphony and chamber orchestras and the societies formed to present some of the many arts festivals in Britain.

Festivals

Considerable interest and enthusiasm is shown for more than 200 professional arts festivals which take place each year. Most are subsidised by a combination of local authority, regional arts association and private funds, while the major ones receive Arts Council assistance. Some arts festivals concentrate particularly on music. These include: the Three Choirs Festival which has taken place annually for more than 250 years in Gloucester, Worcester or Hereford; the Cheltenham Festival which is largely devoted to contemporary British music; and the Aldeburgh and English Bach festivals. Others cater for a number of art forms; among the better known are the Edinburgh International Festival, the Royal National Eisteddfod of Wales, and those held in the City of London, in Bath, Brighton, Malvern, Harrogate, Chichester, Windsor and York. A festival is held in Belfast under the auspices of the Queen's University.

Arts Centres

There are more than 180 arts centres in Great Britain and the number is increasing steadily. They provide opportunities for enjoyment of and participation in the arts. The centres are supported mainly by regional arts associations and local authorities with some help from the Arts Council and other organisations. They may be small centres for amateur activities or they may offer a professional programme. A growing number of theatres and art galleries also provide a focal point for the community by offering facilities for other arts.

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.

DRAMA

Britain is one of the world's major theatre centres. In London during the summer season, theatres are packed with overseas visitors, while in the provinces there is growing support for the work of regional theatres. From what was once called the 'fringe' theatre, and was based on London, a network of informal touring companies has developed, which visit many of the new arts centres and community festivals.

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.

Support for much of this development in British drama comes jointly from the Government, through the Arts Councils of Great Britain and Northern Ireland, from local authorities and regional arts associations, and from some private sponsorship. In particular the Arts Council assists developments in new drama by encouraging co-operation between theatres and playwrights by means of bursaries, commissions and guaranteed royalties. Schemes are also in operation to train stage designers, directors, technicians, actors and those wishing to take up theatre administration.

Professional Theatre

Over 250 theatres in professional use in Britain can each accommodate more than 200 people. Some are owned or rented by non-profit-distributing companies, the majority of which receive Arts Council subsidies, while the remainder are operated commercially or owned by local authorities.

London is the centre of theatrical activity with some 40 principal theatres in or near the centre and eight in the suburbs. Most are let to producing managements on a commercial basis, but five are occupied by major subsidised companies. These include the National Theatre which stages classical and modern plays from various countries in its three auditoria on the south bank of the River Thames, the Royal Shakespeare Company which presents Shakespearean plays at Stratford-upon-Avon and a mixed repertoire in London, and the Old Vic (formerly known as the Prospect) Company, Britain's major theatrical touring company, which has a London base in the famous Old Vic theatre.

Outside London there are a number of theatres which accommodate preand post-West End tours of the major London productions and performances by companies specially formed for touring. (Both the National Theatre and Royal Shakespeare companies have toured in Britain and overseas.) A decline in the number of these theatres has been checked in response to the demand by audiences outside London for the larger opera, dance and drama companies. Some theatres have been bought by local authorities. Many non-repertory theatres outside London present all kinds of drama and many also put on variety shows and other entertainments. There has, however, been a growth in the activities of over 40 resident theatre companies which receive financial support from the Arts Council and the local authorities. These companies employ leading producers, designers and actors, and standards are high. Some companies have their own theatres, others rent from local authorities.

There is no censorship of plays, but the Theatres Act 1968 makes it an offence to present or direct an obscene performance of a play in public or in private (including theatre clubs), an obscene performance being defined as one which tends to 'deprave and corrupt persons who are likely . . . to attend it'. Provision is made for a defence against an obscenity charge on the grounds that the performance is for the public good in the interests of, for example, drama, opera or literature.

Amateur Theatre

There are several thousand amateur dramatic societies in Britain; they are encouraged by local education authorities, by other public bodies, and by four special organisations—the British Theatre Association, the National Drama Conference, the Scottish Community Drama Association and the Association of Ulster Drama Festivals. Most universities have active amateur drama clubs and societies; an International Festival of University Theatre is held annually.

Dramatic Training

Training for the theatre is provided mainly in drama schools. Among the best known are the Royal Academy of Dramatic Art, the Central School of Speech and Drama, the London Academy of Music and Dramatic Art, and the Guildhall School of Music and Drama, all of which are in London; and the Old Vic School in Bristol. There is the Royal Scottish Academy of Music and Drama in Glasgow; and in Cardiff, the Welsh College of Music and Drama. Several universities offer major courses in drama.

Theatre for Young People

Theatre for young people has increasing importance. In 1970 the Young Vic was opened as a theatre for young people, the National Youth Theatre is based in London, and the Scottish Youth Theatre was established in 1970. There are some 10 specialist companies, including the Unicorn Theatre for Young People, Theatre Centre and the Polka Company, some of which are supported by the Arts Council. Outside London about 30 repertory companies provide programmes and other types of theatre activity for young people. In Northern Ireland Interplay Theatre, a company sponsored and administered by the Arts Council of Northern Ireland, works mainly in schools.

Most of the many amateur youth theatres in Britain are supported by local authorities. Many schools and youth clubs put on plays and provide some education in drama. The London education service provides special drama centres for young people.

MUSIC, OPERA AND DANCE

Music plays an important role in British cultural life. Pop music, folk music, jazz, light music and brass bands all have substantial followings while the wide-spread interest in classical music is reflected in the large audiences at choral and orchestral concerts and at performances of opera, dance and chamber music.

The Arts Councils provide subsidies for orchestras, opera and dance companies, music societies and festivals. They also provide bursaries and commissions for composers, musicians, designers and choreographers. The Master of the Queen's Music holds an office within the Royal Household, with responsibility for organising and writing music for State occasions.

Music

Seasons of orchestral concerts are promoted every year in many of the large towns and cities. In central London the principal concert halls are the Royal Festival Hall, adjacent to which are the Queen Elizabeth Hall and the Purcell Room which accommodate smaller-scale performances; the Royal Albert Hall, where the annual summer season of Promenade Concerts is given; the Wigmore Hall, a recital centre; and St John's, Smith Square.

Orchestras

The leading symphony orchestras are the London Philharmonic, the London Symphony, the Philharmonia, the Royal Philharmonic, the Royal Liverpool Philharmonic, the Hallé (Manchester), the City of Birmingham Symphony, the Bournemouth Symphony, the Ulster and the Scottish National. The BBC runs a number of orchestras, including four symphony orchestras, providing 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 London Mozart Players, the Bournemouth Sinfonietta, the Northern Sinfonia (Newcastle upon Tyne), the Scottish Philharmonic, the Scottish Baroque Ensemble and the Scottish Chamber Orchestra. Most orchestras (other than those of the BBC) receive financial aid from the Arts Councils, local authorities and industrial sources.

Choral Societies

Among the principal choral societies are the Bach Choir, the Royal Choral Society, the Swansea Philharmonic Choir, the Edinburgh Royal Choral Union and the Belfast Philharmonic Society. Almost all the leading orchestras have close links with particular choirs, such as the Philharmonia Chorus and the

London Symphony Chorus, though these choirs are mostly independent of the orchestras. The majority of choral societies are affiliated to the National Federation of Music Societies.

Amateur Interest

Interest in amateur music-making is encouraged by county music committees (some of them voluntary and some, sub-committees of local education authorities), which are aided by the Carnegie United Kingdom Trust and united in the Standing Conference for Amateur Music. The National Federation of Music Societies, the organisation for chamber music societies, amateur choirs and amateur orchestras, receives an annual grant from the Arts Council to assist affiliated societies with the cost of engaging professional soloists. Some 1,200 music societies are members of the Federation, which advises them on concert planning and promotion. The Welsh Amateur Music Federation, funded by the Welsh Arts Council, assists amateur music-making in Wales.

Opera and Dance

Regular seasons of opera and ballet are given at the Royal Opera House, Covent Garden, London, which receives financial assistance from the Arts Council and from private and business sponsorship. The Royal Opera House has a permanent orchestra which plays for the Royal Opera and the Royal Ballet. Both organisations have a high international reputation. Seasons of opera and operetta in English are given by the English National Opera which plays in the London Coliseum, and makes provincial tours supplemented by the English National Opera North based in Leeds. Sadler's Wells Theatre houses the London performances of visiting opera and dance companies and the Sadler's Wells Royal Ballet. Scottish Opera has regular winter seasons at its permanent home, the Theatre Royal in Glasgow, and tours mainly in Scotland and northern England, while the Welsh National Opera has four quarterly seasons at the New Theatre, Cardiff and at the Hippodrome Theatre, Birmingham, and tours chiefly in Wales and the west of England.

Other Opera Groups

An opera season, for which international casts are specially assembled, is held every summer at Glyndebourne in Sussex; this is followed with an autumn tour by Glyndebourne Touring Opera with different casts. Other opera companies include Kent Opera, the English Music Theatre Company which specialises in the performance of works by British composers, and the New Opera Company which is associated with the English National Opera. Opera in Northern Ireland is promoted by the Northern Ireland Opera Trust and the Studio Opera Group. A new touring company, Opera 80, financed mainly by the Arts Council, is expected to start production early in 1980.

Dance Companies

Dance companies also include London Festival Ballet, Ballet Rambert (Britain's oldest ballet company, which re-formed in 1966 as a leading modern dance company), Scottish Ballet, London Contemporary Dance Theatre (which provides regular seasons of contemporary dance in London besides touring extensively) and Northern Ballet Theatre (which concentrates its activities in the north of England, although it makes periodic tours elsewhere). Many small modern groups also give performances.

Training in Music, Opera and Dance Professional training in music is given at colleges of music, of which the Royal Academy of Music, the Royal College of Music and Trinity College of Music in London, and the Royal Scottish Academy of Music and Drama in Glasgow are grant-aided. Other leading colleges include the Guildhall School of Music and Drama in London, the Royal Northern College of Music in Manchester and the

Birmingham School of Music. The National Opera Studio provides advanced training courses. The leading dance schools are the Royal Ballet School, the Rambert School of Ballet and the London School of Contemporary Dance which, with many private schools, have helped in raising British dance to its present high standard.

A Youth and Music organisation, affiliated to the international Jeunesses Musicales, encourages attendances by young people at opera, dance and concert performances. Ballet for All, previously a branch of the Royal Ballet, now run by the Royal Academy of Dancing, presents lecture-demonstrations on classical ballet to young audiences. Educational Dance Drama Theatre receives financial support for its work with young people and Ludus (a dance-in-education team) and East Anglian Dance Theatre are supported by their regional arts associations to perform in schools respectively in the North-West and East Anglian regions of England. Scottish Ballet Workshop, the educational branch of Scottish Ballet, operates widely 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 and of Wales and other youth orchestras are noted for their high standards. Almost a third of the players in

the European Community Youth Orchestra come from Britain.

FILMS

British films, actors and the creative and technical services which support them have achieved successes in international film festivals and other events. Cinema and television films are exported to most countries of the world.

There are about 1,550 cinema screens in Great Britain, and estimated attendance in 1978 amounted to 127 million. Cinema attendance figures have been declining since the mid-1950s as television has become generally accessible. In 1953 the average weekly cinema audience was some 25 million; by 1978 it was one-tenth of that figure although this represented an increase over 1977.

An Interim Action Committee is studying the future of the film industry. Among the ideas being considered is the establishment of a British Film

Authority.

The Government does not invest directly in films but the National Film Finance Corporation lends money for feature film production from capital advanced by the Government and private interests. The Corporation also administers the National Film Development Fund which provides loans for script-writing and other pre-production costs.

A levy on cinema admissions, known as the Eady Levy, provides a fund to benefit the makers of eligible films. Grants from the levy can be made to the Children's Film Foundation, the British Film Institute Production Board, the National Film School, and the National Film Finance Corporation. The rest of the fund is distributed to makers of eligible films in proportion to a film's takings.

A specified number of British or European Community films must be shown in British cinemas each year. For main feature films the quota is 30 per cent and for supporting programmes, 25 per cent.

Cinema Licensing and Film Censorship Local authorities have powers to license cinemas and censor films. They have a legal duty to prohibit the admission of children under the age of 16 to unsuitable films, and may also exercise censorship over films for adults. In considering the suitability of films the authorities normally rely on the judgment of an independent body, the British Board of Film Censors, to which most films for public showing are submitted.

The British Board of Film Censors was set up in 1912, on the initiative of the cinema industry, to ensure that a proper standard was maintained in the films offered to the public. The Board, which does not use any written code of censorship, may require cuts to be made before granting a certificate to a film; very rarely, it refuses a certificate. Films passed by the board are placed into one of four categories: 'U' (for general exhibition); 'A' (for general exhibition but parents are advised that the film contains material which they may not wish children under the age of 14 years to see); 'AA' (for persons of not less than 14 years of age); and 'X' (for persons of not less than 18 years of age).

Documentary Films

The documentary tradition in short film production in Britain was founded in 1929 when a group of directors began making factual films of a distinctive and imaginative kind for the Government, and later for commercial organisations. The war years saw a big expansion in this field and, since then, British documentary technicians have continued to produce, for both cinema and television, high quality factual films which have won numerous international awards. The British Industrial and Scientific Film Association promotes the use of films in industry, science and commerce. The Federation of Specialised Film Associations is the trade association of documentary, short, industrial, advertising and cartoon film makers. The National Panel for Film Festivals, under the aegis of the British Council, is responsible for the selection of British entries for international short and documentary film festivals.

The Government sponsors a wide range of documentary films for use non-theatrically and on television in Britain and overseas. They are produced through the Central Office of Information (COI), and the majority are commissioned through private companies. There are several major documentary film libraries, including the COI's Central Film Library, which provides films on hire or free of charge to a wide variety of educational, industrial and other users. The Films of Scotland Committee promotes the production of films covering the industries and cultural traditions of Scotland.

Children's Films

Cinemas which give children's shows require a special licence from local authorities which may impose conditions. There are about 300 cinemas which provide special programmes for children on Saturday mornings. An important contribution to these programmes is made by the Children's Film Foundation, which, with the aid of grants from the British Film Fund Agency, produces and distributes entertainment films specially designed for children.

British Film Institute

The development of the film and television as an art is promoted by the British Film Institute, founded in 1933 and financed mainly by a government grant, and by the Scottish Council for Educational Technology which also receives a government grant. The Institute offers financial and technical assistance to both new and experienced film makers who cannot find support elsewhere. The Institute administers the National Film Theatre in London and the National Film Archive and maintains a film library from which films may be hired; it also has a library of scripts and books on the film and television, a British National Film Catalogue recording all non-fiction and short films available in Britain, and an information service. It makes grants to the Federation of Film Societies, the British Universities Film Council and the Society for Education in Film and Television.

The Institute's Educational Advisory Service offers guidance to teachers in formal education at all levels on film and television courses, and its Editorial

Department produces a range of publications including a critical journal Sight and Sound and the Monthly Film Bulletin.

The National Film Archive contains nearly 37,000 films, including newsreels and other miscellaneous items, and 4,500 television programmes, besides art designs and posters; it also has over I million photographic stills, selected to illustrate the history and the art of the film and as social and historical records.

The National Film Theatre has two cinemas showing films of outstanding historical, artistic or technical interest. It is unique as a cinema offering regular programmes unrestricted by commercial considerations or by the age or nationality of the films shown. Each year it organises the London Film Festival. The British Film Institute has promoted the development of some 50 regional film theatres on the lines of the National Film Theatre and may make grants towards their costs. In Scotland the Scottish Film Council, as a committee of the Scottish Council for Educational Technology, is responsible for regional film theatres and administers the Scottish Central Film Library. Grants in Northern Ireland are made by the Arts Council of Northern Ireland.

Training in Film Production

An independent National Film School which is financed primarily by grants from the Office of Arts and Libraries and the British Film Fund Agency, offers three-year courses for writers, directors, producers and cameramen. 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 of further education.

VISUAL ARTS

A number of modern British painters and sculptors have a high international reputation, and have received many international prizes and commissions for major works in foreign cities. The growth of interest in the visual arts at home has been stimulated by improved methods of display in museums and galleries, and by the activities of many institutions, societies, private galleries and the growing number of local arts centres.

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, 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.

In addition to direct State assistance, the Arts Council runs the Hayward Gallery in London, where major loan exhibitions are shown, and the Serpentine Gallery, which mainly presents the work of young artists. The Council maintains its own collection of contemporary British art, and organises or offers grants or guarantees towards a variety of touring and other exhibitions. It also supports art societies and independent galleries, and provides commissions and awards for artists. A number of photography galleries receive Arts Council support, including the Side Gallery in Newcastle upon Tyne, the largest gallery in Britain devoted entirely to photography. The Scottish and Welsh Arts Councils maintain art galleries in Edinburgh, Glasgow, and Cardiff respectively, and the Northern Ireland Arts Council owns a gallery in Belfast.

The Art Market London is a major centre for the international art market and regular sales of works of art take place in the main auction houses. Certain items are covered by export control: these are works of art and collectors' items over 50 years old and worth more than £8,000; photographic material over 60 years old and worth more than £,200; documentary material over 50 years old; and British archaeological material over 50 years old. A licence is required before such items can be exported, but this is granted automatically in the case of objects imported into Britain within the last 50 years. In other cases the application for a licence is considered by the Department of Trade, 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 regards 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 offer to buy the object at a fair price.

Museums and Art Galleries

About 1,000 museums and art galleries are open to the public including the major national collections and a wide variety of municipally and independently owned institutions.

An increasing number of people visit major national art galleries and museums (about 3 million in 1978 compared with 16.2 million in 1971).

National Collections

Taken together, the national museums and art galleries in London are among the most comprehensive collections of objects of artistic, archaeological, scientific, historical and general interest to be found within any one city. They are the British Museum, the Victoria and Albert 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 Museum of London, the Wallace Collection, the British Museum (Natural History), the Geological Museum and the Science Museum.

There are three national museums and art galleries in Edinburgh: the National Museum of Antiquities of Scotland, the Royal Scottish Museum (including the Scottish United Services Museum), 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 and has recently opened an Industrial and Maritime Museum in Cardiff's dockland. It also has a branch museum (the North Wales Quarrying Museum) at Llanberis (Gwynedd). In Northern Ireland there are two national museums: the Ulster Museum in Belfast and the Ulster Folk and Transport Museum, County Down.

Some of these national museums have also opened branches outside London, examples being the National Railway Museum at York which is administered by the Science Museum, and portrait collections at Montacute House (Somerset) and Beningborough Hall (Yorkshire), administered by the National Portrait Gallery in collaboration with the National Trust.

Most of the national collections are administered by trustee bodies, but the Victoria and Albert and Science Museums are the responsibility of the Office of Arts and Libraries; the Royal Scottish Museum is the responsibility of the Scottish Education Department.

Other Collections

Other important collections in London include the Armouries (housed in the Tower of London), the Public Record Office and the Sir John Soane's Museum. In Buckingham Palace the Queen's Gallery 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 (for example, the Ashmolean Museum in Oxford, founded in 1683, the oldest

in the country, and the Fitzwilliam Museum in Cambridge). There are important museums and art galleries in Aberdeen, Belfast, Birmingham, Bristol, Cardiff, Dundee, Glasgow, Leeds, Leicester, Liverpool, Manchester, Norwich, Reading, Sheffield, Southampton and York. Many private art collections housed in historic family mansions, including those owned by the National Trust, are open to the public. 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 Salop which won the first European Museum of the Year Award in 1978).

Finance

All national collections are financed chiefly from government funds. Besides meeting administrative and maintenance costs, the Government provides annual purchase grants (f, 10·1 million in 1979-80). It may also provide special purchase grants. Pre-eminent works of art may be accepted by the Government in place of capital transfer tax. The Government intends to set up an independent National Heritage Fund to provide assistance to bodies wishing to acquire land, buildings, works of art and other objects associated with the national heritage.

Local museums and art galleries, which are maintained from rates or endowments, receive help in building up their collections through the annual government grants administered by the Victoria and Albert, Science and Royal Scottish Museums. Financial and practical assistance is also given to museums and galleries by trusts and voluntary bodies, including the Calouste Gulbenkian Foundation, the National Art-Collections Fund, the Contemporary Art Society and the Association for Business Sponsorship of the Arts.

Policy and Co-ordination The Government is advised on policy matters by the Standing Commission on Museums and Galleries, which also promotes co-operation between national and provincial institutions. Eight area museum councils, grant-aided by the Government, provide technical services and advice on conservation, display, documentation and publicity.

The Museums Association, to which museums and art galleries and their staffs throughout the country belong and which also has many overseas members, is an independent organisation. It serves as a central body for the collection of information and discussion of matters relating to museum administration, and as a training and examining body for professional qualifications.

Exhibitions

Temporary exhibitions provided by the Arts Councils, the national museums and galleries, the Art Exhibitions Bureau and the area museum councils are a regular feature of many museums. In London the Hayward Gallery, the Tate Gallery, the British Museum, the Victoria and Albert Museum and the Royal Academy are the main centres for loan exhibitions; these are also held at the Whitechapel Art Gallery, the Camden Arts Centre and the Institute of Contemporary Arts. Commercial exhibitions are held in the galleries of the London dealers. The Serpentine Gallery in London's Kensington Gardens houses Arts Council exhibitions of contemporary artists, and another small gallery in London is run by the Crafts Council.

There are a number of national art exhibiting societies, some of which, notably the Royal Academy at Burlington House, have their own galleries in London. The Royal Scottish Academy holds annual exhibitions in Edinburgh. An increasing number of amateur art societies throughout Britain hold local exhibitions and encourage local interest in the fine arts. There are also children's exhibitions, including the National Exhibition of Children's Art.

Training in Art and Design

Art and design education is provided in maintained colleges of art, further education colleges and polytechnics, which are administered by local education authorities. Other institutions offering art and design courses include universities, the Royal Academy Schools and some private art schools. At postgraduate level there is the Royal College of Art which awards its own degrees. Art is also taught at an advanced level at the four Scottish Central (Art) Institutions administered by the Scottish Education Department.

The leading academic institutions for the study of the history of art are the Courtauld and Warburg Institutes of the University of London, and the Depart-

ment of Classical Art and Archaeology in 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. Pictures may also be borrowed from many public libraries.

Crafts

Government grants for the crafts, amounting to some £1 million in 1979-80, are administered in England and Wales by the Crafts Council (formerly the Crafts Advisory Committee). Set up in 1971 to advise the minister responsible for the arts on the needs of artist-craftsmen, the Council holds regular exhibitions of work at its gallery in London and also publishes the bi-monthly magazine Crafts which features crafts activities in Britain and abroad. It also gives financial assistance to enable craftsmen to be trained and to establish or expand their businesses. Its activities include crafts associated with conservation and restoration. It runs a comprehensive information service and houses a slide-index. The Council manages the craft shop at the Victoria and Albert Museum which sells a selection of works by British artist-craftsmen. Scotland receives a separate government grant which is similarly administered by the Joint Crafts Committee. The British Craft Centre in London aims to increase public recognition, enjoyment, and support of the work of artist-craftsmen, and holds ten exhibitions a year (most of the contents of which are for sale).

Architecture

Official responsibility towards the nation's architecture is concerned mainly with encouraging the best in new building and conserving the best that has

been inherited from the past (for conservation, see p 172).

Several government departments, notably the Department of the Environment, provide advice on building and architecture. In collaboration with the Royal Institute of British Architects, the Secretary of State for the Environment makes annual awards for good housing design in both the public and private sectors. Royal Fine Art Commissions for England and Wales and for Scotland advise the departments, planning authorities and other public bodies on questions of public amenity or artistic importance.

The Royal Institute of British Architects is the leading professional institution with a membership of 21,000 in Britain and 6,000 overseas. It exercises control over standards in architectural education, and maintains one of the largest architectural libraries in the world. The Royal Incorporation of Architects in

Scotland is allied to it.

Other bodies with an interest in architecture include the Civic Trust (see p 182) which promotes high standards in civic building and planning, and the National Trusts (see p 182) which acquires land and buildings in order to protect them from harmful development for the benefit of the public. The number of people visiting National Trust properties rose from just over a million in 1960 to more than 6·3 million in 1978.

LITERATURE AND LIBRARIES

The study of literature is included in the curricula of all schools, colleges and universities. There are free public libraries throughout the country, private libraries and many 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 are made, for instance, by the Somerset Maugham Trust Fund and the E. C. Gregory Trust Fund.

Government help is given through the Arts Councils which support literature in a number of ways, including grants awarded to writers, translators, publishers, small presses and magazines. Legislation passed in 1979 provides for a scheme to give authors the right to receive payment from government funds for the use of their books borrowed from public libraries. The title Poet Laureate is conferred

on a poet who receives a stipend as an officer of the Royal Household.

Literary and Philological Societies

Societies for the promotion of literature include the English Association and the Royal Society of Literature. The British Academy for the Promotion of Historical, Philosophical and Philological Studies (known as the British Academy) is the leading society of humanistic studies and receives a government grant.

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, for example, the Poetry Society and the Apollo Society, sponsor poetry readings and recitals. There are also a number of clubs and societies, such as the New Fiction Society and the Poetry Book Society, which

distribute selected new books to their members.

Books

In 1978 British publishers issued nearly 39,000 separate titles: more than 29,000 new ones, and over 9,000 reprints and new editions. An increasing proportion of books-including specialised non-fiction-is sold in paperback form. Book clubs

make available hardback books at a lower price.

Leading organisations representing the interests of those concerned with book production and distribution are the Publishers' Association and the Booksellers' Association. The British Council also publicises British books and periodicals through its libraries in some 60 countries, its programme of book exhibitions (248 exhibitions were mounted in 1978-79) and its bibliographical publications including the monthly British Book News. The Book Development Council promotes British books overseas. (For sales and exports of books in 1978 see p 244). The National Book League has a membership including authors, publishers, booksellers, librarians and readers. It encourages an interest in books and arranges exhibitions in Britain and overseas.

Libraries

The British Library, created in 1973 from a merger of the British Museum Library with other libraries and institutions, is organised in three divisions. The Reference Division includes the Department of Printed Books holding about 10 million titles, the Department of Manuscripts, the Department of Oriental Manuscripts and Printed Books, and the Science Reference Library. The Lending Division at Boston Spa, West Yorkshire, has nearly 3 million volumes including some 140,000 current periodicals available on loan to other libraries in Britain and overseas. 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 foreign countries. The Bibliographic Services Division processes the acquisitions of the British Library for inclusion in its catalogues

and provides other bibliographic services; it publishes the *British National Bibliography* which lists in a classified order (with indexes) all new books and new editions, excluding reprints, published in Britain. The British Library automatically receives a copy of each new book, pamphlet or newspaper published in Britain. The National Libraries of Scotland and of Wales, the Bodleian Library of Oxford University and the Cambridge University Library are also entitled to claim copies. Plans for a new headquarters of the British Library in London are under review.

Some of the national museums also have large libraries, and many government departments have well-established libraries of considerable size and importance. The Public Record Office contains the records of the superior courts of law and of most government departments, as well as such famous historical documents as Domesday Book. In Scotland the Scottish Record Office serves the same purpose. The National Register of Archives (maintained by the Historical Manuscripts Commission) contains particulars of local and private records.

Besides the few great private collections, such as those of the Signet Library, Edinburgh, and the London Library, there are the rich resources of the learned societies and institutions (for scientific societies and institutions, see p 384). Examples are the libraries of the Royal Institute of International Affairs, the Royal Commonwealth Society, the Royal Geographical Society, the Royal Society of Edinburgh, the British Theatre Association, the Royal Academy of Music, the National Library for the Blind and the National Book League.

Libraries in Education The ancient university libraries of Oxford and Cambridge are unmatched by any of the more recent foundations, although the combined library resources of the colleges and institutions of the University of London total some 5·5 million volumes, the John Rylands University Library in Manchester contains some 2 million volumes, and the university libraries of Edinburgh and Glasgow have over 1 million volumes each, while Birmingham, Leeds, Liverpool and St Andrews each has over 750,000 volumes. Many universities have built up large and important research collections in special subjects; for example, the Barnes Medical Library at Birmingham, and the British Library of Political and Economic Science at the London School of Economics. Other universities and the polytechnics are also building collections.

The importance of good libraries is recognised at all levels of the education system. School libraries, most of which are maintained by local education authorities, often receive important support services from the public library service, including loans of books.

Public Libraries

Britain is served by a network of public libraries, administered by local public library authorities. These libraries have a total stock of some 132.7 million books (not including the libraries in publicly maintained schools).

Qualified and specialist staff are available for consultation in all but the smallest service points. About one-third of the total population are members of public libraries. The Chancellor of the Duchy of Lancaster is responsible for the supervision of the public library service in England and is advised by the Library Advisory Council for England. The Secretary of State for Wales has responsibility for supervision of the public library service in Wales and is advised by the Library Advisory Council for Wales. Public library authorities in England and Wales have a duty to provide (with some limitations) a free lending and reference library service of books and periodicals. In Scotland local authorities must provide library facilities, and similar duties are imposed on education and library boards in Northern Ireland. There are some 5,000

public library service points in Britain; some areas are served by mobile libraries of which about 700 are in service, and domiciliary services exist for people who are unable to visit a library.

Many libraries have collections of records and musical scores for loan to the public. Notable examples are the City of Westminster Central Music Library and the Henry Watson Music Library at Manchester Central Library. A number of libraries also lend from collections of works of art, either originals or reproductions. Nearly all libraries provide children's departments, while reference sections and art, music, commercial and technical departments meet the growing and more specific demands in these fields. Most libraries hold a significant collection of books and documents on the history of their localities.

The public library is often a centre for local cultural activities; these may include film shows, lectures, adult education classes, book-week exhibitions, drama groups, record recitals and children's story hours.

A voluntary system of library co-operation exists in England and Wales under which eight regional library bureaux (consisting mainly of public libraries in each area) aim to be largely self-sufficient in the interlending of current British books, achieved in some regions by a system of co-operative subject specialisation.

A number of local schemes for the exchange of specialist titles and information involve industrial, commercial and sometimes university libraries, and are normally centred on a major public or technical college library.

The National Libraries of Scotland and of Wales carry out functions similar to those of the regional bureaux and the Lending Division of the British Library. In Northern Ireland access to the stocks of all co-operating libraries is available on application to the libraries under the control of the five education and library boards and to the libraries of the Queen's University and the New University of Ulster.

Library Associations The principal professional organisation is the Library Association. It maintains a Register of Chartered Librarians, publishes books, pamphlets and official journals, and holds regular conferences. There are also associations of libraries, for example, the Association of Special Libraries and Information Bureaux and the Standing Conference of National and University Libraries.

22 The Press

More daily newspapers, national and regional are sold per person in Britain than in most other countries. Despite a slow but continuous decline in national newspaper sales, on an average day nearly three out of four adults over the age of 15 read a national morning newspaper and about one in two read an evening newspaper. National papers have a total circulation of about 15 million on weekdays and 18 million on Sundays though the total readership is considerably greater.

The press caters for a variety of political views, interests and levels of education. It is subject neither to State control nor to censorship.

Although pronounced views may be expressed in some newspapers and their political leanings may be obvious, they are almost always financially independent of any political party and are not obliged to follow any specific party line. In order to preserve their character and traditions, a few newspapers and periodicals are governed by arrangements which vest ownership of the undertaking in trustees, or operate it in accordance with a deed of trust, or provide that the transfer of shares be controlled by trustees. Others have management arrangements to ensure editors' authority and independence.

Unlike most of its European counterparts the British press receives no subsidies and relatively few tax and postal concessions. Newspaper and magazine sales and advertising receipts are zero-rated for value-added tax purposes. Registered newspapers receive a concession on postal rates, and there are concessions on 'per-word' rates for international press telegrams and photo-telegrams. In common with all postal customers, newspaper and magazine publishers can obtain reduced charges for regular bulk postings.

About 130 daily (Monday to Saturday) and Sunday newspapers and over 1,000 weekly newspapers are published. These figures include certain specialised papers with circulations limited not by region but by interest; for instance, business newspapers, sporting newspapers, newspapers in foreign languages for people of other countries resident in Britain and religious newspapers. Newsprint forms roughly a third of average national newspaper costs. Three-quarters of Britain's requirements are imported.

The national newspaper industry is faced with a number of problems. Financial difficulties (alleviated to some extent by improvements in advertising revenue) are further complicated by problems of labour relations, often associated with the introduction of new production techniques to increase efficiency.

The Royal Commission on the Press, whose final report was published in 1977, considered and made recommendations on a wide range of matters including editorial standards, concentration of ownership, industrial relations, the economics of the Press, training of journalists, and the Press Council (see Bibliography).

Ownership

Newspaper ownership, as it affects the national, London-evening and regional daily newspapers, is concentrated mainly in the hands of a comparatively small number of large press publishing groups (see, for example, the details of the

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groups controlling the national press which are given in Table 37), but 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 diversified interests over the whole field of publishing and communications; some have shares in independent television and radio contracting companies; and others are involved in industrial and commercial activities which have no connection with publishing or the mass media.

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 television programme companies have led or are leading to results which are contrary to the public interest, the Independent Broadcasting Authority may, with the consent of the Home Secretary, notify the companies that their programmes may cease to be transmitted. There is a similar stipulation for independent local radio; if a local newspaper has a monopoly in the area, it is not allowed to have a controlling interest in the local radio station. 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 unless the Minister of State for Consumer Affairs gives written consent. Except in certain limited cases, which include transfers of very small newspapers, consent may be given only after the minister has referred the matter to the Monopolies and Mergers Commission and received its report.

The 'National' Press Ten morning daily papers and seven Sunday papers (see Table 37) circulate throughout the country, and are known as national newspapers. All but one are produced in London (where Fleet Street is the traditional centre for the press), but five of the dailies and four of the Sundays also print northern editions in Manchester (accounting for about a quarter of the total production of the national press). One daily is printed in Manchester only, although there are plans to print an edition in London too in the near future. An edition of the Financial Times is also printed in Frankfurt. Prices of the national newspapers vary from 8p to 20p for the dailies and 15p to 22p for the Sundays.

The leading Scottish papers, *The Scotsman* and the *Glasgow Herald*, have a considerable circulation outside Scotland. Each of London's two evening papers has a distinctive style and draws its readership from a wide area, but both have

ownership affiliations with a national daily (see Table 37).

National newspapers are often thought of as either 'quality' or 'popular' papers on the basis of differences in format (broadsheet or tabloid, though this is not a rigid distinction), style and content. Four dailies and three Sundays are usually described as quality newspapers. The three Sunday qualities produce colour supplements which are distributed as part of the paper.

The slow decline in newspaper circulations as a whole (from 37 million in 1970 to 33 million in 1978), conceals the different experiences of individual papers and the fact that the circulation of some newspapers has remained

generally steady, while that of others has increased.

English Regional Newspapers

The regional newspapers of England (outside London, 74 morning or evening dailies and Sundays and some 700 newspapers appearing once or twice a week) provide mainly regional and local news. The daily newspapers also give coverage to national affairs, and a number co-operate to provide their own foreign news service.

Generally speaking, 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.

Circulation

The total circulation of the regional morning and evening papers is estimated at over 6 million. Of the morning papers the Yorkshire Post (Leeds) and the Northern Echo (Darlington) have circulations of over 100,000 and two provincial Sunday papers—the Sunday Sun (Newcastle upon Tyne) and the Sunday Mercury (Birmingham)—have circulations of over 160,000 and 200,000 respectively. Individual circulation figures of regional evening papers start at about 15,000; most are in the 30,000–100,000 range, although the Manchester Evening News and the Birmingham Evening Mail have circulations of over 330,000 and the Liverpool Echo of 250,000. Weekly papers are mainly of local appeal; they are also a valuable medium for local advertising. Most have circulations in the 5,000–40,000 range.

There are also many free distribution advertising newspapers (mostly weekly), some published by orthodox newspaper publishers.

London Suburban Papers The London local weeklies (112) include papers for every district in Greater London. They circulate in as many as six to eight local editions of individual papers, affiliated in some cases to larger groups.

A number of evening newspapers, using the latest production technology, are published in the outer metropolitan area on the fringe of the circulation

areas of the two London evening newspapers.

Wales

Wales has one daily morning newspaper, the Western Mail, published in Cardiff; its circulation of just over 90,000 is mainly in south Wales. In north Wales the Liverpool Daily Post 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 22,000 and 123,000. North Wales is also served by the Liverpool Echo, the Shropshire Star covers parts of mid and north Wales, and there is coverage to a smaller extent by the Manchester Evening News.

Weeklies

The weekly press (over 60) includes English language papers, some of which carry articles in Welsh, bilingual papers, and Welsh language papers.

Scotland

Scotland has six morning, six evening and three Sunday newspapers. The morning papers, with circulations of between 89,000 and 720,000 are The Scotsman published in Edinburgh; the Glasgow Herald; the Daily Record (sister paper to the Daily Mirror); the Dundee Courier and Advertiser; the Aberdeen Press and Journal; and the Scottish Daily Express (published only in Manchester although production in Inverness is also planned). The evening papers have circulations in the range of 15,000 to 212,000 and are the Evening News of Edinburgh, Glasgow's Evening Times, Dundee's Evening Telegraph and Post, 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 (published in Manchester).

Weeklies

Weekly and local newspapers number about 140, of which the *Hamilton Advertiser* and the *Falkirk Herald* have the largest circulations.

TABLE 37: National and London-Evening Newspapers

Title and foundation date	Controlled by	Circulation average JanJune 1979
NATIONAL MORNINGS		
'Populars'		
Daily Express (1900)	Trafalgar House Investments	2,405,609
Daily Mail (1896)	Associated Newspapers Group	, ,
D '1 75' (4000)	Ltd	1,943,793
Daily Mirror (1903)	Reed International Ltd	3,623,039
Daily Star (1978)	Trafalgar House Investments	937,866 ^b
Morning Star (1966)	The People's Press Printing Society Ltd	34,558
The Sun (1969)	News International Ltd	3,793,007
'Oualities'		-,,
The Daily Telegraph (1855)	Telegraph Newspaper Trust	1,476,887
Financial Times (1888)	Pearson Longman Ltd	206,360
The Guardian (1821)	The Guardian and Manchester	,
	Evening News Ltd	379,429
The Times (1785)	The Thomson Organisation Ltd	293,989°
	Organisation 12tu	273,909
NATIONAL SUNDAYS		
'Populars'		
News of the World (1843)	News International Ltd	4,708,575
The Sunday People (1881)	Reed International Ltd	3,930,849
Sunday Express (1918)	Trafalgar House Investments	3,257,728
Sunday Mirror (1963)	Reed International Ltd	3,888,631
'Qualities'	1	
The Observer (1791)	The Atlantic Richfield Co. and The Observer Trust	1 104 010
Sunday Telegraph (1961)	Telegraph Newspaper Trust	1,124,018 1,278,894
The Sunday Times (1822)	The Thomson	1,270,094
1.00 ~	Organisation Ltd	1,409,296°
LONDON EVENINGS		
Evening News (1881)	Associated Newspapers	
Monday–Friday	Group Ltd	497,652
Evening Standard (1827)	Trafalgar House Investments	
Monday-Friday		376,870

^a Circulation figures are those of the Audit Bureau of Circulations (founded in 1931 and consisting of publishers, advertisers and advertising bureaux) and are certified average daily or weekly net sales for the period. The circulation figure of the *Morning Star* is otherwise independently audited.

Northern Ireland

Northern Ireland has two morning newspapers, one evening paper and one Sunday paper, all published in Belfast with circulations ranging from 50,000 to 162,000. They are *The News-Letter* (Unionist) and the *Irish News* (Nationalist), the evening *Belfast Telegraph* and the *Sunday News*.

There are 43 weekly newspapers.

b April-June 1979.

c Jan-June 1978; publication suspended November 1978-November 1979.

New Technology

The size of the labour element in the costs of national and provincial newspapers continues to encourage publishers to look for ways of increasing productivity, often by use of the new composing technology which dispenses with traditional 'hot metal' typesetting, with type set in molten lead, and employs photographic methods to produce an image. It can combine photo-composition with computer storage and handling of data, and substitutes electronic for manual methods. It presents possibilities for reorganisation which can have effects throughout a newspaper office and may raise difficult problems of manning levels; the introduction of the 'on-line' system, for example, under which text can be fed at electronic speeds to the computer store (and recalled for checking on visual display units) and can be passed between the store and the photosetters, can affect all the traditional departments of a newspaper up to the printing stage. The provincial press has generally led the way in adopting the new techniques.

The Periodical Press

The 4,900 periodical publications (including local freesheets) are classified as 'general', 'specialised', 'trade', 'technical' and 'professional'. There are also about 640 'house magazines' produced by industrial undertakings, business houses or public services for the benefit of their employees and/or clients. The 'alternative' press probably includes a further 500 titles, most of which are devoted to radical politics, community matters, religion, the occult, science or ecology.

General and specialised periodicals include magazines of general interest; women's magazines; publications for children; religious periodicals for all denominations; fiction magazines; magazines dealing with sport, gardening, hobbies and humour; journals specialising in various subjects such as politics, finance and economics, science, agriculture, medicine and the arts; 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 which have circulations approaching 4 million and Woman's Weekly, Woman's Own, Woman, Weekly News (which sells mainly in Scotland) and My Weekly with circulations in the 800,000 to 1.6 million range. The leading journals of opinion are The Economist, a politically independent publication covering topics from a wider angle than its title implies; the New Statesman, which is a review of politics, literature and the arts with an independent socialist political tendency; the Spectator, which covers much the same subjects from an independent conservative standpoint; Tribune, which represents the views of the leftwing of 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. Punch, traditionally the leading humorous periodical, and Private Eye, a satirical fortnightly, also devote attention to public affairs. More recent new publications include Financial Weekly, a periodical for businessmen and investors and Now!, a weekly general news magazine.

Literary and political journals and those specialising in international and Commonwealth affairs, published monthly or quarterly, appeal generally

speaking to the more serious type of reader.

The publication of trade, technical, business, scientific and professional journals (covering hundreds of subjects, many of them in considerable depth) has become one of the more important aspects of the British publishing industry. In addition to circulating in Britain, these journals have a considerable circulation overseas and are an important medium for selling British goods. Their publication ranges in frequency from weekly to quarterly.

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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 (of which the most famous is probably *Blackwood's*), and numerous popular magazines; and Northern Ireland has weekly, monthly and quarterly publications covering farming, the linen industry, building, motoring, politics and social work.

News Agencies

There are three principal British news agencies registered in Britain: Reuters Ltd; The Press Association Ltd; and The Exchange Telegraph Company Ltd. Reuters Ltd, a world news organisation, is owned by four associations: the Newspaper Publishers Association; The Press Association; the Australian Associated Press; and the New Zealand Press Association. They are parties to a trust deed which safeguards the independence and integrity of the news service. Founded in Aachen in 1850 and transferred to London in 1851, Reuters employs 558 journalists and correspondents in 69 countries and territories, and has links with about 120 national or private news agencies, which give it access to coverage by many hundreds of local reporters. Some 700,000 words of general news, sports, and economic reports are received in London every day and are retransmitted to 159 countries and territories over a global network of leased teleprinter lines, satellite links and cable and radio circuits. These news services are specially tailored to the needs of recipients in Britain and overseas, and are distributed to information media, either direct or through national news agencies. Reuters Economic Services, one of the world's largest financial and business news services, supplies information to banks, brokers and other commercial undertakings throughout the world by means of computer-based video display units, teleprinters and bulletins.

The Press Association Ltd, the British national news agency founded in 1868, is co-operatively owned by the principal newspapers of the United Kingdom outside London, and of the Irish Republic. It provides newspapers, the broadcasting organisations, Reuters (of which it is a major joint owner) and other international agencies with a complete service of home news, including general and parliamentary news, legal reports, and all branches of financial, commercial and sports news; and includes in its services to regional papers the world news of Reuters and the Associated Press. News is teleprinted 24 hours a day from head office in London over a network of lines leased from the Post Office—certain items being available in teletypesetting form. Through its photographic department The Press Association serves London and regional newspapers with a daily picture service from home and overseas; these are wired to the regional press. Its Special Reporting Service supplies reports of local or special interest to daily and weekly papers and periodicals. Press Association Features provides exclusive rights to syndicated articles and visual features.

The Exchange Telegraph Company Ltd (Extel), an independent news agency founded in 1872, is a wholly owned subsidiary of The Exchange Telegraphy Company (Holdings) Ltd, a public company. It supplies financial and sporting news to newspapers and broadcasting organisations, and to private subscribers. In conjunction with The Press Association Ltd, racing services are also supplied by telephone and video terminals to subscribers in London and the provinces from offices throughout Britain.

The British press and broadcasting organisations are also served by Associated Press Ltd, and by 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 press organisations, sets and conducts examinations, and organises short training courses for journalists.

The two methods of entry into newspaper journalism are selection for a one-year NCTJ pre-entry course 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 for those who have not attended a pre-entry course. A number of centres provide courses for reporters. Other training facilities include one-year postgraduate courses in journalism at the University College of South Wales in Cardiff, and at the City University (London), and courses provided by the Newspaper Society Training Service for regional newspapers in such subjects as circulation, advertising, industrial relations and management. The NCTJ co-operates closely with the Printing and Publishing Industry Training Board (PPITB) which is responsible for training in printing, publishing and professional photography.

Under the Commonwealth Press Union Harry Brittain Memorial Fellowship Scheme, several young Commonwealth journalists each year spend three months working and studying in Britain. The Thomson Foundation holds training courses for journalists from all parts of the world and provides consultants and tutors for courses in journalism held overseas.

Training for work with periodicals was traditionally done 'on the job' but formal courses of instruction are becoming more widely available. The London College of Printing offers a one-year pre-entry course in periodical journalism as well as block- and day-release courses for those who have already started work as trainees. In addition, several of the larger publishing houses provide systematic training which includes periods in the classroom to supplement work experience. For publishers who do not offer training independently, a training group has been established under the auspices of the PPITB.

Press Institutions

The most important organisations to which employers in the industry belong 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 independent publishers of trade and technical publications and general magazines.

On the journalists' side there are the Institute of Journalists (IOJ), with about 2,300 members, and the National Union of Journalists (NUJ), with 29,600 members. All practising journalists (including those engaged in radio, television, public relations, freelance journalism and book publishing editorial work) are eligible for membership of either. Four main printing unions are concerned with the press.

The Guild of British Newspaper Editors with about 450 members aims to maintain the professional status and independence of editors, defend the

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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 Press Council

The Press Council has a membership consisting of equal numbers of press and non-press members, with an independent chairman. Its aims are: to preserve the established freedom of the press; to maintain the character of the press in accordance with the highest professional and commercial standards; to keep under review any developments likely to restrict the supply of information of public interest and importance; to deal with complaints about the conduct of the press or the conduct of persons and organisations towards the press (the Council's complaints committee comprises equal numbers of press and nonpress members); to report on developments in the press which may tend towards greater concentration or monopoly; to make representation on appropriate occasions to the Government, to organs of the United Nations and to press organisations abroad; to publish its adjudications and periodic reports recording its work; and to review from time to time developments in the press and the factors affecting them. The Council publishes annual reports, which include statistics of the newspaper and periodical press and a series of articles examining the structure of the leading press groups.

The Press and the Law

The press has generally the same freedom as the individual to comment on matters of public interest.

Apart from enactments relating directly to such matters as the registration of newspapers for postal purposes, there are no specific press laws but certain statutes include sections which apply to the press. These 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 preliminary hearings of indictable offences (in England, Wales and Northern Ireland); the right of press representatives to be admitted to meetings of local authorities; restrictions on the publication of (a) certain details of divorce, domestic and rape proceedings in courts of law, (b) legal proceedings involving children, (c) 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 (d) advertisements of remedies for certain diseases, which are covered by public health legislation; agreements between the Post Office 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 the laws on libel and contempt of court. A newspaper may not publish comments on the conduct of judicial proceedings which are likely to prejudice their 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 obtaining and publication of information from state and official sources of a confidential or security nature is affected by the official secrets legislation. Newspapers are also liable to

proceedings for seditious libel and incitement to disaffection.

Legal proceedings against the press are comparatively infrequent; the majority 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 of the article, may all be held responsible.

23 Television and Radio

All British broadcasting is based on the tradition that it is a public service accountable to the people through Parliament. Television and radio are the responsibility of two broadcasting authorities, the British Broadcasting Corporation (BBC) and the Independent Broadcasting Authority (IBA), which work to broad requirements and objectives placed on them by Parliament, but are quite independent in the day-to-day conduct of business. This independence carries with it certain obligations as to programmes and programme content. Each authority must ensure that its programmes 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 also that programmes do 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. There is no advertising on BBC television and radio.

The Home Secretary regulates broadcasting generally under the Wireless Telegraphy Acts 1949 and 1967 which prohibit the sending or receiving of wireless communications except under licence. The Minister 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, and some 98 per cent of the population have access to television. It is estimated that about 10 per cent of households have two or more receivers. Average viewing time per person is over $17\frac{1}{2}$ hours a week. Practically every home also has radio, and car radios and portable transistors have made radio, national and local, one of the country's major day-time diversions.

Households with television must buy a licence each year—at November 1979 they cost £12 for black and white and £34 for colour. Of about 18·5 million licences current in April 1979 approximately 12 million were for colour and 6·5 million for black and white television. The revenue from licences meets most of the cost of the BBC's domestic services. Independent television and independent local radio are self-supporting, with revenue drawn from the sale of advertising time.

The British Broadcasting Corporation The constitution and finances of the BBC are governed by the Royal Charter and by a Licence and Agreement. The Corporation consists of 12 governors (including a chairman, a vice-chairman and separate national governors for Scotland, Wales and Northern Ireland), each appointed by the Queen on the advice of the Government. The governors are responsible for the whole broadcasting operation, including television and radio programmes and installations and equipment. Committees advise them on such matters as the social effects of television, religious broadcasting, music, agriculture, schools broadcasting, further education, programmes for immigrants, science and engineering and charitable appeals. There is also a programme complaints commission. The governors appoint the Director General who is chairman of the BBC's board of

management, which also includes the managing directors for television, radio and external broadcasting, and the directors of personnel, finance, public affairs and engineering.

The National Broadcasting Councils for Scotland and Wales control the policy and content of television and radio programmes intended primarily for reception in their respective countries. Local radio councils, representative of the local community, are appointed by the BBC to advise on the development and operation of local radio stations.

The domestic services of the BBC are financed principally by the income from the sale of television licences less certain deductions for collection and other expenses. This is supplemented by profits from trading activities, including television programme exports, the sale of records and publications connected with BBC programmes, the hire and sale of educational films, film library sales and exhibitions based on programmes and other BBC activities. Nearly three-quarters of the BBC's expenditure on domestic services relates to television. The BBC meets the cost of local radio stations but some local education authorities help to make educational programmes.

The BBC's External Services are financed by a grant determined each year by the Government.

The Independent Broadcasting Authority The IBA's constitution and finances are governed by the Independent Broadcasting Authority legislation and a Licence. It consists of a chairman, a deputy chairman and ten other members (three of whom have responsibility for Scotland, Wales and Northern Ireland) appointed by the Home Secretary. The IBA does not itself produce radio or television programmes; these are provided by commercial programme companies. Its main functions are to appoint the companies, to supervise programme arrangements, to control advertising and to build, own and operate transmitting stations.

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 medical and allied advertisements. A Complaints Review Board reviews reports of complaints received and investigated by the IBA's staff. Local advisory committees provide advice on local radio services.

The chief executive officer of the IBA, the Director General, is supported by a headquarters and regional office staff covering all technical and administrative services.

The IBA's finance comes from annual rental payments made by the television and radio programme companies. The television programme companies also pay to the IBA, for transfer to the Government, a levy related to their profits.

The Programme Companies Fifteen television programme companies hold contracts to provide television 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). The companies operate on a commercial basis, deriving 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 prevent their shareholdings leading to results contrary to the public interest.

In consultation with the IBA, each company plans the content of the programmes to be broadcast in its area. These consist partly of material produced

by the company itself, partly of that produced by the other programme companies, and partly of that purchased from elsewhere. The five largest companies (Thames, ATV, Granada, Yorkshire and London Weekend) 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. The negotiations concerning the supply, exchange and purchase of programmes and their co-ordinated transmission through the independent television network take place largely on the Network Planning Committee which consists of representatives of all the programme companies and of the IBA.

Local radio is broadcast by independent stations on the same principles. The companies providing programmes 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. In certain circumstances local newspapers have a right to a share in the control of local radio companies.

Television

Three television channels are in operation: BBC-1 and ITV broadcasting on both 405 lines very high frequency (vhf) and 625 lines ultra high frequency (uhf), and BBC-2 which broadcasts on 625 lines uhf only. Some 99 per cent of the population live within range of vhf, and just over 98 per cent within range of uhf transmissions, which are still being extended. The vhf transmissions are expected to cease within a few years. A high proportion of programmes on the three uhf services is transmitted in colour, though they can also be received in black and white. Most television sets are designed to receive four channels, and the Government has proposed that responsibility for the fourth channel (expected to come into operation in 1982) should be given to the IBA.

Apart from a break during the war years the BBC has been providing regular television broadcasts since 1936. All BBC-2 programmes and the majority of those on BBC-1 are broadcast on the national network. Of the BBC's 1977-78 television output over 43 per cent was produced in London and 36 per cent elsewhere in Britain; over 14 per cent comprised feature films and series, and 13 per cent Open University programmes. Current affairs, features, documentary, news, schools, further education, Open University and religious programmes comprised some 46 per cent of the total.

Through co-ordinated planning of programmes on its two services the BBC is able to cater simultaneously for people of differing interests. While both services cover the whole range of television output, BBC-1 presents a higher proportion of 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, providing a larger element of documentaries, travel programmes, serious drama, music, programmes on pastimes and international films.

The first regular independent television broadcasts began in London in 1955. ITV services are provided on a regional basis by the programme companies.

On average each of the 14 ITV areas transmitted over 100 hours of television programmes a week in 1978-79, nearly two-fifths of which comprised informative programmes-including news, documentaries, current affairs, education and religion. Three-quarters of the programmes seen on ITV are produced by the programme companies themselves. There is a maximum of six minutes of advertising an hour on average, in three short breaks.

Overseas

British Television British television programmes have won many international awards, and the country is one of the world's foremost exporters of television productions. It is estimated that Britain exported about £36 million-worth of television programmes in 1977, and there are few countries in the world where British programmes have not been shown.

Cable Services

Over 14 per cent of households with television rely on cable systems for the reception of programmes. The systems are usually used to improve reception quality, to avoid 'screening' by buildings or the local topography, or because external aerials are not allowed in some residential buildings. There are cable networks in almost every urban area; some cover a whole town, some homes scattered throughout an area, and others particular housing estates. Of some 2.75 million subscribers to cable networks in 1979 about 1.6 million subscribed to commercial systems, 980,000 to systems operated by local authorities and other non-commercial bodies, and some 95,000 to housing associations' systems. Commercial relay operators are represented by The Cable Television Association of Great Britain. All operators of cable systems are licensed by the Home Secretary and the Post Office.

Since 1972 six experiments have been authorised by the Home Secretary for local stations to distribute locally-originated television programmes by cable systems to subscribers. Three stations are still in operation. At Greenwich in London funds are provided by the local commercial cable television company, while at Swindon they are provided by a number of non-commercial bodies and from the promotion of a weekly lottery. At Milton Keynes the experimental station provides a locally-originated programme service over the Post Office cable system. All the experiments enable people to see programmes about local activities and to have access to programme-making facilities under the guidance of the station staff. There are proposals for a Pay-TV experiment among cable operators.

Radio

BBC Radio's four national channels each have a distinct character. Radio I provides a programme of pop music, while Radio 2 provides light music as well as being the principal channel for the coverage of sport. Radio 3 provides mainly classical music (much of which is in stereo) and in the evening offers, in addition, adult education programmes and works of artistic and intellectual interest. Radio 4 is the main speech programme, providing the principal news and information service as well as a wide range of drama, music, talks, entertainment and schools broadcasts. Many programmes are transmitted in stereo.

Local radio is provided by 20 BBC stations in England and by 19 independent stations distributed throughout Britain. Another 18 local radio stations (nine BBC and nine IBA) are being established and approval has been given for a further 15 (one BBC and 14 IBA). Local broadcasts provide a comprehensive service of local news and information, music and other entertainment, education, consumer advice and coverage of local events, and offer residents a chance to air their views, often by using the phone-in technique.

Four experiments in locally-initiated sound programmes over cable distribution systems have been authorised. As in the case of the local community cable television experiments an advertising service may be included if a station elects to do so.

External Services

The BBC broadcasts to most countries overseas (in 39 languages, including English) for a total of some 710 hours a week. The main objectives are to give unbiased news, to reflect British opinion and to project British life and culture. News bulletins, current affairs programmes, political commentaries and topical magazine programmes form the main part of the output. A full sports service,

all kinds of music, drama, and a wide range of general entertainment are also included.

The languages in which the External Services broadcast and the length of time each language is on the air are prescribed by the Government. Apart from this the BBC has full responsibility and it is completely independent in determining the content of news and other programmes.

The foreign language services are divided into areas: the African, Arabic, Eastern, Far Eastern, Latin American, French (to Europe and Africa), Central European, South European, German and East European Services. Broadcasts

range from 63 hours a week in Arabic to 35 minutes in Maltese.

The BBC's English by Radio and Television Service is the most extensive language teaching undertaking in the world. English lessons are broadcast weekly by radio with explanations in 30 other languages, and recorded lessons are supplied to between 250 and 300 stations in over 100 countries. English by Television programmes are shown in more than 100 countries.

The BBC World Service broadcasts for 24 hours a day in English and is supplemented at peak listening times by additional series of programmes designed

to be of special interest to Africa.

BBC news bulletins and other programmes are rebroadcast by the domestic radio services of many countries. Rebroadcasting involves direct relays from BBC transmissions and the use of recorded programmes supplied through the BBC tape and disc transcription service. There are some 3,000 rebroadcasts weekly of World Service programmes in about 50 countries. The Transcription Service offers programmes to over 100 countries.

Another part of the External Services is the Monitoring Service which listens to and reports on foreign broadcasts, supplying a daily flow of significant news and comment from overseas to the BBC, the press, and the Government.

The BBC External Services are complemented by the radio services of the Central Office of Information (COI) which produce a range of material for transmission by radio stations overseas. In addition, COI television services provide material such as documentary and magazine programmes for distribution to overseas television stations.

Transmitters and Studios

The BBC's domestic television and radio services operate more than 1,100 transmitters, and its external services from some 42 transmitters in Britain and 24 overseas. Most of the circuits used to link studios and transmitters are rented from the Post Office. For its domestic radio, the BBC uses 100 studios in London and the regions, and for its external services 30 in London. In addition, there are semi-automatic studios which can be operated by programme officials without engineering staff. Each of the BBC's 20 local radio stations has at least two studios. BBC television productions come from main studios at the Television Centre in west London and other studios in various parts of London, and six fully-equipped regional studio centres and eight television studios in other towns. Outside broadcasting is covered by a number of mobile units.

The IBA uses a total of 470 television and sound radio transmitting stations throughout Britain, programme links being rented from the Post Office. Independent television programmes are produced at 17 studio centres throughout the country. These studios reflect the IBA's policy of encouraging regional television, and the programmes are designed for either local broadcasting or for national transmission. All companies have facilities for colour transmission.

Advertising

The BBC does not give publicity to any individual firm or organised interest by mentioning its name or branded products, except when it is necessary in order

to provide effective and informative programmes. Under the terms of its Licence and Agreement it must not broadcast sponsored programmes.

Advertisements are broadcast on independent television but there is no sponsoring of programmes by advertisers. Advertisements must be clearly distinguishable and separate from programmes, and the amount of time given to advertising must not be so great as to detract from the value of the programmes as a medium of information, education and entertainment. In any one hour of broadcasting the amount of advertising time on independent television is normally limited to seven minutes. Averaged over the day's programmes it must not exceed six minutes per hour. The independent local radio stations are normally limited to up to nine minutes of advertising each hour. The IBA has drawn up a code governing standards and practice in advertising on television and radio and giving guidance about the types and methods of advertisement that may not be used. Some types of advertising are prohibited, notably those 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.

Government publicity material designed to support non-political campaigns may be broadcast on independent radio and television. It is prepared through the COI and is broadcast and paid for on a normal commercial basis. Short public service items, mainly about health, safety and welfare themes, are also produced by COI for free transmission by the BBC and independent television and radio. The Government has no general access to radio or television.

Parliamentary and Political Broadcasting

Parliamentary reporting includes a daily factual and impartial account of proceedings in Parliament, transmitted on BBC's Radio 4 when Parliament is in session. Since 1978 proceedings of Parliament, including its committees, have been broadcast on radio. Some occasions are broadcast live, and recorded sound extracts may be included in both radio and television news and current affairs programmes.

There is also frequent coverage of political subjects in news bulletins and current affairs programmes on both radio and television. Ministerial and party political broadcasts are transmitted periodically under the rules agreed between the major political parties, the BBC and the IBA.

Technical Developments

Research into technical problems is carried out by the scientific and engineering staffs of the BBC, the IBA, the Home Office, the Post Office, the Government, and the radio industry. Advances by the BBC have included the electronic conversion of monochrome and colour television pictures between the European and the American systems, and the development of a sound-and-vision system known as 'sound-in-syncs' which enables the television sound and picture to be carried over a single 625-line vision circuit, and thus eliminates the operational complexity and expense of a separate circuit for the sound. IBA engineers were the first in the world to introduce a fully digital field rate standards converter (DICE) to improve the interchange of programmes between areas using the 525-lines system (for example, North America) and those using the 625-lines system (for example, Europe). Current IBA research projects include the development of the first digital video tape recorder with economical use of tape, and also a programme of research into the future use of space satellites for broadcasting.

Both the BBC and IBA have produced 'teletext' systems, known respectively as CEEFAX and ORACLE, which allow the broadcasting of written and simple graphical information to television receivers fitted with special adaptors. Both

systems enable viewers to select a display of 'pages' of written information on the television screen. 'Prestel', a service providing a wide range of information via the telephone which can be displayed on the screen of a television receiver is being developed by the Post Office (see p 314).

International Relations

The BBC and the IBA (together with the Independent Television Companies Association) are active members of the European Broadcasting Union (EBU), which was established to advance international broadcasting projects. The EBU manages Eurovision, is responsible for the technical and administrative arrangements for co-ordinating the exchange of programmes over that network and for intercontinental satellite links, and maintains a technical monitoring station where frequency measurements and other observations on broadcasting stations are carried out.

The BBC belongs to the Commonwealth Broadcasting Association whose members extend to each other such facilities as the use of studios, recording channels, and programme contributions. The BBC also provides technical aid, particularly in training the staff of other broadcasting organisations throughout the world; members of the BBC's staff are seconded for service overseas.

The BBC is a partner in Visnews, which supplies a service of world newsfilm to some 200 television organisations in over 90 countries and is the most widely used newsfilm agency in the world. The BBC is also a member of the International Television Federation (Intertel), which produces high-quality information programmes which are exchanged overseas. United Press International, Paramount Pictures and Independent Television News jointly provide an international newsfilm service to more than 100 overseas television organisations via the Eurovision network and by satellite.

The Government spends a considerable amount each year on training in broadcasting for overseas students and largely finances the British Council (see p 69), which includes in its activities training in educational television and radio for members of broadcasting organisations overseas. Training in television work is also provided for overseas trainees at the Thomson Television College in Glasgow, run by the Thomson Foundation, a charitable trust.

The BBC and the IBA participate in the work of the International Telecommunication Union (ITU), the United Nations specialised agency responsible for the regulation and control of all international telecommunication services (including radio and television), for the allocation and registration of all radio frequencies and, through its international consultative committees, for the promotion and co-ordination of the international study of technical problems in broadcasting. The BBC is also represented on the United Kingdom Committee of the International Special Committee on Radio Interference.

24 Sport and Recreation

There is widespread interest in sport in Britain. Large crowds attend occasions such as the association football 'Cup Final' at Wembley Stadium, the international rugby 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; millions also watch them on television. Enthusiasm for active participation in sport and recreation has grown considerably in recent decades and there is a large variety of opportunities and facilities available. Physical recreation tends to be informal and non-competitive and may include, for example, climbing, rambling, riding, boating, angling and other water-based sports, keep fit, movement and dance activities.

ORGANISATION AND PROMOTION

An important feature of British sport and recreation is its amateur element (the people who devote time and energy to the organising, teaching and training of individual activities). Although the Government is not directly concerned with the organisation of sport and recreation, a Parliamentary Under-Secretary of State in the Department of the Environment has responsibility for the coordination of policies and the promotion of research in the field of active recreation. The Secretaries of State for Wales, Scotland and Northern Ireland exercise similar responsibilities in their areas.

The Government provides financial and other assistance through a number of official bodies. Some of these, such as the Sports Councils (see below) and the Countryside Commissions, have specific responsibilities relating to sport and recreation, and assist other public and private bodies in the provision of facilities. Others, for example, 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.

Sports Councils

The main responsibility for the general development of sport in Great Britain rests with 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. Members of the councils are appointed by the Government. The Councils have the task, subject only to general ministerial directives, of allocating funds made available by the Government (in 1979-80 amounting to some £20.2 million). They award grants for sports development, coaching and administration to the governing bodies of sport and to other national organisations; and administer national sports centres. Grants and loans are made to voluntary organisations and local authorities to assist in the provision of sports facilities. The Councils also assist British representatives at international sports meetings and encourage links with international and overseas organisations. 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 Sports Council is linked with nine regional councils for sport and recreation in England on which are represented local authorities and sport and countryside interests in each region.

The Scottish Sports Council consults with the Scottish Standing Conference of Sport which comprises representatives of the national governing bodies of sport in Scotland; and the Sports Council for Wales maintains, through a standing committee, a close liaison with the governing bodies of sport in Wales.

In Northern Ireland the Department of Education provides financial assistance to local authorities and voluntary sports bodies for the provision of facilities. The Sports Council for Northern Ireland advises government on sport and assists financially in coaching, administration and the provision of equipment. It maintains strong links with the governing bodies of sport individually and through the Northern Ireland Council of Physical Recreation.

A bibliographic service about sport is provided by the National Documentation Centre, set up by the Sports Council and based at the University of Birmingham. The Council also has an information centre providing data on a wide range of sports topics; similar services are provided by the Sports Council for Wales and the Scottish Sports Council.

Organisations

There are a number of voluntary organisations whose activities are concerned with recreation. Some, such as the Ramblers' Association, safeguard the interests of particular leisure pursuits; others, such as the National Trusts (see p 182), cater for recreation in addition to their main responsibilities. Most, however, exist to provide recreational opportunities for young people. A description of the youth service and an outline of the work of individual organisations is contained in Chapter 7.

The British Olympic Association The British Olympic Association, founded in 1905, organises the participation of British teams in the Olympic Games. The Association's committee consists of representatives of the 26 sports in the programme of the Olympic Games (summer and winter). It determines the size of the British team (which competes under the name of 'Great Britain'); raises funds; makes all the arrangements for the team's travel and comfort at the games; organises the provision and transport of clothing and equipment; and provides a headquarters staff for the management of the team.

The National Playing Fields Association

The National Playing Fields Association aims to encourage the provision of playing fields, playgrounds and recreational facilities. It maintains a technical advisory service, and specialises in the play and recreational needs of children and young people including young handicapped people. It is a national charity established by Royal Charter, and depends mainly on voluntary contributions. It is helped by its eight regional play advisers and by affiliated associations in Scotland and Northern Ireland and in English and Welsh counties.

The British Sports Association for the Disabled The British Sports Association for the Disabled, founded in 1961, encourages sports for the physically handicapped. The Association, which receives an annual Sports Council grant, provides advice on physical recreation for the disabled, arranges sports meetings and encourages the provision of facilities (including sports clubs) for disabled people. Regional and branch committees of the Association organise local, regional and national games. Annual national and international paraplegic games are arranged by the British Paraplegic Sports Society. At Stoke Mandeville Hospital, the first sports stadium in the world designed for the disabled was opened in 1969. In Scotland and Wales there are associations which co-ordinate sporting activities and facilities for disabled people.





The Arts

The new extension to the Tate Gallery in London, with the most advanced lighting, ventilation and sun-screening systems, was opened in 1979. Its 18 new galleries increase the space by 50 per cent, enabling hundreds of paintings, drawings and pieces of sculpture to be brought out of store.



A technique to measure the gradual change in the colour of paintings caused by light, pollution and temperature has been developed by conservators at the National Gallery in London.

The Arts

The 'living area' of the Sainsbury Centre for the Visual Arts in the grounds of the University of East Anglia, Norwich. The new Centre incorporates a school of fine arts.

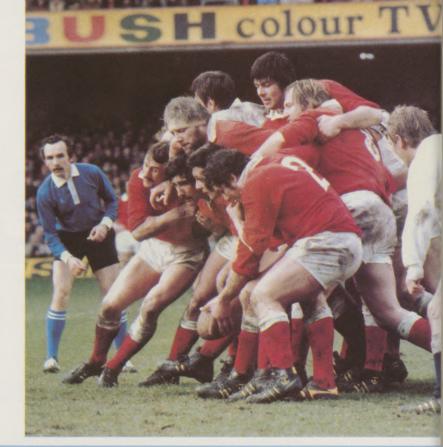




Sport

The Welsh Rugby Union celebrates its centenary in 1980.

Athletics meeting at the Crystal Palace National Sports Centre (below). The Amateur Athletic Association also celebrates its centenary in 1980.





Private Sponsorship

Increasing numbers of sports receive financial sponsorship from commercial organisations. Sponsorship may take the form of financing specific events, or it may be granted to individual sports organisations, for example, to provide better accommodation for spectators or to encourage more people to participate in the sport.

A Sports Aid Foundation has responsibility for raising and distributing funds from industry, commerce and private sponsors in order to assist the training of talented individual sportsmen and sportswomen. The Foundation makes grants on the recommendation of the governing bodies of sport. The Sports Council also runs a sponsorship advisory service which links potential sponsors with suitable sports.

PROVISION OF FACILITIES

Local authorities are the main providers of land and large-scale facilities for community recreation and their total expenditure on sport and outdoor recreation in England and Wales amounted to some £458 million in 1977–78. In Scotland, total expenditure on sports and recreation facilities by local authorities in 1977–78 was about £59.8 million. The facilities provided include parks, playing fields, sports halls, tennis courts, golf courses, lakes, swimming baths and sports centres catering for a wide range of indoor and outdoor activities.

All publicly maintained schools are required by law to provide for the physical education (for example, gymnastics, games, athletics, dancing and swimming) of their pupils. All (except those solely for infants) must 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. In some areas, physical education facilities in schools are available to the whole community outside school hours. Sport and recreation facilities are likewise provided at universities (some of which have departments of physical education), and there are 'centres of sporting excellence' at universities and other colleges enabling selected young athletes to develop their talents and also providing for their educational needs.

Opportunities for outdoor recreation in national parks, nature reserves, forest parks and country parks are provided by public bodies (see p 173). Water-based activities on canals, rivers, lakes and reservoirs are increasingly popular. The British Waterways Board, for example, maintains about 1,760 kilometres (1,100 miles) of cruising waterways for navigation, about 960 kilometres (600 miles) of other waterways and some 90 reservoirs. An Inland Waterways Amenity Advisory Council advises the Board on the use of its waterways for pleasure purposes, and a Water Space Amenity Commission provides advice on the recreational use of water in England generally.

In addition to the recreational facilities provided by public authorities, many facilities are made available by local voluntary clubs. Some of these cater for indoor recreation, but more common are those providing sports grounds, particularly for games such as cricket, association and rugby football, hockey, tennis and golf. Clubs linked to industrial business firms often cater for a wide range of activities, and in many cases make their facilities available to members of the public. Commercial facilities, provided as profit-making businesses, include tenpin bowling centres, ice- and roller-skating rinks, squash courts, golf driving ranges and riding stables.

Sports Centres

National sports centres, some of which were initially financed by funds from voluntary sources, are maintained by the sports councils and provide facilities and a wide range of courses for instructors and performers in many recreational activities. As well as making residential courses available for enthusiasts from

all over Britain, the centres are used extensively by local clubs and by the com-

munity generally.

There are seven national centres in England and Wales. Combined facilities for a range of sports are provided at three centres: the Crystal Palace National Sports Centre in London and the Bisham Abbey and Lilleshall National Sports Centres in Buckinghamshire and Salop respectively. The centre at Crystal Palace has a main stadium seating 17,000 spectators, a sports hall seating 2,000 spectators, a swimming hall with pools meeting Olympic requirements and seating 2,000, two teaching pools, ten squash courts, an indoor cricket school, practice rooms for most indoor sports and a hostel for 132 residents. These facilities are available for international competitions as well as for training purposes, and are supported by a grant from the Greater London Council in addition to the Sports Council grant. The other four are specialist centres: the Plas-y-Brenin National Centre for Mountain Activities in north Wales, the Cowes National Sailing Centre in the Isle of Wight, the Holme Pierrepont National Water Sports Centre in Nottinghamshire, and Harrison's Rocks, a small rock-climbing centre in Sussex. Work has begun on the construction of a National Outdoor Pursuits Centre at Plas-y-Deri in Gwynedd which is expected to be completed in 1982, and plans are in progress for the construction of a National Ice Skating Centre in Manchester, due to be completed in 1983. In addition there is a National Sports Centre for Wales in Cardiff which is supported by local authorities but financed mainly from the Sports Council for Wales grant.

The Scottish Sports Council operates three national sports training centres: Glenmore Lodge near Aviemore for outdoor sports, Inverclyde at Largs for general sports, and a national water sports training centre in Cumbrae Isle on

the Firth of Clyde.

As well as the national sports centres, other centres (such as the Meadowbank Sports Centre administered by Edinburgh District Council) cater for a wide range of recreational activities and often attract more than purely local interest. Over 300 indoor sports centres serve local rather than national needs; more are planned, some as 'dual' projects on school sites. There are also several national centres catering for specialised interests and generally administered by the sponsoring organisations. These include the National Equestrian Centre, run by the British Equestrian Federation, and the Stoke Mandeville Sports Stadium for the Paralysed and Other Disabled, run by the British Paraplegic Sports Society (see p 422).

In Northern Ireland nine indoor sports centres are provided by district councils and several more are being built. The Sports Council for Northern

Ireland has a Mountain Centre at Tollymore, County Down.

POPULAR SPORTS Some of the major sports in Britain are described below. Sportsmen may be professionals (paid players) or amateurs. Some sports, such as rugby union football, hockey and rowing, are entirely amateur but in others the distinction between amateur and professional status is less strictly defined.

Association Football

Probably the most popular spectator sport is association football, dating as an organised game from the nineteenth century, and controlled by separate football associations in England, Wales, Scotland and Northern Ireland. In England over 400 clubs are affiliated to the English Football Association (FA) and some 37,000 clubs to regional or district associations.

The principal 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. During the season attendances at Football League matches total about 27 million.

The annual competitions for the FA Challenge Cup, the Football League Cup, the Scottish FA Cup and the Scottish League Cup are organised on a knock-out basis, and the finals (four of the most important matches of the year) are played at Wembley Stadium, London, and at Hampden Park, Glasgow.

National teams representing England, Wales, Scotland and Northern Ireland compete against one another annually and take part in European competitions, the World Cup competition and other international matches.

The Sports Council is giving grants to some Football League clubs to enable them to provide greater sports opportunities for young supporters.

Athletics

In England amateur athletics (including track, road and cross-country running, relay racing, jumping, vaulting, hurdling, steeplechasing, throwing and race walking) are governed, for men, by the Amateur Athletic Association and, for women, by the Women's Amateur Athletic Association. Scotland, Wales and Northern Ireland have their own associations and, as in England, there are separate women's associations. The various organisations encourage the development of the sport, establish uniform rules and regulations and promote regional and national championships. Hundreds of clubs are affiliated to the various national associations.

International athletics and the selection of British teams are the concern of the British Amateur Athletic Board which is composed of representatives of the national associations. British teams compete in the Olympic Games and in other international matches, and separate teams representing England, Wales, Scotland and Northern Ireland compete in the Commonwealth Games. The Board also administers coaching schemes.

The Highland Games The Highland Games, traditional gatherings of local people in the Highlands of Scotland, at which sports (including tossing the caber, putting the weight and throwing the hammer) and dancing and piping competitions take place, are unique spectacles which attract large numbers of spectators from all over the world. Among better-known Highland Games are the annual Braemar Gathering (traditionally attended by the Royal Family), the Argyllshire and Cowal Gatherings and the meeting at Aboyne.

Boxing

Boxing as a British sport is one of the oldest, probably originating in Saxon times. Its modern form, also 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.

The Amateur Boxing Association controls all amateur boxing in England including schoolboy, club and association boxing, and boxing in the armed services. There are separate associations in Scotland, Wales and Northern Ireland. The associations organise various amateur boxing competitions, and teams from England, Wales, Scotland and Northern Ireland take part in international competitions.

Professional boxing is controlled by the British Boxing Board of Control, founded in 1929. The Board has strict medical regulations which provide for an examination of boxers before and after each contest, and for an extensive annual medical examination. In addition the Board appoints inspectors, medical officers and representatives to ensure that regulations are observed and to guard against over-matching and exploitation.

Amateur and professional boxing championships are decided at various weights—11 in amateur and 10 in professional boxing.

Cricket

Cricket is among the most popular of summer sports and is sometimes called the English national game. It is known to have been played as early as the 1550s. Among the many clubs founded in the eighteenth century is the Marylebone Cricket Club (MCC) which was founded in London and which reframed the laws of the game. Cricket in Britain is now governed by the Cricket Council which consists of representatives of the MCC, the Test and County Cricket Board (representing first class cricket) and the National Cricket Association (representing club and junior cricket).

The game is played in schools, colleges and universities, and in most towns and villages there are amateur teams which play weekly games from late April to the end of September. In the Midlands and the north of England there is a network of League cricket contested by teams of Saturday afternoon players

reinforced by professionals, some of whom come from overseas.

Some of the best supported games are the annual series of five-day sponsored Test Matches played between England and a touring team from Australia, New Zealand, India, Pakistan or the West Indies. A team representing England tours one or more of these countries from November to March. There is also a sponsored First Class County Championship of three-day games played by 17 county teams who also take part in three one-day sponsored competitions—two of these are knock-out competitions and the other is a Sunday League.

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 week-end fixtures, and junior sides play largely six-a-side competitions. Test match series are played against Australia, New Zealand and the West

Indies and other international games take place.

Field Sports

The British Field Sports Society looks after the interests of all field sports (including hunting, game shooting, falconry and hare coursing). The Society is a member of the British Shooting Sports Council which is the representative body of recreational shooting.

Fox hunting on horseback with a pack of hounds is the most popular British hunting sport but there is also stag hunting, and hunting the hare. The fox hunting season lasts from early November to April. There are over 320 packs of hounds of all kinds in Britain, and hunts are financed mainly by members' subscriptions and by the proceeds of events such as steeplechase point-to-points. The sport is not without its critics, but a large number of people take a keen interest in it.

Game shooting as an organised country sport probably originated in the early part of the nineteenth century. 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 game-keepers who are employed on private property as well as by bodies such as the Forestry Commission. It is necessary to have a licence to kill game, and a certificate must be obtained from the local police by anyone who owns, buys or acquires a shot gun. The Game Conservancy, formed by landowners, farmers and others interested in game conservation, collects information and studies factors controlling game population.

Other shooting sports are wildfowling which takes place on marshes and fenlands, and deer stalking.

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, but in England and Wales the most widely practised form of fishing is for coarse fish such as pike, perch, carp, roach, dace, tench, chub and bream. Angling clubs affiliate to the National Federation of Anglers and many clubs organise angling competitions. National championships are organised by the Federation which also enters a team in the World Angling Championship. Freshwater fishing usually has to be paid for; most coarse fishing is let to angling clubs by private owners, while trout and salmon fishermen either 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). In Northern Ireland the Ulster Provincial Council of the Irish Federation of Sea Anglers and the Ulster Angling Federation look after the interests of the sport.

Golf

Golf originated in Scotland where it has for centuries borne the title of the Royal and Ancient Game, the headquarters of the Royal and Ancient Golf Club being situated at St. Andrews on the east coast. The sport 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 golfing year is the Open Golf Championship; other important events include the Walker Cup match for amateurs and the Ryder Cup match for professionals, both of which are played between Britain and the United States.

Lawn Tennis

The modern game of lawn tennis was first played in England in 1872 and the first championships at Wimbledon in 1877. The controlling body, the Lawn Tennis Association, was founded in 1888. The main event of the season is the annual Wimbledon fortnight for players from all over the world; this draws large crowds, the grounds at the All-England Club accommodating over 30,000 spectators. There are also county championships and national competitions for boys' and girls' schools. International events include the Davis Cup and Kings Cup for men and the Federation Cup for women. Women from Britain and the United States compete for the Wightman Cup.

Motor Sports

Among the most popular spectator sports are motor racing and motor rallying. The governing body, RAC (Royal Automobile Club) Motor Sports Association, issues competition licences to motor clubs registered with it covering all events from hill climbs to full international race meetings. It also organises the British Grand Prix which counts towards the Formula One World Motor Racing Championship, and the RAC Rally which counts towards the World Rally Championship.

Motor cycle racing is governed by the Auto-Cycle Union and the most important events of the year are the Isle of Man Tourist Trophy races, the British Grand Prix, and the TT Formula I World Championship. Motor cycle

speedway racing is governed by the Speedway Control Board.

Racing

Horse racing takes two forms—flat racing (from late March to early November) and steeplechasing and hurdle racing (from August to 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 at Cheltenham. The Grand National, run at Aintree near Liverpool, is the best known steeplechase.

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 weekdays throughout the year and about 11,000 horses are in training.

The racing of greyhounds after a mechanical hare (now considered to be among Britain's most popular spectator sports) takes place at 108 tracks licensed by local authorities. Meetings are usually held two or three times a week at each track, up to a maximum of 130 days a year. Rules for the sport are drawn up by the National Greyhound Racing Club, but its overall administration and organisation is the responsibility of the British Greyhound Racing Board.

Riding

The authority responsible for equestrian activities (other than racing) is the British Equestrian Federation which co-ordinates the work of the British Horse Society and the British Show Jumping Association at international level.

The British Horse Society promotes the welfare of horses and ponies, the interests of horse and pony breeding and the art of riding. It provides information, publications, a film library, courses and examinations and, together with riding schools approved by it, helps to promote horsemastership. It also runs the British Equestrian Centre at Kenilworth, Warwickshire, where a variety of activities take place throughout the year. With some 30,000 members the Society is the parent body of the Pony Club and the Riding Club movement. These hold their own rallies, meetings and competitions, culminating in their annual national championships at the British Equestrian Centre.

Horse trials are held during the spring and summer under the auspices of the Society. The three-day events held each year are at Badminton (Avon) in April, Windsor (Berkshire) in May, Bramham (Yorkshire) in June, Burghley House (Lincolnshire) in September, and Wylye (Wiltshire) in October, and include dressage, cross-country riding and show jumping.

Show jumping is promoted by the British Show Jumping Association which draws up competition rules and prescribes the general standards and height of obstacles. The Association keeps a register of horses and ponies taking part in shows and seeks to improve the standard of jumping and to provide for British representation in international competitions. It has over 15,000 members and 1,000 shows are affiliated to it. The three major show jumping events each year are the Royal International Horse Show, the Horse of the Year Show, and the Birmingham International Show Jumping Championships.

Rugby Football

Rugby football is played according to two different sets of rules: 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 throughout Britain under the auspices of the Rugby Football Union (in England), the Welsh Rugby Union, the Scottish Rugby Union and the Irish Rugby Football Union. International matches between England, Scotland, Wales, Ireland and France are played each year and there are tours by international teams.

Rugby League is played mostly in the north of England. The governing body of the professional game is the Rugby Football League which sends touring teams to Australia and New Zealand. Annual matches are also played against France. The Challenge Cup Final, the major match of the season, is played at Wembley Stadium in London. The amateur game is governed by the British Amateur Rugby League Association.

Sailing

Sailing has always been popular on Britain's inland and coastal waters. The Royal Yachting Association has over 1,400 affiliated clubs, 60,000 personal members and approximately 500 recognised teaching centres in the country, including the National Sailing Centre at Cowes in the Isle of Wight where courses are available in all branches of the sport. One of the world's principal regattas takes place each year at Cowes, and major events are held at other British sailing centres.

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 is provided by qualified teachers who hold certificates awarded by the Amateur Swimming Association, to which over 1,700 clubs are affiliated. The Association also draws up and enforces regulations for amateur swimming, diving, synchronised swimming and water polo championships and competitions in England. Separate associations control the sport in Scotland, Wales and Northern Ireland.

Underwater swimming (sub-aqua) is governed nationally by the British Sub-Aqua Club which promotes underwater exploration, science and sport. Formed in 1953, the club has become the largest in the world with some 30,000

members and more than 1,000 branches in Britain and overseas.

Other Sports

The governing bodies of some other sports played in Britain are given below. Most of these are organised on the basis of clubs and regional organisations linked to a national body. Functions of the governing bodies are broadly similar and usually include drawing up the rules of the sport, organising regional and national competitions and maintaining relations with sporting bodies overseas.

Many of the sports listed below have separate national bodies for Scotland,

Wales and Northern Ireland.

Sport

Governing Body

Acrosports.	
Private Flying	
Gliding	
0	

Gliding
Hang Gliding
Parachuting
Archery

Badminton
Basket Ball
Billiards and Snooker

Billiards and Snooker Bowls Canoeing

Croquet Curling Cycling:

Cycle Racing
Touring
Fencing

Gymnastics Hockey

Jogging Judo Karate Aircraft Owners and Pilots Association

British Gliding Association
British Hang Gliding Association
British Parachuting Association
Grand National Archery Society
Badminton Association of England
English Basket Ball Association
Billiards and Snooker Control Council
English Bowling Association
British Canoe Union
Croquet Association

British Cycling Federation Cyclists' Touring Club Amateur Fencing Association

Royal Caledonian Curling Club

British Amateur Gymnastics Association

Hockey Association (men)

All England Women's Hockey Association

National Jogging Association British Judo Association British Karate Control Commission

Sport	Governing Body
Lacrosse	All England Women's Lacrosse Association
Mountaineering	British Mountaineering Council
Netball	All England Netball Association
Orienteering	British Orienteering Federation
Polo	Hurlingham Polo Association
Race Walking	Race Walking Association
Rowing	Amateur Rowing Association
Shooting (Target)	British Shooting Sports Council
	National Rifle Association
	National Small-Bore Rifle Association
	Clay Pigeon Shooting Association
Skateboarding	Skateboard Association
Skating	National Skating Association of Great Britain
Skiing	National Ski Federation of Great Britain
Squash Rackets	Squash Rackets Association
Surfing	British Surfing Association
Table Tennis	English Table Tennis Association
Tenpin Bowling	British Tenpin Bowling Association
Volleyball	English Volleyball Association
Water Skiing	British Water Ski Federation
Weightlifting	British Amateur Weightlifters' Association
Wrestling	British Amateur Wrestling Association

GAMBLING

Various forms of betting and commercial gaming are permitted under strict regulations and the total money staked in Great Britain in 1978 was about £4,600 million. It is estimated that some 94 per cent of adults gamble at some

time or another, 39 per cent regularly.

Gaming includes the playing of casino and card games, gaming machines and licensed bingo which is thought to be played by about 5.5 million people on a fairly regular basis. Betting takes place mainly on horse and greyhound racing, and on football matches (usually through football pools). Racing bets may be made at racecourses and greyhound tracks, or through some 13,000 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 'betting levy' to the Horserace Betting Levy Board which promotes the improvement of horseracing and horsebreeding and the advancement of veterinary science.

In addition legislation allows local authorities and certain bodies to hold lotteries.

A Royal Commission on Gambling reported in 1978 (see Bibliography). The Government has accepted a number of the Commission's main recommendations, including measures to improve the control of lotteries and proposals to improve the supervision of gaming.

Appendix

Currency

112 lb.

2,000 lb.

20 cwt. (2,240 lb.)

The unit of currency is the pound sterling divided into 100 new pence (p). There are six denominations: 50p; 10p; 5p; 2p; 1p; and $\frac{1}{2}p$.

Bank of England notes are issued for sums of £1, £5, £10 and £20. A £50 note is to be introduced in 1980.

Metric Equivalents for British Weights and Measures

1 inch = 2.54 centimetres

Longai	12 inches = 1 foot = 3 feet = 1 yard = 1,760 yards = 1 mile =	0.914 metre 1.609 kilometres	
Area	144 square inches = 9 square feet = 4,840 square yards = 640 acres =	1 square inch = 1 square foot = 1 square yard = 1 acre = 1 square mile =	6·451 square centimetres 929·03 square centimetres 0·836 square metre 0·405 hectare 2·59 square kilometres
Capacity	1 pint = 2 pints = 1 quart = 4 quarts = 1 gallon = 8 gallons = 1 bushel = 8 bushels = 1 quarter=		
Weight (Avoirdupois)	= 16 oz. = 14 lb. =	1 ounce (oz.) 1 pound (lb.) 1 stone (st.)	= 28·35 grammes = 0·454 kilogramme = 6·35 kilogrammes

Double Conversion Tables for Measures and Weights

Length

(Note: the central figures represent either of the two columns beside them, as the case may be, for example, 1 centimetre = 0.394 inch, and 1 inch = 2.540 centimetres.)

1 hundredweight (cwt.) =

1 long ton

1 short ton

50.8 kilogrammes

1.016 tonnes

0.907 tonne

Centi- metres		inches	Metres		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	11.266	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	19.769
22.860	9	3.543	8.230	9	9.843	14.484	9	5.592	3.642	9	22.240
25.400	10	3.937	9.144	10	10.936	16-094	10	6.214	4.047	10	24.711

Kilo- grammes	Av. Pounds	Litres		Pints	Litres		Gallons	Metric Quintals per Hectare		Hun- dred- weight per Acre
0.454 1 0.907 2 1.361 3 1.814 4 2.268 5 2.722 6 3.175 7 3.629 8 4.082 9 4.536 10	2·205 4·409 6·614 8·818 11·023 13·228 15·432 17·637 19·842 22·046	0.568 1.136 1.705 2.273 2.841 3.409 3.978 4.546 5.114 5.682	1 2 3 4 5 6 7 8 9	1.760 3.520 5.279 7.039 8.799 10.559 12.319 14.078 15.838 17.598	4·546 9·092 13·638 18·184 22·730 27·276 31·822 35·368 40·914 45·460	1 2 3 4 5 6 7 8 9 10	0·220 0·440 0·660 0·880 1·100 1·320 1·540 1·760 1·980 2·200	1·255 2·511 3·766 5·021 6·277 7·532 8·787 10·043 11·298 12·553	1 2 3 4 5 6 7 8 9	0·797 1·593 2·390 3·186 3·983 4·780 5·576 6·373 7·169 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.

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This bibliography is in no sense comprehensive: it is only intended to be a guide to further reading on the subjects covered in this handbook.

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Certain reference pamphlets produced by the Central Office of Information can be purchased from Her Majesty's Stationery Office and its agents overseas. These pamphlets are listed here with their respective prices (postage extra).

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Annual reports are published by the Sports Council, the Scottish Sports Council, the Sports Council for Wales and the Sports Council for Northern Ireland. In addition, most of the organisations concerned with sport publish year-books covering results and records of the previous season and future prospects. Many weekly or monthly periodicals on sport are also published.

Index

Bold type in a sequence of figures indicates main references.

As the main purpose of this book is to inform readers overseas about Britain, organisations and societies are generally indexed under their subject matter rather than under Association of, British, National, Royal, etc. (that is, Accidents, Royal Society for the Prevention of; Archives, National Register of). In cases where the first word is not separable, however (for example, Royal Air Force, Royal Society), entries will be found appropriately.

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.

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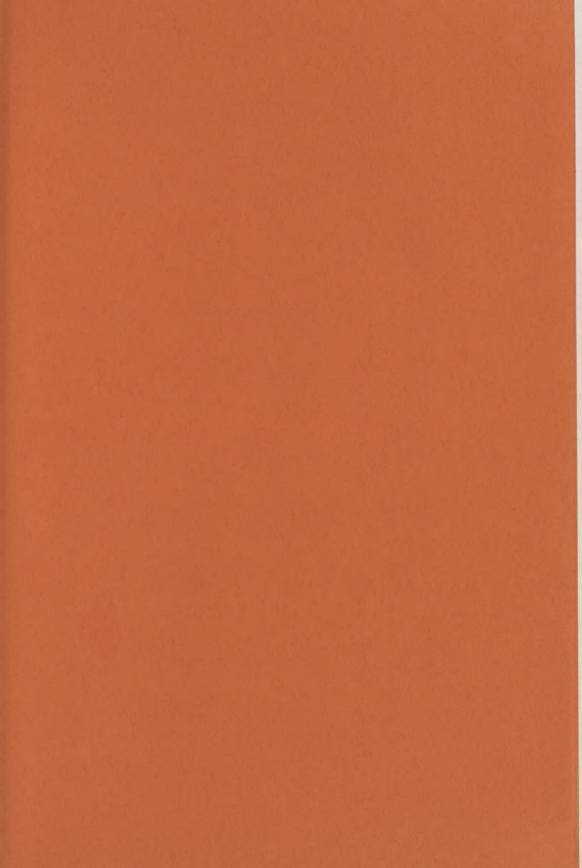
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Much of Britain's energy requirement is supplied from indigenous sources of coal, oil and natural gas. Virtually all gas needs are met from the North Sea and in 1980 Britain will be self-sufficient in oil (in net terms).

Oil and Gas Reserves are expected to last into the next century.

Coal At the current rate of extraction, reserves are sufficient for about

Nuclear Power Britain pioneered the commercial use of nuclear power; a major expansion is under way.

Hydro-electricity This makes a small but valuable contribution to energy requirements.

> Research on renewable sources of energy

Wind Solar radiation Waves and tides

Although these and other sources are not expected to change the pattern of energy supply in the immediate future, their contribution may increase significantly towards the end of the century.

