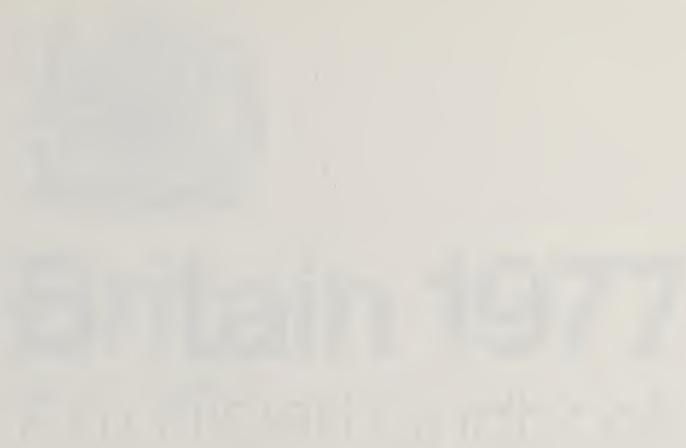


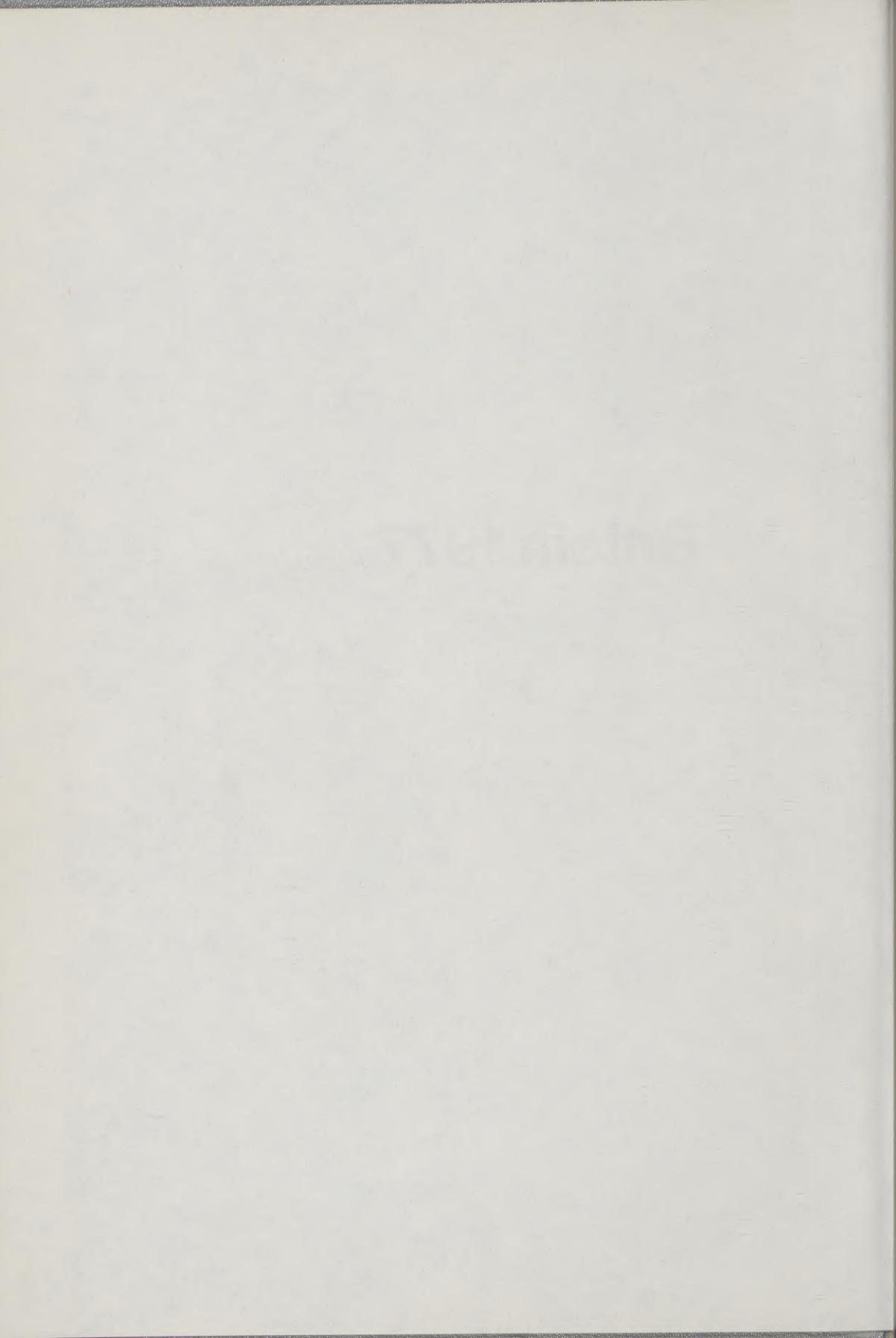
*Britain
1977*

An official handbook





Britain 1977 An official handbook





Britain 1977

An official handbook

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Acknowledgement is made for photographs to: *Imperial Chemical Industries Ltd.* for aromatics plant (facing p. 230); *British Petroleum Chemicals Ltd.* for Grangemouth complex, cell room at chlorine plant (between pp. 230 and 231) and 'Toprina' plant and finished product (facing p. 231); *Albright and Wilson Ltd.* for phosphoric acid container, benzyl cyanide plant (between pp. 230 and 231) and 'Proban-X' curing unit (facing p. 295); *English Sewing Ltd.* for raw cotton (between pp. 294 and 295); *Courtaulds Ltd.* for roto spinning frame (between pp. 294 and 295); *Osman Textiles* for easy-care fabrics (facing p. 295); *Vikoma International Ltd.* for 'Miniskimmer' (facing p. 422).

Introduction

Britain 1977 is the twenty-eighth official handbook in the series prepared and revised each year by Reference Division of the Central Office of Information. The contents are based on information available up to September 1976. 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 available overseas in a limited free edition and is on sale by Her Majesty's Stationery Office throughout the world.

Britain 1977 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 factual and statistical information it contains is compiled with the co-operation of other government departments and agencies, and of many unofficial organisations. While most sections relate to Britain, facts and figures for England, Wales, Scotland and Northern Ireland are given separately when relevant.

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

The purpose of this study is to investigate the effects of a new educational program on student performance. The program, which was implemented in the fall of 2020, focuses on enhancing critical thinking and problem-solving skills through a series of interactive activities and projects. The study aims to determine whether the program leads to significant improvements in students' academic achievement and engagement. The research is structured as follows: the first section provides a detailed overview of the program's components and objectives. The second section describes the methodology used for data collection and analysis. The third section presents the results of the study, including statistical analyses and comparisons between the experimental and control groups. Finally, the fourth section discusses the implications of the findings and offers recommendations for future research and program implementation.

1 The Land and the People

THE PHYSICAL BACKGROUND

Britain, formally 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 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 far north 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 (excluding tidal water)	
	square miles	square km	square miles	square km	square miles	square km
<i>United Kingdom</i>	94,222	244,035	93,048	240,994	1,174	3,041
Great Britain	88,770	229,915	87,842	227,511	928	2,404
England	50,338	130,375	50,077	129,700	261	675
Wales	8,018	20,766	7,969	20,641	48	125
Scotland	30,414	78,774	29,796	77,171	619	1,604
Northern Ireland	5,452	14,120	5,206	13,483	246	637

Source: *Annual Abstract of Statistics 1975*.

Discrepancies between totals and their constituent parts are due to rounding.

When studying British statistics it should be noted whether they refer to England, to England and Wales (considered together for many administrative and other purposes), to Great Britain, which comprises England, Wales and Scotland, or to the United Kingdom (Great Britain and Northern Ireland) as a whole. United Kingdom statistics and other data sometimes include the Isle of Man, 227 square miles (588 sq km), and the Channel Islands, 75 square miles (194 sq km), which are dependencies of the Crown, but not part of the United Kingdom.

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 0°

passes through the old observatory at Greenwich (London), while the easternmost point of England is nearly $1^{\circ} 45'$ East and the westernmost point of Northern Ireland is $8^{\circ} 10'$ West. It is just under 600 miles (966 km) in a straight line from the south coast to the extreme north of mainland Britain and about 300 miles (483 km) across in the widest part. Owing to the numerous bays and inlets no place is as much as 75 miles (121 km) from tidal water.

The seas surrounding the British Isles are everywhere shallow—usually less than 50 fathoms (300 feet or 91 metres)—because the islands lie on the continental shelf. To the north-west along the edge of the shelf the sea floor plunges abruptly from 600 feet (183 metres) to 3,000 feet (914 metres). 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 their small area, the British Isles contain rocks of all the main geological periods. In Great Britain the newer rocks, which are less resistant to erosion and have thus been worn down to form low land, lie to the south and east, and the island can therefore be divided roughly into two main regions, lowland Britain and highland Britain.

In lowland Britain the newer and softer rocks of southern and eastern England have been eroded into a rich plain, more often rolling than flat and rising to chalk and limestone hills, but hardly ever reaching a thousand feet (305 metres) above sea level. Its boundaries run roughly from the mouth of the Tyne in the north-east to the mouth of the Exe in the south-west.

Highland Britain comprises the whole of Scotland (including the hills and moors of southern Scotland as well as the mountains of the Scottish Highlands, which extend from the Forth–Clyde valley to the extreme north-west), the Lake District in north-west England, the broad central upland known as the Pennines, almost the whole of Wales, and the south-western peninsula of England coinciding approximately with the counties of Devon and Cornwall. Highland Britain contains all the mountainous parts¹ of Great Britain and extensive uplands lying above one thousand feet (305 metres). This high ground, however, is not continuous but is interspersed with valleys and plains. Geologically the mountains and hills consist mainly of outcrops of very old rocks (archaeic and palaeozoic), while the upper strata in the valleys and plains are mainly more recent (carboniferous age) and similar to those in the northern and western parts of lowland Britain.

These carboniferous strata are rich in minerals and include the coal measures which were the foundation of Britain's 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 underlie the fertile lowlands.

Towards the end of Britain's long geological history, when the ancestors of present-day man had already settled in the country, came the great Ice Age during which, at one period or another, ice caps and ice sheets extended approximately as far south as the Bristol Channel and the Thames valley. The ice naturally accumulated on the higher ground and swept from the mountains

¹ The highest peaks are: in Scotland, Ben Nevis, 4,406 feet (1,342 metres); in Wales, Snowdon, 3,560 feet (1,085 metres); and in England, Scafell Pike (in the Lake District, Cumbria), 3,210 feet (978 metres).

of Scotland, northern England and Wales any loose rock or soil which had previously been formed, so that, when the ice eventually disappeared, the hills stood out as barren rocky areas, while a thick mantle of glacial debris—boulders, boulder-clay, sands and gravels—lay distributed widely over the lower ground. The ice had blocked up previous drainage channels and left large lakes, which have since gradually dried up, leaving deposits of sand, silt and mud, often affording soils of great fertility.

In Ireland, where the solid rocks are covered deeply by the debris left by the ice sheets, the great central plain has large boggy areas, due to interruption of the previous natural drainage. The mountains and hill masses¹ are irregularly placed around central lowlands; the rocks of Ireland are of the same types as the highland zone of Great Britain, and in the higher parts the moorland vegetation resembles that of the higher parts of highland Britain.

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 highland Britain 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 lowland Britain 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 low-lying mostly, and for centuries some stretches of it have been protected against the sea by embankments.

The marked tidal movement around the British Isles sweeps away much of the sand and mud brought down by the rivers and makes the estuaries of the short British rivers² valuable as natural harbours.

Climate

Britain has a generally mild and temperate climate. It lies in middle latitudes to the north-west of the great continental land mass of Eurasia, but the prevailing winds are south-westerly and the weather from day to day is controlled mainly by a succession of depressions from the Atlantic which, moving in a generally easterly or north-easterly direction, pass over or near the British Isles. The climate is subject to frequent changes but to few extremes of temperature. Although it is largely determined by that of the eastern Atlantic, occasionally during the winter months easterly winds may bring a cold, dry, continental type of 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 British Isles.

Winds

In Britain, 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

¹ The highest peak in Northern Ireland is Slieve Donard, 2,796 feet (852 metres).

² The longest rivers in England—the Severn and the Thames—are only about 220 and 210 miles (354 and 338 km) long respectively.

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 of the British Isles, 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 19 mph (31 km/h) in January to about 14 mph (23 km/h) in August, while at Kew Observatory, on the western outskirts of London, the average speed varies from about 10 mph (16 km/h) in January to about 7 mph (11 km/h) in August. The stormiest region is along the north-west coast with over 30 gales a year; south-east England and the east Midlands are the least stormy, with gales occurring on about 2 days a year inland and on some 15 to 20 days on the Channel coast.

Temperature

Near sea level in the west of Britain the mean annual temperature ranges from 8°C (47°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 4°C (39°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). The average range of temperature between winter and summer varies from 7°C to 12°C (45°–54°F), being greatest inland in the eastern part of the country. During a normal summer, the temperature occasionally rises above 27°C (81°F) in the south, but temperatures of 32°C (90°F) and above are infrequent. (During late June and early July 1976, however, some parts of the country experienced their longest periods of temperatures around 32°C since records were first taken.) Extreme minimum temperatures depend largely on local conditions, but -7°C (20°F) may occur on a still, clear winter's night, -12°C (10°F) is rare, and -18°C (0°F) or below has been recorded only during exceptionally cold periods.

Rainfall

The British Isles as a whole have an annual rainfall of over 40 inches (1,016 mm), while England alone has about 34 inches (854 mm). 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 150 and 200 inches (3,810 and 5,080 mm) of rain fall on the summits of Snowdon and Ben Nevis during the average year, whereas some places in the south-east of England record less than 20 inches (508 mm). 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. For many places, however, the summer of 1976 saw the driest period of weather since records were first taken.

Sunshine

The distribution of sunshine over Britain 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 north-west 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 in the Peak District (Derbyshire) 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 in recent years as a result of changes in fuel usage and the operation of clean air legislation.

Soil and Vegetation

Many parts of the surface of highland Britain have only thin, poor soils, with the result that large 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 systems have 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 natural 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 50 years, woodlands now occupy only about 8 per cent of the surface of the country. The greatest density of woodland occurs in the north and east of Scotland, in some parts of south-east England and on the Welsh border. Yet much of Britain appears to be well 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 elm trees, especially in southern England, has been severely reduced 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. Most of Britain, however, is agricultural land, of which over a third is arable and the rest pasture and meadow, a varied semi-natural vegetation composed of indigenous grasses and flowering plants.

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 removal of hedges to facilitate mechanical farming has resulted in a more open landscape in certain parts of the country. The cool temperate climate of Britain 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 in which some flowers may not be found in hedgerows and sheltered woodland glades.

Fauna

The fauna of the British Isles is, in general, similar to that 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 areas, and otters are found along many rivers and streams. Both common and grey seals may be seen on various 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.

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 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 gravels 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 birds shot for sport in the open 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, for example, 89 kinds, including salmon, have been recorded, compared with only one in 1964.

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 Europe. There are no snakes in Ireland.

There are more than 21,000 different kinds of insects, most of them small, in the British Isles. Among the largest are the rare swallowtail butterfly (3 to 4 inches or 8 to 10 cm) and the stag beetle (2½ inches or 6 cm). The insect fauna in Britain 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 in Britain 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 wild life are the subject of special safeguards.

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 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 a reasonable contemporary estimate put the population of England and Wales at $5\frac{1}{2}$ million and that of Scotland at about 1 million. The main factor in this gradual growth of population was a slow natural increase, the rate of which was retarded in Britain, as in all countries before the development of medical science, by high death rates and, in particular, by 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.

Vital Statistics and Population Censuses

From the beginning of the nineteenth century, information about the British people—their number, sex, age, geographical distribution, births, deaths, marriages, occupations, language and family structure—is relatively plentiful and reliable. Most of it is derived from two main sources: the regular flow of vital statistics (that is, statistical information based on statutory registration of births, marriages and deaths) and the periodic censuses of population.

The compilation of complete records of births, marriages and deaths is carried out by registrars of births and deaths, some of whom also act as registrars of marriages. In England and Wales there are some 500 superintendent registrars in charge of registration districts and nearly 1,150 registrars in charge of sub-districts. Registrars and superintendent registrars are appointed either by the councils of counties or of metropolitan districts and in London by the borough councils. They act under the instruction of the Registrar General for England and Wales, who is also director of a central government department, the Office of Population Censuses and Surveys, whose functions include regulating the registration of births, deaths and marriages, the planning and carrying out of population censuses, and the compilation and analysis of population and vital statistics. There are corresponding authorities and similar arrangements in Scotland, Northern Ireland, the Channel Islands and the Isle of Man.

Since 1801 censuses of the people of Great Britain have been taken regularly every ten years, except that because of war there was no census in 1941. The latest full census in Britain was in April 1971.

Home Population In mid-1975 the estimated home population of Britain (excluding the populations of the Isle of Man and the Channel Islands) was 55,962,000 compared

with 54,218,000 in mid-1965, 38.2 million in 1901, and 10.5 million (in Great Britain) in 1801. The main causes of this great increase in numbers were a progressive reduction in death rates and a continuance of high birth rates into the beginning of the twentieth century.

Britain's population density was approximately 594 persons per square mile (229 per sq km) in mid-1975, but in England there were approximately 923 persons per square mile (356 per sq km), and in Greater London 11,664 persons per square mile (4,502 per sq km).

Future Growth

Since 1971 there has been a decline in the rate of population growth. However, on the basis of mid-1975 population estimates and of present trends in birth and death rates and migration, the increase in population is expected to continue, reaching 56.9 million in 1985, 59 million in 1995, 60.4 million in 2005 and 62.5 million in 2015. This represents an average growth rate of 0.2 per cent a year over the whole period.

Population Policy

Growing public concern about the effects of an increasing population on an already densely populated island led to proposals for a policy on population matters. In 1971 the Government set up a Population Panel following recommendations made by a House of Commons Select Committee. In its report the panel endorsed the main recommendations of the select committee for an official attitude on population and for comprehensive family planning services as an integral part of the National Health Service. Provisions for family planning advice and help within the framework of the National Health Service have gradually been extended so that a free service is now available to all (see p. 133). In 1974 the Government announced that it proposed to give higher priority to survey and research work to study fertility, mortality and migration, in an attempt to discover more about the factors which have caused the recent decline in the rate of growth of population in the United Kingdom. The Lord Privy Seal has been given ministerial responsibility for monitoring and co-ordinating further developments in population matters.

Birth and Death Rates

For most of the nineteenth century the annual birth rate was over 30 per thousand of the population, and the annual death rate was just over 20 per thousand. Both birth and death rates fell over the last 20 years of the century, but natural population increase changed little.

These fertile years, with their comparatively high death rates in all age groups, produced a population of low average age. But when death rates in all age groups fell by an average of about a third, as they did between 1880 and 1910, the results were a very low general death rate, which helped to maintain the population increase in spite of a fall in the birth rate, and a gradual increase in the average age of the population. By the 1930s the birth rate had fallen to less than half the nineteenth century rate. The population continued to increase slowly, but its average age rose more rapidly.

Owing to the changing age composition, the general death rate has remained nearly stationary since 1920 at around 12 per thousand of the population though death rates have continued to fall heavily in every age group, particularly among pre-school children, school children and adults in their thirties and forties, with a consequent lengthening of the expectation of life from about 48 years at birth for a boy born in 1901 and 52 years for a girl, to 69 years at birth for a boy born in 1972-74 and 75 for a girl.

The continuous fall in the number of births and birth rates ceased in 1933 and for the rest of the 1930s remained at about 15 per 1,000 population. During

the second world war the birth rate began to rise and reached a temporary post-war peak of 20.7 per thousand population in 1947. It receded to slightly above the pre-war level in the early 1950s, but from 1956 onwards began to rise again, reaching a peak of 18.8 per thousand in 1964. It has since fallen particularly sharply, reaching 12.4 per 1,000 population in 1975. The proportion of illegitimate births, which reached a peak of 9.1 per cent of all live births in 1945, the end of the second world war, fell between 1945 and 1955, when it reached 4.5 per cent; since then it has risen, and was about 8.5 per cent in 1975.

Mortality Causes

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 acute infectious diseases and from tuberculosis, and infant and maternal mortality have declined very sharply. Mortality from the main acute infectious diseases of childhood is less than a two-hundredth and mortality from tuberculosis is about one-fifty-fifth of the rate prevailing in the mid-nineteenth century. The infant mortality rate (deaths of infants under one year old per thousand live births) has fallen from 142 in 1900-2 to 16.8 in 1974 and maternal mortality from 4.71 per thousand live births in 1900-2 to 0.19 in 1974. The reported mortality from some of the illnesses of middle and old age, such as cancer of the lung and heart diseases, has risen during the twentieth century, and this rise, though exaggerated by the improvement in diagnosis, is at least partly real. Medicine has not yet discovered effective measures to combat some of these illnesses and improvement in positive health does not always bring increased immunity or resistance to them. Death rates from suicide have shown a marked decline within the past decade (from 107 per million in England and Wales in 1965 to 75 in 1975).

Sex Ratio

Total births of boys naturally exceed those of girls by about 6 per cent, but stillbirth rates and mortality rates at almost all ages are higher for males, so that in nearly all countries—and in Britain since records began—women preponderate among the elderly and outnumber men in the total population. There are more than 105 females to every 100 males in Britain. Formerly women outnumbered men in every age group from adolescence onwards. Recently, however, the fall in stillbirths and infant mortality has reduced the influence of these factors on the sex ratio so that the age at which women begin to outnumber men has advanced and is now about 45. On the other hand, the lengthening of the expectation of life, which has been rather more marked for women than for men, has increased the preponderance of women among the elderly—there are more than 18 women over 70 years old to every 10 men—and made it a weightier factor in the sex ratio of the whole population.

Marriage and Divorce

Over the past 30 years the proportion of the population of Great Britain who are or have been married has risen from about 52 per cent in 1939 to 62.4 per cent in 1974, while the proportion of single persons in the population aged 15 years or over has fallen from 33.3 per cent to 22.7 per cent. This change has been due mainly to an increase in marriage rates among men and women in their late teens and early twenties; whereas in 1939 only 33.8 per cent of young women aged 20 to 24 were or had been married, in 1974 the percentage was 58.

There were nine decrees of divorce made absolute in 1975 for every 1,000 married people in England and Wales; a substantial proportion of divorced people marry again.

Fertility Trends

The fall in birth rates in the latter part of the nineteenth and the early part of the twentieth centuries was due mainly to a decline in the size of the family (that is, the number of children born per married couple) caused by the spread of deliberate family limitation. Couples married just over a hundred years ago produced on the average rather more than six liveborn children. The decline seems to have set in with those married in the 1860s, and the average family size for Great Britain fell to less than 2.1 for those married in the decade 1934-43. There has since been some increase, and the average family size of women marrying in the 1950s is about 2.3 liveborn children, although recently married women have delayed child bearing.

The generation of girls born about 1840, and married mostly between 20 and 30 years later, had about 40 per cent more children than were needed to replace the original generation, while those born at the beginning of the present century had only about 70 per cent of the number of children needed for replacement. Since then the figure has been rising again and seems likely to exceed full replacement with the generation born during the second world war. The rise has been due mainly to the increased proportion of women getting married and of children surviving to adult life.

Age Distribution

The effect of the fall in the birth rate beginning in the latter part of the nineteenth century was to reduce the ratio of children and old people to adults of working age. This ratio was at a minimum in 1930. After 1936 the number of children leaving school for work fell sharply owing to the drop in the birth rate after 1921, but the population aged over 64, born during an era of high fertility and representing successive generations of steeply rising numbers, increased very rapidly; the population aged over 40 was also increasing relatively faster than that between 15 and 40. The higher birth rates after 1942 arrested the compensating fall in the number of children and further reduced the proportion of people of conventional working age.

Because of this high proportion of the young and the old in the present population, which is expected to increase still further, and the growing numbers of young people continuing in full-time education, there is a special need to make the best use of national human resources, both by ensuring that those available for work are able to find suitable employment and by increasing the rate of technological improvement and of training and retraining in order to raise productivity. At the time of the 1971 census 91 per cent of men and 55 per cent of women between 15 and normal retirement age (65 for men, 60 for women) in Great Britain were economically active in remunerative work (this includes those temporarily out of work or sick). In addition some 19 per cent of men and over 12 per cent of women over normal retirement age were still economically active. At the other end of the scale, some 30 per cent of young people between 15 and 20 were continuing their education (in 1971, 15 was the school-leaving age; it was raised to 16 in 1972).

Migration

From the beginning of the nineteenth century until the 1930s the balance of migration was markedly outward. Between 1815 and 1930 well over 20 million people left Britain for destinations outside Europe, mainly in the Commonwealth and the United States. Many emigrants later returned and large numbers of Europeans, mainly Russians, Poles, Germans and Hungarians, entered

Britain. Nevertheless, the net loss by migration from Britain's present area amounted to some 4 million between 1871 and 1931. Since then the balance of migration for Britain as a whole was inward until 1967, since when a small net outflow has been recorded. The population of Scotland and Northern Ireland has been characterised by a net outward movement of population to countries overseas as well as to England and Wales.

There have been two main periods of net inflow into Britain since 1931. The first was in the years 1931 to 1940 when emigration was very low, many former emigrants returned, there was considerable net immigration from the Irish Republic, and extensive immigration from Europe, including about a quarter of a million refugees seeking sanctuary in Britain. The second, from the 1950s, resulted from a large increase in net immigration from Commonwealth countries, particularly West Indian countries, India and Pakistan. In the three years 1960-62 total net immigration amounted to some 388,000 people, about three-quarters of them from the Commonwealth. It was in these circumstances that the Government introduced the Commonwealth Immigrants Act 1962, which gave it power to restrict the number of people from the Commonwealth and, in principle, the Irish Republic who did not have citizenship of the United Kingdom and Colonies and who might immigrate into Britain without assured prospects of employment or adequate means of self-support. The Commonwealth Immigrants Act 1968 extended immigration control to citizens of the United Kingdom and Colonies who had no close links with Britain: broadly speaking, those neither born, naturalised, adopted or registered in Britain nor having a parent or grandparent who was. The Immigration Act 1971, which replaced this earlier legislation, provides a single system of control over Commonwealth citizens and foreign nationals entering Britain. It 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.

The net emigration from the United Kingdom to Commonwealth countries in 1975 was 7,300 and to foreign countries 34,500, including 5,400 to other countries in the European Community. Some 19,350 work permit holders and 4,510 dependants entered Britain from overseas countries in addition to 82,400 Commonwealth citizens and foreign nationals accepted for settlement. Over the same period residence permits were granted to 8,125 nationals of European Community countries. (For welfare of immigrants see Chapter 6.)

Nationality

Under the British Nationality Act 1948, persons 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 an 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 1st January 1973 have the right to be registered after completing five years' ordinary residence without satisfying any other requirement. Some 64,600 people acquired citizenship by naturalisation and registration in 1975.

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.

A government review of United Kingdom nationality law is in progress.

Language

In England, Wales, Scotland and Northern Ireland, English is the language predominantly spoken. In Wales, however, Welsh, a form of British Celtic, is the first language of the majority of the population in most of the western counties and was spoken by 21 per cent of the population aged three years and over (some 542,400 people) 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 Manx and Cornish varieties of Celtic are no longer effectively living languages, although there is a revival of cultural interest in Cornish, and, in the Isle of Man, Manx is used in addition to English for certain official pronouncements.

English is spoken throughout the Channel Islands, but a Norman-French *patois* is still also spoken there by some people. In Jersey French is the official and ceremonial language, although English is also used in the courts; in Guernsey English is used in almost all official proceedings.

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, as enumerated by censuses in 1901, 1931, 1961, and 1971 (or nearest possible estimate) and estimated in 1975, is shown in Table 2, which also gives figures for the Isle of Man and the Channel Islands.

The standard regions of England, which are sub-divisions of the country used for most statistical and economic planning purposes, have the following populations (provisional mid-1975 estimates): East Anglia 1,780,400; East

Midlands 3,728,000; Northern 3,126,100; North-West 6,577,400; South-East 16,936,100; South-West 4,233,200; West Midlands 5,178,100; and Yorkshire and Humberside 4,894,400.

Geography, history and economic factors have given rise to the differences between England, Wales, Scotland and Northern Ireland and to an uneven distribution of the population within them.

TABLE 2: Populations 1901-75^a*thousands*

		1901 census	1931 census	1961 census	1971 census	1975 mid-year estimate
England	<i>Persons</i>	30,509	37,359	43,461	46,018	46,454
	Males	14,714	17,839	21,012	22,355	22,626
	Females	15,795	19,520	22,448	23,663	23,828
Wales	<i>Persons</i>	2,019	2,593	2,644	2,731	2,765
	Males	1,014	1,294	1,292	1,328	1,342
	Females	1,004	1,300	1,352	1,404	1,423
Scotland	<i>Persons</i>	4,472	4,843	5,179	5,229	5,206
	Males	2,174	2,326	2,483	2,515	2,504
	Females	2,298	2,517	2,697	2,714	2,702
Total Great Britain	<i>Persons</i>	37,000	44,795	51,284	53,979	54,425
	Males	17,902	21,459	24,787	26,198	26,472
	Females	19,098	23,337	26,497	27,781	27,953
Northern Ireland	<i>Persons</i>	1,237	1,243 ^b	1,425	1,536	1,537
	Males	590	601 ^b	694	755	761
	Females	647	642 ^b	731	781	777
Total United Kingdom	<i>Persons</i>	38,237	46,038	52,709	55,515	55,962
	Males	18,492	22,060	25,481	26,952	27,232
	Females	19,745	23,979	27,228	28,562	28,730
Isle of Man	<i>Persons</i>	55	49	48	56	56 ^c
	Males	25	22	22	26	26 ^c
	Females	29	27	26	30	29 ^c
Jersey	<i>Persons</i>	53	50	64	73	72 ^c
	Males	24	23	31	35	35 ^c
	Females	29	27	33	37	37 ^c
Guernsey and Associated Islands	<i>Persons</i>	43	43	47	53	53 ^c
	Males	21	21	23	25	26 ^c
	Females	22	22	24	27	28 ^c

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

^b Estimates.

^c 1974 figures.

Table 3 gives figures of some of Britain's largest urban areas. About half the British 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. Most of the mountainous parts of Britain,

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. Though in most places the population has been increasing, there have been local differences in the rate of increase. Many places in the Midlands, East Anglia and south-east England, some south-coast areas and some of the most

TABLE 3: Size and Population of Some Urban Areas, Mid-1975

	Area ^a		Population estimate (thousands)
	square miles	square km	
Greater London	609.7	1,580	7,111.5
Birmingham	102.0	264	1,084.6
Glasgow	60.5	157	880.6
Leeds	217.0	562	749.0
Sheffield	141.9	368	559.8
Liverpool	43.6	113	548.8
Manchester	44.9	116	506.3
Edinburgh	52.0	135	470.1
Bradford	142.9	370	460.6
Bristol	42.3	110	420.1
Belfast	54.0	140	368.2
Coventry	37.3	97	337.0
Sunderland	53.2	138	298.0
Newcastle upon Tyne	43.2	112	295.7
Leicester	28.2	73	290.6
Nottingham	28.7	74	287.8
Doncaster	224.5	582	285.0
Cardiff	46.3	120	284.4
Kingston upon Hull	27.4	71	279.7
Wolverhampton	26.6	69	269.0
Plymouth	30.6	79	257.9
Stoke-on-Trent	35.8	93	255.8
Southampton	18.9	49	215.4
Derby	30.1	78	215.2
Aberdeen	19.3	50	210.4
Portsmouth	14.4	37	200.9
Dundee	19.2	50	194.7
Swansea	94.5	245	190.5
Newport	77.4	201	133.5
Londonderry	144.9	375	86.6

^a Areas relate to boundaries as constituted in April 1974 (England and Wales), May 1975 (Scotland) and October 1973 (Northern Ireland).

prosperous parts of northern England, Wales and Scotland have had increases well above the average national rate, while remote country areas in northern England, Wales and Scotland and some coastal resorts have had relatively small increases. The differences result largely from the effect of migration towards areas of expanding employment and housing opportunities and towards certain retirement areas.

Urban Dispersal

Throughout Britain the population is predominantly urban and suburban, although there may be access to large parks, commons and other expanses of open country within the urban area.

During the nineteenth century the labour demands of newly developing industry drew great numbers from the countryside; by the end of the century three-quarters of the British population was living in towns and the large conurbation was already the dominant type of British community. During the twentieth century the suburbs of the towns in these population centres have continued to spread and merge. Over one-third of the population lives in Greater London, the metropolitan counties, and the Scottish conurbation of Central Clydeside (centred on the city of Glasgow). The centres of the metropolitan counties are the cities of Manchester (Greater Manchester), Liverpool (Merseyside), Sheffield (South Yorkshire), Newcastle upon Tyne (Tyne and Wear), Birmingham and Wolverhampton (West Midlands), and Leeds and Bradford (West Yorkshire).

There has been a recent decline in the numbers of people living in inner urban areas, balanced or surpassed by the increase of population in and beyond the outer suburban fringes (limited in certain areas by the 'green belt' policy where little development is permitted). This applies most strikingly to London, also to the outer areas of the West Midlands and Merseyside counties and to such towns and cities as Bristol, Derby, Liverpool, Norwich, Oxford, Portsmouth and Sheffield.

Factors in the further dispersal of the last few years have been the spread of car ownership and the growth of motorway and trunk road networks, expansion in public transport serving journeys to work, private property developments to meet the demand for housing, and planned transfers of population to the new towns around London, Glasgow, the West Midlands and Merseyside and to selected expanding towns near to the great cities.

Mobility

The extent to which people in Britain move about the country for work, housing or study purposes is shown by the finding that 10.9 per cent of residents in Great Britain in 1971 had changed their address in the preceding year and 32.5 per cent in the previous five years; 4.3 per cent had moved between England and Scotland or Wales, or from one region to another, during 1966-71.

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 of the handbook, in particular those on housing, transport, employment, planning and the environment, and sport and recreation. It deals with topics in very broad and informal terms and many exceptions apply to the generalisations. Some of the sources consulted are listed in the Bibliography.

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, earlier marriage, widening educational opportunities and technical progress, particularly in communications and transport. 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.

Household Structure

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. Most people marry in

their twenties (women in their early twenties and men in their middle twenties), some 90 per cent being married by the time they are 30. There were approximately 27.5 million married people at the time of the 1971 population census and of these 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. Of the 12.5 million families, nearly 8 million, comprising 32 million people, contained a married couple and their children or grandchildren. There were, in addition, 1.2 million families consisting of one 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 2.8 in 1973. It is estimated that in 1973 19 per cent of households consisted of one person only, 32 per cent of two, 18 per cent of three, 18 per cent of four and 13 per cent of five or more. However, about half of the small households (one or two persons) contained a person over 60 years old while the other half consisted largely of young, often recently married, couples without children and of young people who had left home to live on their own during the first years of their employment and increasingly during the last stages of their education. Relatively few people in their middle years lived in small families without children.

Housing and Environment

Houses are much more common than flats; four British households out of five live in a house. In the centre and inner areas of large towns and the inner streets of small towns and villages, terraced houses, most of them built in the early years of the present century, still provide accommodation for a third of all households. In urban areas, slum clearance and redevelopment have been major features of post-1945 public housing policies. Although in the 1960s high-rise blocks of flats were thought to offer a number of advantages, such as economy in land use and speed of construction, their disadvantages from certain points of view, including inhumanity of scale, have led to the current preference for carefully planned low-rise, high density layouts, including many houses with gardens or patios. With the help of improvement grants from public funds, the modernisation and conversion of sub-standard housing has increasingly been encouraged as an alternative to clearing and rebuilding, as a way of preserving the social fabric and of making more economic use of resources, including the skills of small building firms.

The main housing development of the past 50 to 60 years, however, has been suburban. More than half Britain's 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. From 1919 to 1939 such houses were often located along main roads, a pattern which became known as 'ribbon development'. More recently the pattern has tended to change to one of housing in estates set back from the main thoroughfares with more attention given to amenities such as health centres and community centres which provide for various activities, often run by associations of the residents. Standards of new housing have improved considerably in recent years and many more houses now have modern conveniences. In 1973 some 89 per cent of households in Great Britain had exclusive use of a bath or shower, and 95 per cent had sole use of a lavatory—high percentages by international standards. Most housing built nowadays is centrally heated. At the same time improved housing

design and greater use of labour-saving equipment and materials have combined to lighten the burden of housework. Some nine households in ten have a vacuum cleaner, more than two in three a washing machine, over four out of five a refrigerator, one in three an electric food mixer and nearly all an electric iron. An increasing, but still comparatively small, number have a dish-washing machine, deep freeze and tumble drier. Very few households employ any regular paid help and hardly any have a resident servant. Some households get help through the local authority home help service because of particular need, for example, if there is an invalid or elderly person in the house or because the mother is having her baby at home. People in full-time work benefit from launderettes with extended opening hours and from the fact that some shops stay open later, at least one evening a week.

Over half of all families now own their own homes, though 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 (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. Though many people, perhaps 20 per cent of all heads of households, seem to stay nearly all their lives in the house into which they moved on marriage, there are always a number of individuals and whole families (perhaps between 6 and 9 per cent of families each year) changing their homes for a variety of reasons. Much of this movement is to another house in the same or neighbouring area, but there are certain broad patterns of movement, for example, the drift away from very remote rural areas and from the centres of large towns towards suburbs and rural areas accessible to towns, and the movement of people on retirement to the country and seaside.

An important influence on the planning of housing and services has been the growth of car ownership. New housing estates are often some distance from public transport and from work places, schools and the main shops.

Some 55 per cent of households now own cars (70 per cent in country areas). In the mid-1950s public transport was more significant than private motoring, but now private motoring, measured in terms of distance travelled by passengers, is nearly four times as important as public transport. The volume of public transport services has not fallen as much as the use of them; indeed, many inter-city rail services have become more frequent over the last ten years. In urban areas, in spite of heavy falls in use, bus services have been broadly maintained. Services in rural areas, however, have been sharply reduced.

Very great benefits are conferred on families and individuals by the growth of car ownership, but this trend has serious implications for the public transport system. The problems of those without access to a car, many of whom are among the poorer sections of the community or are elderly or infirm, are being given particular attention in the development of transport policies.

The spread of car ownership has also influenced large-scale urban reconstruction and road development programmes of the last 20 years. Some towns and cities have been altered to accommodate more traffic and house more people; many town centres have pedestrian precincts; by-passes help to reduce traffic in city centres.

In modern industrial society in a densely populated country 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 being supplemented to a growing extent by those of groups formed expressly to safeguard the amenities of a particular area and to give publicity to 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, a Clean Air Council and an Advisory Council on Noise. Voluntary societies include the National Society for Clean Air, the Noise Abatement Society and the Council for Nature.

The Economic and Social Pattern

The working population comprises nearly half the total population. About 35 per cent of employees work in manufacturing industries and slightly more (36 per cent) in professional and government (including local government) services, 12 per cent in the distributive trades, 8 per cent in public utilities, 6 per cent in the construction industry and less than 3 per cent in agriculture. 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 £41,150 million, an average annual rise of 4.6 per cent. It is estimated to have fallen by between a half and one per cent in 1975, the first year to show a fall since the official series was started in 1948.

Although the progressive effect of direct taxation on the degree of inequality of income distribution is largely offset by the regressive effect of indirect taxation, the combined effect of the tax system, the receipt of transfer payments and direct and indirect benefits in kind is a major redistributive one. The Royal Commission on the Distribution of Income and Wealth, in a report published in 1975, showed that, on the basis of the latest available figures, changes in the distribution of income between the late 1950s and 1972-73 were not very pronounced, but there had been a continuing 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 17 per cent in 1972-73, accounted for largely by the drop in the share of the top 1 per cent from about 8 per cent to 6 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 1972-73 from 5.3 to 5.8 per cent.

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. The Royal Commission found that in 1972 about 28 per cent of personal wealth was owned by the top 1 per cent of the adult population, and over 82 per cent by the top 20 per cent. The value of state pension rights has a marked effect on these figures; in particular the share of the top 1 per cent falls by a third while the share of the bottom 80 per cent of the adult population is more than doubled. The proportion of personal wealth held in the form of physical assets rose from less than a third in 1960 to a half in 1973, 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 pattern of expenditure has been changing. Expenditure on food now

¹ Total personal income less taxes on income, national insurance contributions, transfers abroad (net) and taxes paid abroad.

accounts for a smaller share of total consumer expenditure than it did ten years ago. Increases have taken place, however, in expenditure on motor vehicles, housing, alcoholic drink, recreation and entertainment. The proportion of expenditure on clothing and footwear has fallen.

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. The general picture of British food consumption between 1972 and 1975 shows a drop in consumption of meat, eggs, oils and fats, sugar, fruit and vegetables, and increases in dairy products, potatoes and grain products. Tea remains the most popular drink but many more people are drinking coffee than before (mainly 'instant' coffee). A greater willingness to try unfamiliar foods has given rise to a wider availability of imported products, as well as to restaurants serving the national dishes of other countries.

Over the period 1964-74 total consumption of beer (Britain's most popular alcoholic drink) rose by 30 per cent; that of spirits by 77 per cent; and that of wine 123 per cent. Indications are that in 1975 consumption of spirits and wine fell slightly, although beer consumption increased.

Many of the differences between socio-economic groupings have been reduced during the twentieth century, but persist in such matters as educational attainment, standards of health and even mortality rates. Differences between the counties and regions of Britain have also been identified, notably the concentration of higher employment incomes in London and south-east England.

Big town houses have been converted into flats, offices or nursing homes, while some country estates have been opened to the public or have become schools, rehabilitation or recreation centres or wild-life parks. The proportion of the working population in non-manual occupations is growing and an increasing number of people in professional or managerial occupations are the children of manual workers.

A broadly similar way of life is shared by many members of the immigrant communities who have settled in Britain since the 1950s, though, as new arrivals, mainly from Commonwealth countries, sometimes with a poor command of the English language or none at all, they may face problems of limited employment opportunities and inadequate housing. Evidence of immigrant cultures can be seen in the urban areas where most of them have settled (national dress worn by many Asian women, Asian films and shops, market stalls with West Indian fruit and vegetables) and many schools have adapted their curricula to allow host and immigrant communities to understand each other's traditions better. The needs of immigrant children for language training are being met in special centres run by the education authorities, of workers, increasingly, in colleges of further education and in the factories themselves, and of Asian women in groups run by local community relations councils and other voluntary organisations.

The greatest social changes have been in the lives of women. During the twentieth century there has been a notable shortening of the proportion of a woman's life devoted to the care of children. A woman marrying at the end of the nineteenth century would probably have been in her middle twenties, and would be likely to have seven or eight children of whom four or five survived to the age of five. By the time the youngest was 15 she would have been in her early fifties and would expect to live a further 20 years, during which custom, opportunity and health made it unusual for her to do paid work. Today women marry younger and have fewer children. Usually a woman's youngest child will be 15 when she is 45, and she can expect to live another 35 years and is likely to

take paid work until retirement at 60. Even while she has the care of children, her work is lightened by household appliances and convenience foods. This significant change in women's life pattern has only recently begun to have its full effect on their economic position. Up to about 20 years ago some 85 per cent of girls left school at the minimum age of 15 and most of them took a full-time job. However, when they married, they usually left work at once and often never returned to it. Thus, single women, nearly half of them under 25, formed some 56 per cent of the female labour force. Today the school-leaving age is 16, many girls stay at school after that age, and, though women tend to marry younger, more married women stay at work at least until shortly before their first child is born. Very many more subsequently return to full- or part-time work. Such changes have led to a new relationship in marriage, with the husband accepting a greater share of the burdens and satisfactions of family life, and with both partners sharing more equally in financing and running the home according to their respective capacities and interests. However, in spite of these major social changes and the removal of practically all sex discrimination in political and legal rights, the Government believes that tradition and prejudice still handicap women in their working careers and personal lives. Accordingly, major legislation promoting equal opportunities for women and equal pay has recently been brought into force.

Social Attitudes

Social attitudes have continued to change over the past 20 or 30 years and there has developed, for example, a more informed tolerance of certain types of deviant behaviour and an unwillingness to penalise individuals with particular problems. This spirit of toleration is reflected in the growing popular sympathy for the difficulties of the unmarried mother, for instance, and in the passing of more liberal laws on such matters as abortion, divorce and homosexuality. Similarly, changes in the law applying to young offenders reflect the view that it is unreasonable to treat children who have broken the law as fundamentally different from children in trouble of other kinds.

This liberalising trend is balanced by a recognition that, in some areas, restrictions on certain freedoms must be extended in the interests of society as a whole—hence legislation on race relations and the control of dangerous drugs and firearms. There are also fears in some quarters that liberal attitudes towards social problems have failed to produce adequate solutions and that a more disciplined approach is necessary.

Relationships between the generations are undergoing considerable change, with the result that there is today a greater readiness on the part of children and young people to criticise traditional institutions and to seek more influence in shaping society. This desire for personal involvement is manifest not only among those prepared to demonstrate for or against certain courses of action and to bring pressure on the responsible authorities, but also among the increasing numbers of young people who offer their services to help the old, the disabled, the illiterate, and others in need.

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 39 to 40 hours a week, although many manual workers actually work somewhat longer (about 45 on average) 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. Britain has fewer public holidays than nearly all other European countries.

The number of holidays taken in Great Britain by British residents was 40 million in 1975 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 over a quarter involve camping or caravanning. Holidays abroad in 1975 numbered 8 million, compared with 5.5 million in 1966. A major factor in this growth has been the availability of reasonably priced 'package' holidays. Spain, by far the most popular destination, receives a third of all British holiday-makers abroad.

Apart from holidays, leisure patterns for the individual are determined very much by age, sex, social class, income, access to a car and education. The General Household Survey of 1973 (published in 1976) found that the percentages of people interviewed who had taken part in a variety of leisure activities at least once in the four weeks before the survey were roughly as follows: watching television and listening to the radio or records, 95 per cent; hobbies 49 per cent; going out for a drink (the public house—known as the pub or the local—is a traditional social centre for many people), 38 per cent; gardening (a majority of British families have some garden or an allotment despite the high proportion of the population living in urban areas), 30 per cent; eating out, 29 per cent; open-air outings, perhaps to parks, seaside or countryside, 21 per cent; cultural outings, 18 per cent; outdoor sports and games, 18 per cent; going to social clubs,¹ 12 per cent; film-going, 11 per cent; watching sports and games, 10 per cent; taking part in indoor sports and games, 10 per cent; visits to buildings and museums, 9 per cent; social and voluntary work, 7 per cent; and attending leisure classes, 2 per cent. These statistics are quoted in *Social Trends 1975*.

Television watching, easily the most popular leisure activity, takes up over 19 hours a week on average for people aged 5 years and over. Boys and girls aged 5 to 14 tend to watch rather more. About 95 per cent of British households have a television.

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 United Kingdom is a monarchical State. It is one of the independent members of the Commonwealth¹ (the Queen is recognised as head of the Commonwealth), and a member of the European Community.

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 became part of the kingdom during the middle ages. 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. 56.

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 sharing very varied backgrounds and traditions. 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.

Devolution

England and Wales on the one hand and Scotland on the other have different systems of law, a different judiciary, different education systems, different systems of local government and, for most domestic matters, different government departments. In Scotland departments are grouped under a Secretary of State, and in the administration of Welsh affairs there is a considerable measure of devolution under a Secretary of State.

Legislation is being introduced in the 1976–77 parliamentary session which will greatly extend this devolution of decision-making from London. The Government is proposing the establishment of elected assemblies for Scotland and Wales, in Edinburgh and Cardiff respectively. The Scottish assembly would have law-making powers within areas for which separate Scottish legislation already exists (for example, housing, health and education) and executive functions for devolved responsibilities, including the making of delegated legislation, would be carried out by a Scottish executive. The Welsh assembly would not have law-making powers but would carry out executive functions for devolved responsibilities. Membership would be on the same

¹ The other members are: Canada, Australia, New Zealand, India, Bangladesh, Sri Lanka, Ghana, Malaysia, Nigeria, Cyprus, Sierra Leone, Tanzania, Jamaica, Trinidad and Tobago, Uganda, Kenya, Malawi, Malta, Zambia, The Gambia, Singapore, Guyana, Botswana, Lesotho, Barbados, Mauritius, Swaziland, Tonga, Western Samoa, Fiji, the Bahamas, Grenada, Papua New Guinea and Seychelles. Nauru is a special member, participating in functional activities but not in meetings of Heads of Government.

system as membership of the United Kingdom Parliament, but with smaller constituencies. There would be a block grant to the assemblies which would take into account local needs and the desirability of some uniformity of standards in all parts of the United Kingdom. Allocation of the grant among different devolved services would be a matter for the assemblies.

The establishment of the assemblies would not, however, detract in any way from the overriding interest of all British people in the determination of United Kingdom policies as a whole. The United Kingdom Parliament and central government ministers would remain fully responsible for overall British interests; Scotland and Wales would retain their present representation in Parliament; and Secretaries of State for Scotland and Wales would continue to act as full members of the Government forming United Kingdom policies.

Ministerial responsibility for devolution policy is held by the Lord President of the Council, a senior member of the Cabinet. He is assisted by other ministers, and works in collaboration with the Secretaries of State for Scotland and Wales. At official level a Cabinet Office unit works closely with the Scottish and Welsh Offices, and reports to the Lord President.

Channel Islands and Isle of Man

The Channel Islands and the Isle of Man (which are Crown dependencies, not 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 their proximity to it and 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 precepts and practices, known as conventions, which have never been codified and are not directly enforceable in a court of law, but which, nevertheless, have a binding force as rules of the constitution. Because the constitution is not contained in any single document, 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. 27);
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. 40); (b) government departments, most of them under the control of ministers and all staffed by civil servants, which are responsible for administration at the national level (see p. 43); local authorities, which administer and manage many services at the local level (see p. 64); and (d) public corporations which may be responsible for the operation of particular nationalised industries or of a social or cultural service, for example, 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 the other member nations of the Commonwealth of which the Queen is Sovereign, to suit the particular circumstances of each.

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 Sovereign, 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.

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) 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 Sovereign. 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 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 members 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. She reigns, but she does not rule. 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 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 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 peers.

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.

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 the inauguration of scientific, artistic, industrial and charitable works of national importance encourages nationwide interest and publicity. For 1977, which marks the Silver Jubilee of the Queen's accession to the throne in 1952, special commemorative arrangements are being planned throughout the country. The Queen pays State visits to foreign governments, always accompanied by the Duke of Edinburgh, and undertakes lengthy tours in other countries of the Commonwealth. Other members of the royal family pay official and private visits overseas.

Royal Income and Expenditure

More than three-quarters of all expenditure arising from the official duties of the royal family is borne on the votes 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 and met partly from the Consolidated Fund and partly by the Treasury; her private expenditure as Sovereign is met from the Privy Purse, which is supplied mainly from the revenues of the Duchy of Lancaster; 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 Queen's eldest son, 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

The supreme legislative authority in the United Kingdom is the Queen in Parliament, that is to say, the Queen and the two Houses of Parliament—the House of Lords and the elected House of Commons.

The three elements of Parliament 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 coronation, or the State opening of Parliament when the Commons are summoned by the Queen to the House of Lords. As a law-making organ of State, however, Parliament is a corporate body and cannot as a rule legislate without 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. It 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 legislatures¹ 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 virtually free to legislate as it pleases: generally to make or unmake any law; to legalise past illegalities and make void and punishable what was lawful when done and thus reverse the decisions of the ordinary courts; and to destroy established conventions or turn a convention into binding law. It can prolong its own life beyond the normal period without consulting the electorate.

In practice, however, Parliament does not assert its supremacy in this way. Its members bear in mind the common law which has grown up in Britain throughout the centuries and act as far as possible 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 in Britain ensures that Parliament legislates with its responsibility to the electorate in mind.

As a member of the European Community, the United Kingdom recognises various types of Community legislation, including regulations, which take direct effect in member countries, and directives, which are binding as to the result achieved upon each member State to which they are addressed, but allow the national parliaments to choose the form and method of implementation. The national parliaments of the nine Community members currently delegate a number of their members to sit in the European Assembly. It is hoped that the first direct elections to the Assembly will be held in 1978. A more detailed account of Britain's membership of the European Community is given in Chapter 3.

The Functions of Parliament

The main functions of Parliament are (1) to pass laws regulating the life of the community, (2) to scrutinise government policy and administration, particularly proposals for expenditure and taxation. In discharging these two 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 may be, and nearly always is, 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 very soon followed by the issue of writs in each constituency to cause an election to be held on the day named.

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

The life of a Parliament is divided into sessions. Each usually lasts for one year—beginning and ending most often in October 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 160 in the House of Commons and about 140 in the House of Lords. At the start of each session the Queen’s speech in the House of Lords outlines to the members of both Houses 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 may be sub-divided into (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 1963, (2) all life peers and peeresses created by the Crown under the Life Peerages Act 1958, and (3) those Lords of Appeal in Ordinary who are appointed to assist the House in the performance of its judicial duties and who remain members of the House after their retirement. 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. 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 270) include elder statesmen and others who have spent their lives in public service. They receive no salary for their parliamentary work, but they are entitled to travelling expenses from their homes to the Houses of Parliament and within specified limits they may claim payments for expenses incurred in attending the House (except for judicial sittings).

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 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 almost universal adult suffrage and consists of men and women from all sections of the community. There are 635 seats in the House of Commons (516 for England, 36 for Wales, 71 for Scotland, 12 for Northern Ireland).

General elections are held after a Parliament has been dissolved and a new one summoned by the Sovereign. If a vacancy occurs in the House as a result of the death or resignation¹ 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 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. The basic salary for members is £6,062; this comprises the 1975-76 salary of £5,750 plus a 1976 £6-a-week increase permitted under the Government's pay policy for 1975-76 (see p. 194). The £6 increase was not paid, or was reduced, where it would have carried earnings from parliamentary and other sources over the £8,500 limit for pay rises.

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.

Permanent officers of the House (that is, those who are not members of Parliament) include the Clerk of the House of Commons, who conducts the business of the House in the official departments under his control and is the accounting officer for the House of Commons Estimates, and the Serjeant-at-Arms, who attends upon the Speaker, executes the orders of the House, is the official housekeeper 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 in which British subjects (except members of the House of Lords) and citizens of the Irish Republic are entitled to vote provided that they are 18 years old or over, and are not subject to any legal incapacity to vote. People eligible to vote in any constituency are those who are annually recorded on a register of electors for the constituency as resident in that constituency on a date fixed by statute. Each elector may cast one vote, normally in person at a polling station, although members of the armed forces, Crown servants of the United Kingdom and staff of the British Council employed overseas, and wives or husbands of such

¹ If a member wishes to resign from the House, he may apply either for what is technically an office of profit under the Crown (Bailiff of the Chiltern Hundreds and Steward of the Manor of Northstead) which automatically disqualifies him from membership of the House but to which, in fact, no remuneration attaches.

persons, if resident overseas with their married partners, may vote by proxy. Voting by post, or in certain cases by proxy, may also be allowed if the voter cannot attend in person because of blindness or other physical incapacity or the nature of his work or on grounds of religious observance. British subjects who are on the electoral register and who are temporarily abroad on business may vote by proxy if they cannot return in time for polling day; those who are away on holiday cannot vote.

Voting is not compulsory, but of about 40 million people entitled to vote in the elections of February and October 1974 some 78·7 per cent and 72·8 per cent respectively 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 entitled to vote 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, and certain people holding offices of profit under the Crown are, however, not eligible. The last category is defined in the House of Commons Disqualification Act 1975 and includes 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 his election campaign is £1,075, plus £0·06 for each eight electors in a borough constituency and £0·06 for each six electors in a county constituency. A candidate may send by post (free of postal charge) an election address to each elector in his constituency. All other expenses, apart from the candidate's personal expenses, must be covered by the statutory sums.

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 rival 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 October 1974 general election and the resulting distribution of seats in the House of Commons are given in Table 4.

The party which wins the majority of seats (although not necessarily the majority of votes) at a general election, or which is able to command a majority of supporters in the House of Commons, usually forms the Government. By tradition, the leader of the majority party is appointed as Prime Minister by the Sovereign; and its most outstanding members in the House of Lords and the House of Commons receive ministerial appointments 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

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.

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. On occasions

TABLE 4: Percentages of Votes Cast, and Members Elected,^a in the October 1974 General Election

Party	% of Votes Cast	Party	Members Elected
Labour	39.3	Labour	319
Conservative	35.8	Conservative	276
Liberal	18.3	Liberal	13
Others	6.6	Scottish National	11
		United Ulster Unionist	10
	100.0	Plaid Cymru (Welsh Nationalist)	3
		Social Democratic and Labour (Northern Ireland)	1
		Independent (Northern Ireland)	1
		The Speaker	1
			635

^a By-elections and other developments have since changed party strengths.

no party succeeds in winning an overall majority of seats in the House of Commons; then a minority government or a coalition might be formed.

The effectiveness of the party system in Parliament largely rests on the relationship between the Government and the Opposition. Depending on the relative voting strengths of the parties in the House of Commons, the Opposition might seek to overthrow the Government by securing a sufficiently large adverse vote on a major policy issue. In general, however, its aims are (a) to contribute to the formulation of policy and its expression in legislation by constructive criticism of the Government's approach; (b) to oppose specific government proposals that it considers objectionable; (c) to secure concessions on government Bills; and (d) to increase support outside Parliament and enhance its chances of success in by-elections or at the next general election.

The detailed arrangements of government business are settled, under the direction of the Prime Minister and the Leader of the House, by the Government Chief Whip in consultation with the Opposition Chief Whip. 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 House is primarily the responsibility of the Leader of the House, and it is his duty to provide all reasonable facilities for the House to debate matters about which it is 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 Government Chief 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 seven are paid Assistant Whips. Salaries are likewise paid to the Chief Opposition Whip and his counterpart in 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 sometimes 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: £500 for every seat and £1 for every 200 votes, up to a maximum of £150,000. The Government is considering whether public funds should be made available to political parties for their work outside Parliament, and to candidates for election expenses.

Parliamentary Procedure

Parliamentary procedure is largely based on custom and precedent, supplemented by standing orders governing details of practice in each House.¹ 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. He must guard against abuse of procedure or any infringement of minority rights, and he 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). He 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 he can adjourn the House or suspend the sitting on his own initiative.

Voting in the House of Commons is carried out under the direction of the Speaker, and it is his duty to pronounce the final result. If an equal number of votes is cast for and against the motion under debate, 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 House of Lords being generally governed by the principle that unless there is a majority in favour the question is decided in the negative. When the House is sitting judicially (see pp. 85 and 99) the question is put in such a way that, if the votes are equal, there is no interference with the judgment under appeal.

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 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.

¹ A major review of parliamentary procedure is planned.

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. Parliamentary proceedings are not transmitted on television, but both Houses of Parliament are to have permanent radio broadcasting of their proceedings.

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 fact drafted on behalf of ministers, and has the support of the Cabinet before being presented to Parliament by the appropriate minister.

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 'Green Papers' are published setting out for public discussion major ministerial proposals which are still at the formative stage.

Public Bills can first be introduced in either House. As a rule, however, 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 must be introduced in the Commons, and a Bill involving taxation or the spending of public money must be based on resolutions agreed to by the 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, which gives the Government considerable control over legislation.

At the beginning of each session private members of the Commons ballot for the chance to introduce 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. 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. 36). If the House so decides, the Bill may be referred to the whole House sitting in committee. In the Lords a Bill is considered by a committee of the whole House as a matter of course, unless the House decides 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 the Bill is sent from the Commons 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 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 Lords Bill be unacceptable to the Commons it would not become law because no debating time would be allotted to it—at least until a new Government came into office. 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 members of the other House, 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. The Lords can delay a non-financial Commons Bill for about 13 months. 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 semi-judicial 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 govern-

ment 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 confirm 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 checks the technical propriety of statutory instruments, and a standing committee of the House of Commons considers their merits.

Parliamentary Committees

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 all 71 Scottish members and ten 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 the annual report for Wales and other subjects concerning Welsh affairs. The Northern Ireland committee considers matters relating specifically to the province. An experimental standing committee has been set up to consider English regional affairs.

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, as 'sessional' select committees, at the beginning of a session. On rare occasions a parliamentary Bill is examined by a select committee (a procedure additional to the legislative process). Select committees are constituted on a party basis, in proportion to party strength in the House.

Sessional select committees in the Commons include committees on public accounts, expenditure, privileges, services, nationalised industries, the Parliamentary Commissioner for Administration and European Community secondary legislation. 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 committees. 'Specialist' select committees not necessarily appointed regularly include those on science and technology, race relations and immigration, and overseas development.

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 there are sessional committees on the European Community, standing orders (Private Bills), personal Bills, procedure, offices, privileges, leave of absence, and Lords' expenses, selection and the Appeal and Appellate Committees.

*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 important 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.

**Parliamentary
Control**

Control of the Government in power is exercised in the final analysis by the ability of the House of Commons to force the Government 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'. 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 parliamentary procedure. 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, if a member wishes to discuss a 'specific and important matter that should have urgent consideration' he 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, he 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 address in reply to 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.

Certain opportunities for criticism of the Government are also provided in the House of Lords at question time and during debates on specific motions.

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 17, Finance.

Arrangements have been made in Parliament to keep members informed about European Community developments, and to enable them to scrutinise and debate matters which are to be decided in Community institutions.

*Parliamentary
Commissioner
for Administration*

The Parliamentary Commissioner for Administration is an independent statutory officer whose function is to investigate complaints of maladministration brought to his notice by members of the House of Commons on behalf of members of the public. His 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 his jurisdiction include matters affecting relations with other countries and the activities of British officials outside the United Kingdom.

In the performance of his duties, the Parliamentary Commissioner has access to all departmental papers, and reports his findings to the member of Parliament who presented the case. The Parliamentary Commissioner reports annually to Parliament and may submit such other reports as he thinks fit. A select committee considers these reports.

**Parliamentary
Privilege**

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



In 1977 Her Majesty The Queen celebrates the twenty-fifth anniversary of her accession to the throne.

Inspecting the Queen's Company 1st Battalion Grenadier Guards at Windsor Castle.

The Queen carries out hundreds of engagements a year. These functions take her to many parts of the country.







The Queen opens each new session of Parliament with a speech from the throne which outlines her Government's programme.

government departments, some of which were originally committees of the Privy Council. Nowadays the Privy Council is responsible for advising the Sovereign 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 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 as an honour to persons who have reached eminence in some branch of public affairs in any country of the Commonwealth. There are usually about 340 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 Privy Council committees whose meetings differ from those of the Privy Council itself in that the Sovereign cannot constitutionally be present. These advisory committees 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. He is assisted by a Minister of State and a Parliamentary Secretary, and has special responsibility for devolution policy (see p. 22) and other 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 Crown, and all other ministers are appointed by the Crown 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 his ability to command a majority in Parliament and from his power to submit his own 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.

It is the duty of the Prime Minister to inform the Sovereign of the general business of the Government; to preside over the Cabinet; and to exercise a general supervision over departments, settling departmental differences and approving important departmental decisions where reference to the Cabinet is not required. The Prime Minister speaks for the Government in the Commons on the most important topics and general administration.

The Prime Minister's other responsibilities include making recommendations to the Sovereign 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. He also advises the Crown on appointments of Privy Counsellors, Lord-Lieutenants 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. He likewise makes recommendations to the Sovereign 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) and selects the trustees of certain national museums and institutions.

A specialist unit advises the Prime Minister on domestic policy matters.

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,¹ the Lord Privy Seal, the Paymaster General—and from time to time Ministers

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.

without Portfolio. Sometimes these ministers 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.

*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 in a subordinate capacity to government departments in which the work is particularly heavy or complex and where it involves frequent travelling abroad. It is possible for a Minister of State to be given a place in the Cabinet and to be 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. The primary function of most junior ministers is to relieve their senior ministers of some of their burden by taking part in parliamentary debates, answering parliamentary questions, and assisting in departmental duties. In certain cases, however, they may be given responsibility, directly under the head of the department, 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. 32).

**Ministerial
Salaries**

Ministerial salaries range from £5,812 a year for junior ministers and £7,812 to £9,500 for more senior ministers to £13,000 for Cabinet ministers. The Prime Minister receives £20,000 a year.

Ministers in the House of Commons, including the Prime Minister, also have parliamentary salaries of £3,000 (£3,700 for non-Cabinet ministers) and are entitled to claim the allowances paid to all members of the House. The Lord Chancellor receives £20,000 a year, including £2,500 for his speakership of the House of Lords.

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 his 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 co-ordination 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 publica-

tion 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 Sovereign 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. 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 attend meetings of the Cabinet and its committees as appropriate.

Ministerial Responsibility

Ministerial responsibility means both the collective responsibility which ministers share for government policy and actions and 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 Sovereign, even when its members 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 particular matter has been decided, each minister is expected to support it, unless he chooses to resign, as he is free to do if he cannot agree with his colleagues on a matter of general policy or on a single major issue.

The individual responsibility of a minister for the work of his department means that, as political head of that department, he 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 he is 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 who are in the House of Lords must be 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 will usually wish to 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 organisations operating under various degrees of government control.

A few departments have existed for over 200 years. Many more have come into existence during the past half-century to match the widening scope of government activity. The election of a party of a different political complexion 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 and Northern Ireland, and there is also a separate department with responsibility for affairs in 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 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, 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 publishing 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 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; it co-ordinates the statistical work of other departments and agencies; and it prepares a number of statistical publications.

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 peace-time events.

The Civil Service Department

The Civil Service Department is under the control of the Prime Minister as Minister for the Civil Service, with responsibility for the day-to-day work of the department delegated to a senior minister. The department's Permanent Secretary 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 the size and deployment of manpower, 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. The department's further responsibilities include the development and application of new systems and techniques in the field of management and administration; the provision of a central management services consultancy for the Civil Service as a whole to deal with management subjects and techniques such as organisation and methods and operational research; and central planning, procurement and co-ordination of data processing in government.

The Civil Service Commission

The Civil Service Commission, which is responsible for the recruitment of civil servants, 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 drafts all financial and other parliamentary motions and amendments moved by the Government during the passage of Bills; 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 a Minister 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.

**The Ministry of
Agriculture,
Fisheries and
Food**

The Ministry of Agriculture, Fisheries and Food is responsible in England and Wales for administering government policy for the agriculture, horticulture and fishing industries. Directed by the Minister of Agriculture, Fisheries and Food (who is assisted by a Minister 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 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 and with food hygiene, including standards of its 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. These measures are being harmonised with European Community legislation. The ministry has overall responsibility for questions of food supply, is the sponsor-department for the food and drink industries and also acts as agent of the Department of Prices and Consumer Protection for the detailed administration of subsidies on food.

A number of the functions relating to agriculture and fisheries in Wales are the joint responsibility of the minister and the Secretary of State for Wales. In regard to the operational control of certain diseases of animals the ministry's responsibilities extend to Scotland.

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, such as the Food and Agriculture Organisation of the United Nations, and the Organisation for Economic Co-operation and Development.

*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.

**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 severally responsible for each of the three armed services.

The Department of Education and Science

The Department of Education and Science promotes education generally in England and post-school education in Wales. It is responsible for the Government's relations with universities in Great Britain, and it fosters the progress of civil science both in Britain and in collaboration with other countries. The department also has responsibilities relating to the library service, support for the British Library and the administration of the Victoria and Albert and Science Museums in London.

The Secretary of State for Education and Science is assisted by a Minister of State and a Parliamentary Under Secretary of State. A second Minister of State in the department is responsible for the arts, and deals with policy on the promotion of the arts and on libraries and museums.

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 co-operation 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 is generally responsible for Britain's manpower policy and deals with the payment of unemployment benefit, the collection and publication of statistics on labour and industrial matters, relations with the International Labour Office, and representation on employment and related matters at sessions of other international bodies. The Secretary of State for Employment is assisted by a Minister of State and two Parliamentary Under Secretaries of State. Members of the Advisory, Conciliation and Arbitration Service, the Manpower Services Commission and the Health and Safety Commission (see Chapter 16) are appointed by the Secretary of State for Employment.

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, gas and electricity industries; it is responsible for the Atomic Energy Authority; and is the sponsoring department for the nuclear power and oil industries. It is also responsible for the policy for the development of off-shore oil and gas resources in the British sector of the continental shelf; and deals with the international aspects of energy problems, including relations and co-operation with oil-producing 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 supported by a Minister of State, who is especially concerned with the development of North Sea oil and gas resources, and by two Parliamentary Under Secretaries of State.

The Department of the Environment

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

The Secretary of State is concerned primarily with the strategic issues of policy and priorities, including public expenditure, which determine the operations of the department as a whole. He is also responsible for statutory and regional planning; development control; inner city renewal; land policy; commercial property; new towns; local government structure and finance; water and sewerage; minerals; and countryside policy. He is assisted by a Minister for Housing and Construction, a senior minister, who is responsible for the policy and finance of the housing programme; the construction industries; and the Property Services Agency (which provides nearly all government common services relating to land, property, buildings and furnishings). A Minister of State has special responsibilities for sport and recreation, the control of pollution, and water supply (within the context of the exceptional drought conditions of 1976). There are four Parliamentary Under Secretaries of State.

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.

Export Credits Guarantee Department

The Export Credits Guarantee Department, which is an independent government department within the responsibility of the Secretary of State for Trade, offers facilities to British exporters; insurance against the risk of not being paid for goods and services; access to special fixed interest rates for export finance; 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 for large contracts. The use of the department's services is optional.

The Foreign and Commonwealth Office

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 for Foreign and Commonwealth Affairs is assisted by four Ministers of State and three Parliamentary Under Secretaries of State.

One of the Ministers of State, as Minister for Overseas Development, and one of the Parliamentary Under Secretaries work at the Ministry of Overseas Development.

The Department of Health and Social Security

The Department of Health and Social Security 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 department is headed by the Secretary of State for Social Services who is assisted by a Minister for Social Security (of Cabinet rank), a Minister of State and two Parliamentary Under Secretaries of State (one of whom has special responsibilities for disabled people).

The Home Office

The Home Office deals with those internal affairs in England and Wales not assigned to other government departments. The Home Secretary is the channel 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. He 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. He 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 civil defence services; immigration and nationality; community relations; and community and urban programmes. He also deals with the broad questions of national broadcasting policy.

Other Home Office 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; theatre and cinema licensing; co-ordination of government action in relation to voluntary social services; and sex discrimination policy.

The Home Secretary 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. Some regional industrial policy functions in

Scotland and Wales are exercised by the Scottish and Welsh Offices. The department sponsors individual manufacturing industries, including iron and steel, aircraft and shipbuilding, and is responsible for the British Steel Corporation and the Post Office. It is also responsible for industrial research and development, including civil aerospace research and the supervision of industrial research establishments and the provision of technical services to industry. The Design Council and the National Research Development Corporation also come within its sphere.

The department's regional offices also serve the Departments of Trade, Energy, and Prices and Consumer Protection.

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

The Central Office of Information

The Central Office of Information is a common service department which produces information and publicity material, and supplies publicity services required by other government departments which are responsible for the policy expressed in its work. In the United Kingdom, it conducts government, press, television and poster advertising, produces booklets, leaflets, films, 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, books, graphics, magazines, reference services, films, exhibitions, photographs, display and reading-room material; and manages schemes for promoting the overseas sale of British periodicals and newspapers. It provides exhibition services (except for trade and cultural exhibitions); and it organises tours (other than those sponsored by the British Council and the British Overseas Trade Board) for visitors officially invited to Britain. There are nine regional information offices in England, which provide services for the home departments and assist the overseas services by the provision of material and by arranging tours for overseas visitors; similar services are supplied 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, and the proposed 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.

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 in proceedings before international tribunals such as the international court 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. He has the ultimate responsibility for the enforcement of the criminal law and his consent is necessary before proceedings for a number of criminal offences can be commenced; the Director of Public Prosecutions is subject to his superintendence. Legal proceedings for the enforcement of public rights and on behalf of the interests of charity are conducted in his name and the functions of the Queen's Proctor, who has certain duties connected with the operation of the divorce laws, are exercised under his

direction. 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 and are always members of the House of Commons, are assisted, particularly in parliamentary work, by a Parliamentary Secretary. Their office has a small professional staff.

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 his 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.

He 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. His 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.

In addition he 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 he is responsible for the administration of the Judge Advocate General's Department,¹ 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. 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 Ministry of Overseas Development

Subject to the overall responsibility of the Secretary of State for Foreign and Commonwealth Affairs, overseas development functions are the responsibility of a Minister of State in the Foreign and Commonwealth Office who is assisted by a Parliamentary Under Secretary of State.

The separate Ministry of Overseas Development is responsible for Britain's policy of financial and technical assistance to developing countries. It is con-

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. In addition he protects the interests of people committed to prison for contempt of court, acts as Receiver for people with a mental disability, and can be appointed as Judicial Trustee in complex and disputed trusts.

cerned with the aid programme as a whole and its detailed composition. The provision of financial assistance includes both grants and loans (the latter mostly interest-free since 1965); technical assistance comprises the supply of British experts and equipment, the training of overseas personnel, and the support of research and advisory services.

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 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, whose director is also the Registrar General for England and Wales, is concerned with the regulation of civil marriages, the registration of births, marriages and deaths in England and Wales, and control of the registration services. Its work also includes the preparation and publication of reports on vital, medical and demographic statistics, taking the periodical census of the population, and, through the Social Survey Division, conducting research into the attitudes and circumstances of individuals through direct contact with members of the general public on a sample basis, or of particular groups.

The Department of Prices and Consumer Protection

The Department of Prices and Consumer Protection is responsible for general policy and legislation on prices. It also deals with consumer affairs, and sets policy for consumer credit, fair trading, monopolies, mergers and restrictive practices, consumer and home safety, and weights and measures, including metrication, quality assurance and standards. It is responsible for the Price Commission, the Monopolies and Mergers Commission, the Consumer Protection Advisory Committee, the Metrication Board, the British Hallmarking Council, the Hearing Aid Council and the Nationalised Industry Consumer Councils. It is the sponsoring department for the British Standards Institution and for the National Consumer Council. The Secretary of State for Prices and Consumer Protection also appoints the Director General of Fair Trading. The Secretary of State is assisted by a Minister of State and a Parliamentary Under Secretary of State.

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 his 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 residuary estates (estates undisposed of by will) of certain deceased persons, 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 central purchasing organisation responsible for supplying the home and overseas public service with paper, printing, binding, books, periodicals, office supplies, and office machinery. The department also provides services such as duplicating, addressing, photocopying, micro-copying, distribution and repair of office machinery.

As publisher for Parliament and the Government, HMSO produces a wide range of printed matter in its eight printing works and through private printers under contract. It operates six binding works, two of which are involved in the repair of manuscripts from national archives. Official publications are sold by government bookshops in London, Edinburgh, Manchester, Belfast, Bristol, Cardiff and Birmingham, and through agents in Britain and overseas. HMSO is also the United Kingdom agent for European Community publications, and for those of the principal international organisations. The Controller is Queen's Printer of Acts of Parliament, and the copyright of all British Government documents is vested in him.

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 promotions, overseas finance and planning. 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 Parliamentary Under Secretaries of State.

The Department of Transport

The Department of Transport is responsible for roads, transport policy, ports, railways, freight movement, road and vehicle safety, and urban transport. The Secretary of State for Transport is assisted by a Parliamentary Under Secretary of State.

The Welsh Office

The Secretary of State for Wales, a Cabinet minister, has full responsibility in Wales for ministerial functions relating to child care, health, housing, local government, primary and secondary education, town and country planning, new towns, water and sewerage, roads, forestry, tourism, national parks and historic buildings, and shared responsibility for the administration of urban grants to areas of acute social deprivation, and (with the Minister of Agriculture, Fisheries and Food) for agriculture in Wales. He has direct ministerial responsibility in Wales for selective financial assistance to industry, as well as a general responsibility for economic development. This aspect of the Secretary

of State's work has been strengthened by the establishment of a Welsh Development Agency, responsible to him, with important industrial and environmental functions. The Secretary of State has certain responsibilities relating to the national library and the national museum. He is assisted by two Parliamentary Under Secretaries of State.

The Welsh Office maintains close and continuous working relationships with the government departments mainly concerned with economic and industrial affairs through the Welsh Planning Board. Advice on the implications for Wales of national policies, particularly in the economic field, is also available to the Secretary of State through the Welsh Council. The Welsh Office is in Cardiff; there is also 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 United Kingdom 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, local government and environmental services, social work, health, housing, roads and certain aspects of shipping and road transport services. He is also responsible for a range of other functions from police and fire services to sport and tourism. At ministerial level he is assisted by two Ministers of State and three Parliamentary Under Secretaries 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 collectively 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.

The Secretary of State also has a major and expanding role in the planning and development of the Scottish economy. He has important additional functions related to industrial development, with the establishment of the Scottish Development Agency which is responsible to him, and his assumption of responsibility for selective financial assistance to industry in Scotland.

He plays a full part in the Government's determination of energy policy and exercises a co-ordinating function over activities in Scotland—such as the location of industry, the creation of employment and the land-based facilities needed for North Sea oil—which are not his direct responsibility but have an important effect on the country's economy. United Kingdom government departments with significant Scottish responsibilities have offices in Scotland with delegated powers, and work closely with the Scottish Office.

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 Department of Agriculture and Fisheries for Scotland

The Department of Agriculture and Fisheries for Scotland has a general responsibility for, and in most cases administers, government measures for the promotion and development of farming in Scotland. It also has responsibilities for the oversight and protection of the Scottish inshore, deep sea and freshwater fisheries, and functions relating to certain harbours.

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 finance and for ancient monuments and historic buildings.

The Scottish Economic Planning Department

The Scottish Economic Planning Development is responsible for industrial and economic development including the Scottish aspects of regional policies and the economic aspects of North Sea oil development; selective assistance to industry; oversight of the Scottish Development Agency; rural development, including supervision of the Highlands and Islands Development Board; electricity; new towns; 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 Education Department

The Scottish Education Department is responsible for the development of 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, with 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. It is responsible for Scottish aspects of devolution.

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 himself responsible for the institution and direction of all prosecutions on indictment in Scotland, and the control of summary prosecution 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 who 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, international conventions and associated problems, the jurisdiction and procedure of the Scottish courts, and enforcement of judgments.

**NORTHERN
IRELAND**

Northern Ireland has traditionally had its own subordinate legislature responsible for a broad range of domestic matters. 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. These arrangements remained in force until 1972 when, following several years' political instability and violence in Northern Ireland, a period of direct rule was introduced, with executive powers exercised by a Secretary of State for Northern Ireland and laws made by Order in Council. In 1973 a new type of constitution for the Province provided, among other things, for the devolution of powers to a legislative assembly and a power-sharing executive. These arrangements came into force in January 1974, but following widespread opposition in Northern Ireland the Assembly was prorogued in May 1974. In July 1974 the Northern Ireland Act was introduced, 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 that, in the interim period (defined as one year from the passing of the Act), the United Kingdom Government and Parliament should continue to be responsible for law and order, electoral matters and business of national importance, such as foreign policy, defence and certain aspects of taxation, while the Secretary of State for Northern Ireland should be responsible to the United Kingdom Parliament for the devolved services (such as agriculture, commerce, education, health, finance and the environment). It further provided that, during this period, laws for Northern Ireland on matters formerly within the competence of the Assembly should be made by Order in Council. The Northern Ireland Assembly was 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 by Order in Council, having failed to reach agreement on the central issue of a system of government within a divided community which

would provide for a form of partnership and participation. Northern Ireland, therefore, continues to be governed by direct rule, as laid down under the 1974 Act, Northern Ireland departments with executive responsibility for the devolved matters being the responsibility of ministers in the Northern Ireland Office.

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 two Parliamentary Under Secretaries of State, has overall responsibility, and is fully answerable to Parliament, for the government of Northern Ireland. In addition to exercising personal responsibility for constitutional developments, law and order and security in Northern Ireland, the Secretary of State is closely concerned with financial and economic matters in the Province. The four other ministers are in charge of the various Northern Ireland departments, the activities of which are co-ordinated as necessary.

Northern Ireland Departments

The Northern Ireland departments' 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.

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 forensic science department.

Department of Education

The Department of Education's functions include the development of education and the library services; teacher training; examinations; youth welfare and youth services; museums; the Arts Council for Northern Ireland; and the Armagh Observatory. The department is also responsible for sport and recreation, policies for the improvement of community relations and grants to relieve special social need in urban areas.

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 the management of Northern Ireland's Civil Service.

The department also has certain duties in relation to: constitutional and legal policies and law reform; charities and charitable funds; provision and maintenance of public buildings; building regulations, liaison with the construction industry; property valuation; ordnance survey; public records; the registration of births; deaths and marriages; the registration of titles; land; miscellaneous licensing functions; and the registration of clubs.

*Department of
Health and
Social Services*

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.

*Department of
Manpower Services*

The Department of Manpower Services is responsible for the administration of the employment service in Northern Ireland; employment statistics; an advisory service to companies; sponsorship of Enterprise Ulster; and government training centres and various industrial training schemes. The department also has functions in connection with industrial relations, provides the factory inspectorate and is concerned with disabled persons, contracts of employment, redundancy pay and wages councils.

THE CIVIL SERVICE

A civil servant in Britain is a servant of the Crown (not being the holder of a political or judicial office), who usually is paid wholly and directly out of money voted by Parliament and works in a civil capacity in a department of government. Some civil servants, however, work for Crown bodies, which are not government departments (the Manpower Services Commission and its agencies are examples), and are paid out of government grants to these bodies. Including part-time staff (two part-time officers being reckoned as equivalent to one full-time), there are about 750,000 civil servants (just over one-third of them women), roughly 331,000 of whom are engaged in the provision of public services—paying sickness benefits and pensions, collecting taxes and contributions, running employment services, staffing prisons, and providing services to industry and agriculture. About 270,000 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.

Over 70 per cent of civil servants work outside the London area, and plans have been made for further dispersal from the capital.

The total of civil servants includes about 180,000 industrial staff, mainly manual workers in government industrial establishments, whose pay and conditions of service are largely separately administered, and differ quite substantially, from those for non-industrial grades.

Stability of administration is ensured by the political neutrality of the service. Although a civil servant works under the authority and direction of the minister of the department to which he is appointed, legally he is a servant 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, who are none the

less civil servants and are paid from public funds, to give them advice on policy matters. Such appointments lapse when the Government's term of office ends.

Structure

Following the report of the Fulton committee which in 1968 assessed the structure, recruitment and management, including management training, of the service, the Civil Service has been undergoing a programme of reshaping and modernisation to make it more effective in carrying out its changing tasks.

The structure of the Home Civil Service, which before 1968 tended to reflect the assumption that specific types of work should be allocated to particular classes of civil servants on the basis of narrow or vocational qualifications, is being redesigned to provide for a more flexible deployment of staff so that talent can be used to the best advantage 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 regard to their academic background or to whether they were previously in a specialist or generalist 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. Nine categories have so far been created, and the groups of staff that are so far members of them are shown below.

Categories

There are five groups within the General Category. The Administration Group contains some 230,000 staff. Their functions range from the co-ordination and improvement of government machinery and the formulation of advice to ministers on matters of policy to the performance of normal clerical duties connected with the running of departmental business at lower levels. The Economist Group contains about 300 staff. They provide economic advice and undertake economic analysis. The Statistician Group (some 450 staff) undertakes the collection and analysis of statistics required for government policies. The Information Officer Group (some 1,350 staff) carries out a variety of specialised press, publicity, public relations and information work. The Librarian Group (some 350 staff) carries out the professional librarian duties in departmental libraries.

The Science Category contains the Science Group (18,000 staff), which is responsible for conducting scientific research and testing in numerous government laboratories and testing establishments, and for providing advice on scientific policy. Its members also participate in the planning and management of advanced technology procurement projects.

There are two groups in the Professional and Technical Category. The Professional and Technical Group contains some 40,000 staff and includes a range of professionals—architects, surveyors, quantity surveyors, and electrical and mechanical engineers—and appropriate supporting staff, whose main function is to plan and oversee a wide range of government construction

and procurement activities, and to carry out certain inspection and regulatory activities. The Illustrator Group contains about 500 staff responsible for the preparation of all forms of artwork applied to the wide range of requirements within the government service.

Within the Training Category the Instructional Officer Group comprises some 4,000 staff employed on instruction in a trade, craft or subject, or on ancillary or supervisory duties connected with instruction.

The Legal Category contains the Legal Group (England and Wales) and the Legal Group (Scotland), a total of some 850 staff who carry out a wide range of legal work for government departments.

The Police Category consists of a single Police Group of some 4,000 staff who form an internal constabulary to carry out normal police functions in Ministry of Defence establishments.

The Secretarial Group within the Secretarial Category comprises 23,000 typists, who work mainly in small groups, and some 4,600 personal secretaries who work mainly for senior civil servants.

The Data Processing Category contains a single group of 8,000 staff who operate processing equipment in computer and other machine installations.

The 43,000 staff employed in the single group within the Social Security Category work in local offices of the Department of Health and Social Security.

The nine categories already established account for over 70 per cent of the non-industrial staff. The intention is that the remainder (including support staff such as paperkeepers, messengers and office-keepers) will be absorbed into existing categories or, where this is impossible, into additional categories set up for the purpose.

The Diplomatic Service

The Diplomatic Service is a separate self-contained service of the Crown, which provides the staff (it directly administers some 6,500 civil servants) 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. It also has secretarial, communications and security officer branches. Various specialists and advisers from home departments or the armed forces may serve at overseas posts on secondment or attachment to the Diplomatic Service.

An official review of all aspects of Britain's overseas representation, including the Diplomatic Service, began in 1976.

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 the Foreign and Commonwealth Office, the Ministry of Overseas Development and the Crown Agents for

Overseas Governments and Administrations are asked to recruit other candidates, principally from the United Kingdom.

Recruitment

Recruitment to the Civil 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, especially 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 series of qualifying tests followed by an interview. For the clerical entrants selection is normally by interview only.

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

Training

In all except the smallest government departments, there are full-time training officers and instructors whose task it 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. Some use is also made of external management courses in business schools, the Administrative Staff College, Henley, and other centres.

Methods of training within the Civil Service combine lectures, discussion groups, instructional visits and case-studies with the use of many audio-visual aids such as closed-circuit television and video-tape recordings, instructional films and programmed learning. There is also a considerable amount of 'on-the-job' training. Civil servants are regularly moved between the different branches of their department and sometimes between departments so that they can gain as wide an experience as possible of Civil Service work.

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.

Training is co-ordinated by the Personnel Management (Training) Division of the Civil Service Department which is responsible, in conjunction with the Civil Service College, for the analysis and determination of training needs to be met centrally, and which exercises advisory functions in regard to departmental training. All central training is provided by the Civil Service College which offers a wide range of courses and seminars (some of a broad developmental nature and others more job-related) for civil servants, including those in specialia-

list groups, at various levels up to and including that of under secretary. Subjects covered include structure and machinery of government, personnel management, economics, statistics, social administration, operational research, computers and information systems. The college also provides courses on European institutions and their working, and has developed an exchange scheme with other European countries.

Promotion

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 a procedure of accelerated promotion has been worked out for administration trainees and officers who have shown exceptional promise but are outside the age and salary limit for a particular grade.

Conditions of Service

Machinery for negotiation on conditions of service affecting the Civil Service as a whole is provided by the National Whitley Council, which is composed jointly of official and staff representatives. Negotiating machinery for separate sections of the service is provided through the various staff associations which civil servants are encouraged to join (for instance, the Civil and Public Services Association, the Society of Civil Servants and the Institution of Professional Civil Servants), and through departmental Whitley Councils.

In general, the civil servant receives a salary which is based on a fair comparison with that paid for similar work outside the service and usually he receives annual increments up to the maximum of the scale of the grade to which he belongs. In addition, although a civil servant holds office at the pleasure of the Crown and may therefore be dismissed at any time, in practice he enjoys a considerable measure of security of tenure. Thus every civil servant who is capable and efficient may reasonably expect a full career in the public service and is entitled to receive pension benefits.

It is possible for staff to interrupt their careers, or to have special leave granted, to look after domestic responsibilities, and staff who resign may apply later to rejoin the service in the grade they held at the time of resignation.

Civil servants are required to work a specified number of hours each week. Certain grades are eligible for overtime pay for any hours worked in excess of the standard hours, but this does not apply to the higher grades whose salaries are determined on the assumption that they will work as long as necessary without additional pay. The standard working week for office staff is 42 hours (41 in London). Annual leave varies according to grade and length of service up to a maximum of 30 working days a year.

Sick leave on full pay, less any national insurance benefit received, may be granted to civil servants for up to six months in any 12 months, and on reduced pay up to a maximum of one year's sick leave in any four years; any officer whose health is permanently impaired may be retired.

Political and Private Activities

The position and functions of a civil servant remain the same whichever political party is in power; and it is his duty to serve the Government of the day irrespective of his own political opinion. The extent to which he is free, as a

private individual, to participate in political activities varies according to grade. For this purpose civil servants are divided into three groups: those who are completely free to engage in all kinds of national and local political activities (although if they intend standing for Parliament, they must resign their appointment before nomination day on the understanding that if not elected they will be reinstated in their previous capacity within a week of the declaration of the election result); those who are free, subject to the acceptance of the need for discretion and with the permission of the department, to take part in most activities except parliamentary candidature; and those who are debarred from national political activities though they may seek permission to take part in local government political activities. In the non-industrial Civil Service the completely free groups are mostly ancillary staff such as cleaners and messengers. The intermediate group includes mainly members of the clerical and typing grades and the granting of permission by the department depends, broadly, on the nature of the work done. The remainder are not allowed to take part in national political activities. Permission is usually granted to members of all groups to engage in local political activities to the maximum extent consistent with the reputation of the Civil Service for political impartiality and the avoidance of any conflict with official duties. Where permission is granted, it is subject to a code of discretion and to the obligation to notify the department of election or co-option to a local council. A committee of inquiry was set up by the Government in May 1976 to review the rules governing political participation by civil servants.

All civil servants enjoy the right to register their private political opinions on appropriate occasions, 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 1920,¹ and the Prevention of Corruption Act 1926. However, since a civil servant must not use his official position to further his private interests, he is subject to certain restrictions in commerce and business: for instance, he may not hold private interests in public contracts and he may not use official information in writing, broadcasting or lecturing without the approval of his department.

Security

As a general rule the political views of civil servants are not a matter of official concern, but there are some civil duties in which secrecy is so vitally important to State security that the Government does not feel itself justified in employing anyone to carry them out whose reliability is in doubt. For this reason no one who is known to be a member of, or actively associated or in sympathy with, the Communist Party or with Fascist organisations, or is liable to be a security risk in any other respect, is employed on secret work.

Each government department is responsible for its own internal security, and the Security Service, which operates independently under a Director-General who is responsible for its efficiency to the Home Secretary, deals with national security. In addition, there is a Security Commission which, if requested by the Prime Minister in consultation with the Leader of the Opposition, may investigate and report on breaches of security in the public service and, in certain circumstances, advise whether any change in security arrangements is necessary or desirable.

¹ The Government is preparing proposals to amend the Official Secrets Acts and to liberalise the practice relating to official information.

LOCAL GOVERNMENT

The local government system comprises a pattern of elected councils for defined areas. The councils represent their own localities, provide a local level of democracy and make available a wide range of services.

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, but, in respect of certain services, Acts of Parliament dealing with local government give government ministers defined powers, some of which are designed to secure a measure of national uniformity in the standard of service provided or to safeguard public health, while others are for the protection of 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 a minimum.

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.

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 p. 66). However, in six of the English counties, which are in heavily populated areas and known as 'metropolitan' counties, responsibility for certain large-scale services rests with the district authorities. In England populations in the non-metropolitan counties range from 287,000 to about 1.4 million (the Isle of Wight with a population of about 111,000 is an exception), and in the metropolitan counties from 1.2 to 2.8 million. District authorities within metropolitan counties have populations of between 172,000 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 101,000 to 540,000, and the districts have populations of between 19,000 and 284,000. 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 610 square miles (1,580 sq km) and a population of some 7.1 million—is administered by the Greater London Council, the councils of 32 London boroughs (with populations ranging from 136,000 to 325,000) and the Corporation of the City of London (the historic centre which has a resident population of less than 6,000).

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. Local community councils are being formed to express local views and to take action in the interests of the community.

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 local environmental services are the responsibility of 26 district councils; area boards and local offices responsible to the appropriate central departments administer other services at a local level.

Constitution and Election of Councils

Local authorities comprise a number of elected unpaid councillors presided over by a chairman. They can claim flat-rate attendance allowance as of right (without proof of loss of earnings) 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 and Wales each council annually elects a chairman and vice-chairman. Some districts have the ceremonial title of borough granted by royal charter and some are cities. In boroughs and cities the chairman is normally known as the Mayor (in the City of London and certain other cities, he is known as the Lord Mayor). In Scottish regions and islands the chairman is called the convener; no general title is laid down for district chairmen, but some are known as conveners, while others continue to use the old burghal title of 'provost' ('lord provost' in four districts which have city status).

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 will take place in 1977 and every fourth year thereafter. The metropolitan district elections are held for a third of the seats in each year when there is no county council election; the non-metropolitan district councils can adopt the same procedure or choose block elections in 1976, 1979 and every fourth year thereafter. In London the next Greater London Council elections will be held in 1977, and elections to the London borough councils will take place in 1978. In Scotland the next elections for the regions will be in 1978, and for the districts in 1977. Elections for the district councils in Northern Ireland will take place in 1977 and 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 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 the qualification for voting is a little different.

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. He must be of British nationality and aged 21 or over. In addition, he must be registered as a local government elector in the area of the local authority to which he seeks 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 he is nominated as a candidate; or, in that 12 months, have had his principal or only place of work there. A candidate is 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 in accordance with orders made by the Home Secretary. 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 his electoral area: he need not record all his votes, but must not give more than one vote for each candidate. In Northern Ireland the 1973 local government elections were held on the basis of proportional representation. Facilities for postal voting were available to those who wished to use them.

Functions and Services

The functions of local authorities are far reaching. Some are framed primarily as duties mandatory 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 all county councils are 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 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 independent 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 are primarily responsible for the provision of housing, although the GLC also maintains a stock of housing. It is additionally involved in such matters as the provision of housing outside London for people from the London area, assisting the inner London boroughs in relation to slum clearance,

the provision of accommodation for people on the London boroughs' housing waiting lists, and the rehousing of its own tenants and those of the London boroughs whose accommodation needs have changed. Greater London and certain areas just outside are policed by the Metropolitan Police Force.

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 services are administered by the district councils, but responsibility for planning and control of roads, water supply and sewerage services is exercised in each district by a local office of the Northern Ireland Department of the Environment working closely with the district council and its staff. Area boards, responsible to appropriate 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 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. 70), 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.

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 at the instance 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 £17,000 million in 1975. A clear distinction is made between capital and current expenditure. Capital expenditure (just under a quarter of the total) is normally financed by borrowing. Housing, the major element, accounts for almost a third of the total. The education service accounts for about a third of current expenditure, followed by the police, the personal social services, roads, and refuse disposal. Current expenditure is financed from three principal sources: government grants (over a half in 1975); local rates paid by occupiers of land and buildings (almost a third); and rents from council houses, and other income (about a sixth). Each local authority is responsible for its own finance, although in a few cases several authorities combine to organise a specialised service which it would be uneconomic for each authority to provide on its own.

The report of an independent committee of inquiry into local government finance was published in May 1976.

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. 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 poorer people.

In Northern Ireland the district councils receive specific grants plus a resources element towards the services they provide.

Rates

Rates are local taxes paid by the occupiers of non-agricultural land and buildings to meet the cost of local services (after allowing for grants and other income). 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. Rateable values are assessed periodically in England and Wales by the Board of Inland Revenue, which is independent of local authorities. The present valuation lists came into force in 1973 (1976 in Northern Ireland). Disputes about rating assessments are heard by local valuation courts, and then, on appeal, by the Lands Tribunal.

In Scotland valuation is on a basis similar to that in England and Wales; but it is carried out by assessors appointed by the regional and islands councils. Appeals are heard by the valuation appeal committee of each valuation area and thereafter by the Lands Valuation Appeal Court of the Court of Sessions. In Northern Ireland valuations are carried out by the Valuation Office of the Department of Finance. There is a right of appeal.

In England and Wales the responsibility for levying and collecting the rates lies with the district councils and London borough councils. Expenditure by county councils and the Greater London Council is met by contributions from district councils and London borough councils respectively, who take these into account in the rates they levy. 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 islands councils. In Northern Ireland rates are set by the district councils (district rate) and by the Department of Finance (regional rate); both are collected by the department.

Agricultural land and buildings (apart from living accommodation) and places of religious worship are exempted from rate payments, and in Scotland and Northern Ireland industry and freight transport are rated at a half and a quarter, respectively, of their net annual value. Householders (and all other ratepayers in Scotland) benefit from rate reductions financed by government grant and they have the right to pay rates in ten instalments a year. Householders with small incomes are entitled to rebates. Charities pay half the full rate on property they occupy for charitable purposes but may be given further reliefs by the rating authorities, which can reduce or remit the rates for a range of non-profit-making bodies. Full rates may be levied on empty properties. In Northern Ireland 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. In Northern Ireland the government department responsible for the service also issues the appropriate loan approvals. 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 an independent Commission for Local Authority Accounts appointed by the Secretary of State for Scotland, and in Northern Ireland it is carried out by 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 local authorities, 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. 68). 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 63 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

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. Some brigades have schemes for the employment of juniors of 16–18 years, prior to their enrolment as regular firemen at the age of 18.

Each fire authority must draw up a scheme showing the establishment of personnel, the number and location of fire stations and the number and type of appliances considered necessary for the provision of fire cover for its area. Establishment schemes vary according to the fire risks in the area concerned. In the United Kingdom there are about 34,000 full-time and 17,500 part-time operational members of fire brigades.

Recruits and junior ranks in the fire service in England and Wales receive practical training in basic firemanship at collective training schools run by the larger fire authorities. In Scotland similar training is carried out at a central training school. Management and command training is provided for the higher and middle ranks at the Fire Service Staff College, where high-level operational studies are also conducted. Fire prevention, practical firemanship, advancement and instructor training for junior and middle ranks is provided at the Fire Service Technical College. Both colleges are maintained by the Home Office and the Scottish Home and Health Department. Facilities for officers from overseas fire services to study the organisation, current training methods, appliances and equipment of British fire brigades are arranged by the Home Office Fire Department.

Equipment

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 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.

In the United Kingdom some 5,000 fire-fighting appliances are used (including pumps, turntable ladders, water tenders, emergency tenders and hose-laying lorries), and are housed in nearly 2,000 fire stations.

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.

Special Services Fire authorities have discretion to employ their brigades and equipment for purposes other than fire-fighting, and they are in fact 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.

Fire Prevention Fire authorities are concerned with fire prevention measures required under a wide range of statutes 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 Research into the different aspects of fire is undertaken by a number of government departments and other organisations. 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. Its work is supervised by a steering committee, the membership of which is drawn from the Department of the Environment, the Home Office and independent sources.

3 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 1st January 1973.

British membership of the Community was endorsed in June 1975 by a more than two-to-one majority in the first national referendum to be held in Britain. Some 67·2 per cent of those voting wanted Britain to remain in the Community, against 32·8 per cent who voted for withdrawal. Almost 65 per cent of those eligible to vote did so.

The British Government recommended that the British people should support continued Community membership in the referendum after the objectives of its policy of renegotiating some aspects of its membership had been largely achieved.

Details of Britain's participation in the development of Community policies in specific sectors are contained in the appropriate chapters.

Formation of the European Communities

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. These are described briefly in the following pages.

The European Coal and Steel Community

The European Coal and Steel Community (ECSC) was established in 1952 by bringing together the coal and steel resources of the six member countries, and formed the model for the 'community' approach to economic integration. The ECSC 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 Treaty of Paris, which established the ECSC and was signed in 1951, provided for the abolition of duties and quantitative restrictions (or charges having the same effect) on trade in coal and steel between member States; of discrimination by producers in prices, delivery terms or transport rates; of any measures which hampered free choice of supplier; and of restrictive practices resulting in the collusive sharing or exploitation of markets. The treaty also provided for action by the Community over a wide field of activity in the coal and steel industries, the work of the Community being financed by a levy on production. The Community provides funds for capital investment, research and other programmes, as well as loans to help create new jobs in declining coal areas or where restructuring of the steel industry is taking place. Grants to assist redundant coal and steel workers until they find new employment, or while undergoing retraining, are also made.

*The European
Economic
Community*

The European Economic Community (EEC) was created by the Treaty of Rome signed by the six countries in 1957. It aimed to promote the continued and balanced expansion of the members' economies by their progressive harmonisation and integration. The preamble to the treaty included among the basic objectives of the EEC the establishment of the foundations for a growing unity among European peoples, the improvement of their working and living 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 were the creation of a customs union, abolition of internal tariffs and other barriers to trade and establishment of a common external 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 was made for the overseas countries which had special links with the member countries to have preferential treatment in aid and the development of trade.

*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) and to ensure the dissemination of technical information, to facilitate the co-ordination of investment in the nuclear field, and to ensure a proper supply of nuclear ores and fuels and wider commercial outlets. A common market for all nuclear materials and equipment came into effect at the beginning of 1959, with a common external tariff on imports of 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.

**The Treaty of
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 separate 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 Treaty of Accession provided for a transitional period during which tariffs on trade in industrial products between Britain and the original six members have been progressively reduced; on 1st July 1977 they will be abolished and the phased introduction of the common external tariff on British imports from countries neither members of, nor having any special arrangements with, the Community will be complete. In addition, Britain has been progressively adopting the Community system of agricultural support (the CAP) during a transitional period ending on 31st December 1977. The treaty provided for a slightly longer period of adjustment with regard to payments to the Community budget. Other provisions included those relating to participation in the Community's institutions and to its relations with Commonwealth and other countries.

**European
Communities
Act**

The European Communities Act became law in October 1972 and 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. The Act gave the force of law in Britain to that part of Community law which is directly applicable in member States. It also contained detailed legislation (in part repealing or amending existing statutes) to implement Community obliga-

tions. Other Community obligations are being met under existing powers to make subordinate legislation, introduced as the measures become applicable.

Community Law Community policies are implemented by means of regulations, which are legally binding and directly applicable in all member countries; directives, which are binding on those member States to whom they are addressed regarding their objectives, 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.

Institutions The separate institutions established by the treaties for each of the three Communities were merged in 1967. The Community institutions, comprising the Council of Ministers, the Commission, the Court of Justice, the Assembly or European Parliament and others, including a number dealing with specific subjects, provide a framework within which the interests of the member States are represented and reconciled and common policies formulated and administered. In each of the institutions Britain has a position equal to that of France, the Federal Republic of Germany or Italy. English is one of the 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. Most council decisions are taken on the basis of a proposal by the Commission. Where member States' vital interests are involved, the council's practice is to proceed only on the basis of unanimity. Some issues may be decided by majority, or qualified majority, with votes weighted according to provisions in the Treaty of Accession.

The Presidency of the Council (the chairmanship of meetings of the council and its subordinate bodies) changes at six-monthly intervals. Britain will occupy the Presidency for the first half of 1977.

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. It has some limited powers of decision relating mainly to the detailed administration of the CAP. It is composed of 13 commissioners nominated by the member governments; two are from Britain. The President of the Commission, who is appointed for a two-year renewable term, acts 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 in complete independence 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 of Justice consists of nine judges, assisted by four advocates-general.

The Assembly or European Parliament is currently composed of nominated members of the parliaments of member States, sitting according to party affiliation and not nationality. Britain is entitled to nominate 36 members out of a total of 198. The parliament is consulted on and debates all the major policy issues of the Community. Members of the parliament may question the Council of Ministers and Commission and have the power to dismiss the Commission by a two-thirds majority. It may reject in its entirety the Community's draft annual budget; measures to strengthen its scrutiny of past Community expenditure are being introduced. In future the Assembly is to be directly elected and its size is to be increased to 410 members. It is hoped that it will be possible to hold the first direct election in 1978.

The Committee of Permanent Representatives consists of representatives of the member States of ambassadorial rank, whose task is to prepare for the meetings of the council and perform whatever additional functions it might delegate.

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.

Other Community institutions include the European Investment Bank, and the European Monetary Co-operation Fund and the Court of Auditors.

In addition to, and separate from, these Community institutions, the member States have set up the European political co-operation machinery for the consideration of important problems of foreign policy. The Community foreign ministers meet in this framework four times annually. Under the foreign ministers there is a structure of official committees. The country having the Presidency of the Council of Ministers provides the Secretariat. 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 Government meet at least three times annually as the European Council in order to ensure progress and consistency in the activities of the Community. The European Council combines the functions of a meeting of the Council of Ministers with those of a meeting held within the context of political co-operation.

The Community Budget

All member countries contribute to a common budget for certain specific purposes, such as agricultural support (administered by the European Agricultural Guidance and Guarantee Fund, often known by its French initials FEOGA), the European Social Fund (used for occupational retraining and re-adaptation programmes and programmes designed to further manpower mobility), the Regional Development Fund, and administrative costs. Under the direct income system, which came into effect for the original members in January 1971, the Community finances this budget directly from the revenue of customs duties and of levies on agricultural imports. Except for a 10 per cent rebate to cover collection costs, all levies on agricultural imports and all customs revenues are handed over to the Community budget by the original six member States. The remaining proportion of the necessary income (taking into account the new members' contributions, described below in the case of

Britain) is made up by contributions from the six original member States according to their shares of the Community's gross national product (GNP); eventually this will be replaced by a proportion (equivalent to up to a 1 per cent rate) of the proceeds of the value added tax.

The Treaty of Accession gave Britain a transitional period up to 1980 in which to adopt this system. The treaty set a percentage (or key) based on Britain's share of the total GNP of the nine countries in the enlarged Community. This represented the proportion of the budget which Britain would nominally have been expected to pay in the first year of membership. During the transitional period, Britain is paying a proportion of its nominal contribution, increasing in annual steps, from some 8.75 per cent of the budget in 1973 to about 19 per cent in 1977. For the two-year period after 1977, the British contribution is not to increase by more than a limited amount.

A 'correcting mechanism' has been established providing for repayments to a member State whose contribution to the Community budget is seriously out of line with its share of total Community GNP and its economic situation.

4 Justice and the Law

THE LAW

Although the United Kingdom is a unitary State, it does not have a single body of law applicable universally within its limits. England and Wales on the one hand and Scotland on the other have their own distinctive legal systems and law courts. Common opinions on broader issues, and a common final court of appeal in civil matters have resulted in substantial identity on many points, but considerable differences remain in law and in procedure and practice. In Northern Ireland legal procedure and practice have for centuries closely resembled those of England and Wales but there are often differences in enacted law. However, a large volume of modern legislation, particularly in the social field, applies throughout the United Kingdom.

Sources of Law

The main sources of law in the United Kingdom are legislation, common law and European Community law. Legislation consists of laws made by or under the authority of Parliament and may be Acts of Parliament; 'delegated legislation'—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 other than where it has been superseded by legislation.

Community law (see p. 75), which arises out of the United Kingdom's membership of the European Community, is largely confined in impact to economic and certain social matters. It stands alongside both domestic legislation and the common law and in the event of conflict takes precedence over them. The law is normally applied by the domestic courts, but the most authoritative rulings are given by the European Court of Justice (see p. 75).

Branches of the Law

A feature common to the domestic 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.

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 and the selection of appropriate sentences for the guilty; and the treatment of convicted offenders, both within the community and within prisons and other custodial centres.

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 through the normal legislative process. In practice most legislation affecting the criminal law is government-sponsored, but there is often consultation between the government departments concerned and bodies representing the legal profession and the police. Less formally, the views of commentators and interested parties are taken into account in determining policy.

Crime Statistics

Local chief officers of police have a duty to supply statistics relating to offences, offenders, criminal proceedings and the state of crime in their areas. Abstracts of this information are published every year and further information about crime trends (as well as about police matters) is contained in the annual reports of the Chief Inspectors of Constabulary and (for London) the Commissioner of Police of the Metropolis.

The differences in the legal systems of the constituent countries make it impractical to analyse in detail trends in criminality for the United Kingdom and even within one area the accuracy of statistics is reduced by a number of factors; for instance, the public's readiness to report incidents, the general level of tolerance towards certain types of anti-social behaviour and the amount of police resources allotted to different aspects of their work may all vary from one time to another. Nevertheless, it is clear that, as in western Europe generally, there has been an upsurge in crime since the early 1950s.

Of the serious offences known to police in England and Wales in 1975, however, offences of violence against the person formed less than four per cent and sexual offences less than two per cent. Over 85 per cent of the known offences comprised burglary, theft and the handling of stolen goods and a majority of these crimes involved property worth less than £25.

The number of recorded offences per 100,000 people in England and Wales in 1975 was about 4,280 (see Table 5). The police 'clear-up' rate was 44 per cent, although this figure conceals regional variations (the rate for England and Wales outside London was 49 per cent) and wide variations for different types of offence; for example, 81 per cent of known offences of violence against the

TABLE 5: Indictable Offences Recorded in England and Wales, 1972-75

Offence Group	<i>Number of Offences per 100,000 people</i>			
	1972	1973	1974	1975
Violence against the person:				
<i>Homicide</i>	1	1	1	1
<i>Other</i>	106	124	128	143
Sexual offences	48	52	50	48
Burglary	895	800	983	1,060
Robbery	18	15	18	23
Theft and handling stolen goods	2,059	2,031	2,419	2,576
Fraud and forgery	221	225	238	250
Criminal damage	85	107	136	160
Other offences	14	16	17	17
TOTAL	3,447	3,371	3,990	4,278

Main Sources: *Criminal Statistics (E & W) 1974 and 1975*

person were cleared up, compared with 38 per cent of criminal damage offences.

Most offenders are proceeded against in court (some 2 million people, less than 10 per cent of them women, were convicted of offences in England and Wales in 1975) but some may be given written or oral cautions by the police (136,000 in 1975). Of the people convicted of offences, about a fifth were guilty of indictable (the more serious) crimes. Of these, just under half were under 21 years of age.

Criminological Research and Studies

A wide range of criminological and other social research is carried out by the Home Office Research Unit which also co-operates on research matters with the Scottish Home and Health Department. Research is carried out in university departments, much of it financed by the Home Office and the Scottish Home and Health Department. The principal university research establishment is the Institute of Criminology at Cambridge.

Studies undertaken in the Home Office Research Unit are mainly concentrated on subjects of direct interest to home departments. The results of the unit's work are published in learned journals and in the Home Office Research Studies series. First degree courses (normally in law, sociology or social administration) which include some study of criminology, one-year post-graduate courses and research facilities are available at a number of universities.

Criminal Injuries Compensation Scheme

The Criminal Injuries Compensation Scheme was established in 1964 to provide *ex gratia* compensation to victims of crimes of violence and people hurt as a result of attempts to arrest offenders and prevent offences. It is administered by a board which consists 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 some £31 million since the scheme began. A review of the scheme is in progress with a view to putting it on a statutory basis.

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 p. 81). Compensation for property damage includes consequential 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. The Prevention of Terrorism (Temporary Provisions) Act 1976, for example, contains powers of three main kinds: it enables organisations to be proscribed which are concerned in terrorism connected with Northern Ireland affairs; it enables the Home Secretary to exclude from Great Britain or Northern Ireland, or in certain cases from the United Kingdom as a whole, people concerned in terrorism designed to influence public opinion or government policy over affairs in Northern Ireland; and it provides powers of arrest and detention for people concerned in terrorism, and enables a system of travel controls to be imposed between Great Britain and Ireland.

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 has been passed by the Irish Parliament.

Trials in Northern Ireland criminal courts of offences involving terrorism are heard by a judge sitting alone (that is, without a jury, see p. 104, to obviate the possibility of intimidation of juries or of perverse acquittals by partisan juries).

As a result of the civil disturbances in the province since 1969, some £20 million has been paid from public funds in compensation for personal injuries and about £140 million for damages to property (see p. 80).

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, although it has been recognised since the days of the earliest police forces that public approval and co-operation are essential to the maintenance of law and order. The sanction of the British police in enforcing the law rests mainly upon common consent, in particular because of the small number of officers in relation to the population (roughly one officer to 500 people), because of the strict limitations on police powers and because of the fact that officers do not normally carry firearms (their only weapon is a wooden truncheon).

Forces

The police service in Great Britain comprises 51 independent forces linked with local government—43 in England and Wales and eight in Scotland. Central government ministers, the Home Secretary (for England and Wales) and the Secretary of State for Scotland, have overall responsibility for the preservation of law and order. Each force is responsible for law enforcement in its own area, but there is constant co-operation among them. The Northern Ireland police service is organised in a single force (see p. 84).

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 15 miles (24 kilometres) 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 about 118,000 (including over 6,000 policewomen), the size of individual police forces depending on the area and population which they serve. The strength of the Metropolitan Police Force is about 21,000.

In addition to the regular police forces, constabularies are maintained by the British Railways Board and some other public authorities and by the Ministry of Defence. Considerable numbers of people are employed by commercial security organisations (which are subject to the ordinary law of the land).

Police Authorities and Chief Constables

Each of the regular police forces is maintained by a police authority. The authority is a committee consisting of local councillors and (in England and Wales) magistrates. The police authority for the Metropolitan Police Force is the Home Secretary.

The primary duty of the police authority is to provide an adequate and efficient police force for the area for which it is responsible. Its functions, some of which are subject to ministerial approval, include appointing the chief constable and deputy and assistant chief constables and, if necessary, calling upon them to retire; fixing the establishment of the force and the number of officers in each rank; appointing traffic wardens; and providing and maintaining 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, however, generally answerable to the police authorities on matters of efficiency, and must every year submit a written report.

Central Authorities

The Home Secretary and the Secretary of State for Scotland are concerned both in the general organisation of the police service and in its administration and operation. 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 are also empowered to make regulations, with which all police authorities must comply, covering such matters as rank; 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 on behalf of ministers. 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.

Finance

The income of police authorities derives from central Government, the 'rates' (a form of local property tax) and various other local sources. The Government's contribution, 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 the 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 18½ and 30. An individual chief constable may approve the appointment of especially suitable older men and women.

The standard police ranks in Great Britain, except in the Metropolitan Police area, 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, and there is one commander.

Cadet training is designed to prepare boys and girls between 16 and 18½ years of age for a career in the police service. 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 opera-

tional duties police authorities employ over 35,000 civilians on administrative duties (pay, records, finance and other general subjects), technical duties (fingerprint, scenes of crime and control room work) and other duties, including catering and domestic work.

Traffic wardens (of whom there are over 7,000) are extensively employed to discharge specified duties connected with road traffic, vehicles and pedestrians normally undertaken by the police. In this connection they may be authorised to serve fixed penalty notices¹ for some aspects of minor offences; to man police car-pounds (except in Scotland); 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, if the police agree. Wardens remain under the control of the chief constable of the force to which they are attached, whatever their duties.

Each police force has an attachment of special constables, who are volunteers willing to perform police duties without pay in their spare time. In England and Wales the function of special constables is to 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 purposes.

Duties

A police officer in Great Britain is an independent holder of a public office and exercises his powers as a constable, whether conferred by statute or by common law, by virtue of his office. He is an agent of the law of the land, not of the police authority nor of the central Government and, although his chief officer of police has a vicarious liability for any wrongful act he may commit in the performance of his functions as a constable, he himself may also be sued in respect of his own wrongful act. Strict procedures govern the way complaints against police officers are handled and an independent element is being introduced into the way complaints are investigated in England and Wales. Similar proposals are to be made for Scotland.

No member of the police service may belong to a trade union since it is a basic principle of the service that its members must not only be free from political bias, but must also be seen to be free of it. All ranks, however, have their own associations which can make representations to ministers or to police authorities on matters of interest or concern to their members.

The many functions of a police officer as a constable range from the protection of people and property, road or street patrolling and traffic control to crime prevention, criminal investigation and the apprehension of offenders. Modern police work inevitably includes many 'social' functions—ranging from special juvenile liaison and community relations schemes to involvement with family and health matters.

The main departments in all police forces are the uniform department, the criminal investigation department and the traffic department. Many forces also have specialised departments, including river police (in districts with stretches of navigable waterway), a mounted branch and dog handlers.

Common Services

A number of common services are provided by the central government departments for the benefit of all forces to supplement those provided by the police authorities for their own use and by communal arrangements made between the

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.

forces themselves. The most important of these services are: training services; a forensic science service in England and Wales which provides eight regional laboratories (in addition to the Metropolitan Police Laboratory); telecommunications services, including depots which in England and Wales supply and maintain wireless equipment for the police; 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, operating under a committee of chief constables, are employed in England and Wales to investigate major crimes involving inquiries in more than one police area. The Scottish Crime Squad operates in the same way throughout Scotland.

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's Police Department: the Forensic Science Service, with its regional laboratories; a Central Research Establishment staffed by scientists; a Directorate of Telecommunications with one section of engineers engaged solely on research and development; and the Police Scientific Development Branch, staffed by scientists and technicians assisted by seconded police officers from the Police Research Services Unit—both being concerned with operational research into police methods and the development of equipment for police forces. Co-ordination and policy are the responsibility of a separate division. 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 includes the production of programme accounts and studies of the use of resources.

In all aspects of police work, the application of scientific aids has reached an advanced stage. A national police computer is being developed to rationalise the keeping of records and speeding up the dissemination of information.

Northern Ireland

The Police Authority for Northern Ireland has a statutory duty to maintain an adequate and efficient police service. As in Great Britain, the chief constable is responsible for the control and direction of his force, the Royal Ulster Constabulary, which has a strength of nearly 5,000. Ranks, conditions of service, pay and general duties follow closely on the lines of the service in Great Britain. The regular force is assisted by the Royal Ulster Constabulary Reserve, a largely part-time body of men and women.

CRIMINAL COURTS

England and Wales

Criminal proceedings in England and Wales are held either in magistrates' courts, where cases are tried under summary procedure without a jury, or in the Crown Court, where the more serious cases are tried on indictment with a jury. Magistrates' courts also conduct preliminary investigations into the more serious cases. Average waiting times for people committed by magistrates for trial in the Crown Court are about ten weeks.

One of the principal features of criminal courts in England and Wales is the important part played by laymen who have no special legal qualifications—as magistrates who are the justices of the peace (the 'judges' in most magistrates' courts), as members of juries and as prosecutors (most criminal prosecutions are initiated by the police). About 98 per cent of all criminal cases are finally heard and determined by magistrates.

Magistrates' Courts

The 900 or so magistrates' courts normally consist 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 one of his assistants) who is normally legally qualified and is also in charge of the administrative matters of the court.

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 evidence must not be reported in the press at the time except at the defendant's request, unless the magistrates discharge him.

Magistrates cannot usually impose a sentence of more than six months' imprisonment or a fine exceeding £400. 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.

To hear cases involving people under the age of 17 brought before the court in 'care' (see p. 96) or criminal proceedings, and to deal with applications for the adoption of children, magistrates' courts sit as juvenile courts. Juvenile courts sit either in a different room or building from other courts, or at a different time, and 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 remits the case to a juvenile court, unless it wishes to dispose of the case by discharge or fine.

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 recorders, who sit on a part-time basis. All trials in the court take place before a jury. Lay magistrates have a role to play in the court; 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. For the most serious cases a High Court judge sits alone.

Of nearly 68,000 people tried in the Crown Court in 1975, 63 per cent pleaded guilty to all charges, 22 per cent were convicted after trial and 15 per cent were acquitted on all counts.

Appeals

A person convicted by a magistrates' court may appeal against the conviction or against the sentence to the Crown Court. 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. Appeals from the Crown Court, either against conviction or against sentence, are normally made to the Court of Appeal (Criminal Division). The Court of Appeal (Criminal Division) normally consists of three judges, who may be Lords Justices of Appeal or judges of the High Court, although the Lord Chief Justice or a Lord Justice of Appeal usually presides. A further appeal from the Court of Appeal (Criminal Division) 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

Criminal cases in Scotland are heard either under solemn procedure, when proceedings are taken on indictment and the judge sits with a jury, 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 under solemn procedure. Proceedings are taken under summary procedure in the less serious cases in the sheriff courts, and in the district courts.

District Courts

The system of lay summary courts is based on the district and islands areas of local government. Judges in the district courts are 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

For purposes of sheriff court jurisdiction, Scotland is divided into six sheriffdoms and these sheriffdoms are further divided into sheriff court districts. A sheriffdom has a sheriff-principal and a number of sheriffs who are legally qualified and act as the judges of the court. The sheriff courts exercise an extensive civil as well as a criminal jurisdiction.

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 (who is also the Lord President of the Court of Session), the Lord Justice Clerk, or any one of the 18 Lords Commissioner of Justiciary who are also judges of the Court of Session. The seat of the court is in Edinburgh, but the judges go on circuit to preside at trials in other towns.

Appeals

A person convicted in the High Court or in a sheriff court on indictment may appeal to the High Court of Justiciary (*a*) against his conviction on any ground which involves a question of law alone, or, with leave of the High Court or upon the certificate of the judge who presided at the trial that it is a fit case for appeal, on any ground, and (*b*) against his sentence, with the leave of the High Court, unless the sentence is one fixed by law. Appeals are heard by three or more judges, and there is no further appeal to the House of Lords.

A person convicted summarily may appeal to the High Court, but only on questions of law and procedure, and not on issues of fact.

Children's Hearings

Children under 16 years (and in some cases people between 16 and 18) who are considered to need compulsory care are normally brought before an informal children's hearing comprising three members of the local community. (Prosecution in the criminal courts is rare, and may take place only on the instructions of the Lord Advocate.) An official 'reporter' decides whether a child should come before a hearing. The hearing's main task is to decide, after the grounds for referral have been accepted by the child and his parents, what measures of compulsory care (if any) are most appropriate. If the grounds for referral are not accepted, the case must first go to the sheriff court for proof. An appeal lies from the decision of a hearing.

Northern Ireland

The day-to-day work of dealing summarily with minor local criminal cases in Northern Ireland is carried out in petty sessions districts by magistrates' courts presided over by a professional, paid resident magistrate. 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 may be made to a county court.

The county courts and the High Court of Justice share a similar jurisdiction in criminal matters, except that the most serious cases, such as murder, are tried in the High Court only. Other cases are in practice heard at the court where the trial can be heard soonest. For people convicted of serious crimes there may be an appeal to the Northern Ireland Court of Criminal Appeal and from there to the House of Lords.

Coroners' Courts

Most of the work of coroners' courts nowadays 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 his 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 post-mortem examination to determine cause of death. If, however, he has reason to believe that the deceased died a violent or unnatural death or died in prison or other circumstances provided for by statute, he must hold an inquest. Moreover, if he has reason to suspect that the death was due to murder, suicide, manslaughter or infanticide or was caused in a road accident, he must summon a jury.

The courts' other functions include dealing with 'treasure trove' matters.

In Scotland the office of coroner does not exist. The 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 in order that Crown Counsel may consider what proceedings, if any, are required.

Coroners in Northern Ireland are mostly senior lawyers; the work of their courts is broadly equivalent 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 their dependants and other civilians who accompany them outside the United Kingdom. The courts do not deal with certain serious offences if committed in the United Kingdom, such as treason, murder, manslaughter, treason-felony and rape. Other non-military criminal offences committed by servicemen in the United Kingdom are also normally dealt with in the ordinary courts.

A court martial (which consists of a president and a number of serving officers) may be convened by an authorised officer. A judge advocate is appointed to sit with the court in more serious Army and Air Force cases (and at every Navy trial) to advise upon law and procedure and in the former case, to sum up the evidence.

There is a system of appeals for people convicted by a court martial.

Proceedings Before Trial *Prosecutions*

The decision to prosecute normally rests, in England and Wales, with the police and in Scotland and Northern Ireland with public prosecutors. Police have powers to issue cautions (warnings in Scotland) instead of prosecuting, especially in the case of young people.

All criminal trials in the United Kingdom take the form of a 'contest' between the Crown and the accused person. In England and Wales (and very exceptionally in Scotland) a private person may institute criminal proceedings, but they are usually initiated and conducted by the police.

Some offences in England and Wales can be prosecuted only by or with the consent of the Attorney General or the Director of Public Prosecutions. Where the consent of the Attorney General is required (for example, under the official secrets legislation), such prosecutions are invariably in the hands of the director (a senior civil servant and prominent lawyer appointed by the Home Secretary) who is responsible to the Attorney General. His other duties include: prosecuting all serious offences, which must be reported to him by the police; advising the police and others concerned with the administration of the criminal law; and taking over, where necessary, criminal proceedings instituted by another prosecutor. He is also concerned with complaints of criminal offences by the police, extradition and offences committed by foreign servicemen stationed in England and Wales.

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.

Each year the director's department conducts between five and ten per cent of the prosecutions brought on indictment in England and Wales; it also conducts some summary prosecutions.

In Scotland the Lord Advocate, acting through the Crown Office and subordinate prosecutors, is responsible for the prosecution of practically all crimes before Scottish courts. The Crown Office is concerned with the preparation of prosecutions in the High Court; the public prosecutors in the sheriff courts and district courts, known as 'procurators fiscal', are lawyers who are usually full-time civil servants. The police make preliminary investigation of all offences known to them, and report the details to the procurator fiscal, who can decide whether to prosecute, subject to the discretion and control of the Crown Office. Private prosecutions, though permitted in some circumstances, are rare.

The Director of Public Prosecutions in Northern Ireland, who is responsible to the Attorney General, has functions which include the initiation of criminal proceedings in certain circumstances, representing the Crown in criminal actions, and prosecuting offences against statutory provisions on behalf of government departments. The director also has functions in relation to the granting of bail.

Arrest

In criminal cases in England and Wales arrest may be effected either on a warrant issued by a judicial authority on sworn information laid before it or, in certain cases, without warrant. In the latter circumstances, a police officer may release the defendant on bail; that is, he may discharge him temporarily to appear in court or at a police station at an appointed time. It is an offence to abscond while on bail. If the defendant cannot be brought before the magistrates' court within a day, and his alleged offence is not serious, the police must release him on bail. Magistrates also have discretion to grant bail, which they exercise according to well-defined principles. If bail is refused by the magistrates, the defendant is entitled to apply to the Crown Court or the High Court, and he must be informed of this right. There is a statutory presumption in favour of the granting of bail.

Some 85 per cent of people remanded by magistrates' courts in 1974 were granted bail, compared with 66 per cent in 1967.

Once anyone has been charged with an offence, the police may not put any further questions to him, 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 his detention are not lawful¹ may apply for a writ of *habeas corpus* against the person who detained him, this person then 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.

In Scotland the police have very broadly the same powers of arrest as have the police in England and Wales. The Judges' Rules do not apply, but when anyone is arrested he must be cautioned and have the charge read over to him. Thereafter, only his voluntary statements are used in evidence at his trial, and the court will reject any statements made by him unless it is satisfied that they have been fairly obtained. As in England and Wales, when anyone is apprehended in Scotland he 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 the judge may then commit him 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, in any event, be brought to a conclusion within 110 days of committal to custody.

Trial

Since criminal law in Britain presumes the innocence of the accused until his 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 for his defence and if he cannot afford to pay he may be granted legal aid wholly or partly at the public expense. If remanded in custody he may be visited in prison by his legal adviser to ensure that his defence is properly prepared. During the preparation of the case, it is customary for the prosecution to inform the defence of any relevant documents which it is not proposed to put in evidence and to disclose 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 is unfit to be tried. A jury must decide whether or not this is so. If they find that it is, the defendant will be admitted to a hospital specified by the Home Secretary.

Criminal trials in England and Wales are (with rare exceptions) held in open

¹ Lawful grounds are: in pursuance of criminal justice; for contempt of court or of either House of Parliament; detention of persons found to be mentally disordered; detention of children by their parents or guardians; and detention expressly authorised by Act of Parliament. The writ of *habeas corpus* applies in both criminal and civil cases.

court and the law of evidence (which is concerned with the way facts may be proved and what facts may not be proved) is rigorously applied. If evidence is admitted in contravention of the law, a resultant conviction is liable to 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 own witnesses who, if they will not attend the trial of their own free will, may be legally compelled to attend; and to address the court either in person or through his lawyer—the defence having the right to the last speech at the trial. Moreover, the defendant cannot himself be questioned unless he consents to be sworn as a witness in his own defence. When he does testify, he may only be cross-examined about his character or other conduct in very 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.

In criminal trials by jury the judge determines questions of law, sums up the evidence for the benefit of the jury, and discharges the accused or passes the sentence according to the verdict of the jury; but the jury alone decides whether, on the basis of the evidence presented at the trial, the defendant is guilty or not guilty. Verdicts need not necessarily be unanimous; in certain circumstances the jury may 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 on the part of the defendant to the appropriate court.

At summary trials in Scotland the accused is asked to plead to the charge at the first calling of the case and, if he pleads guilty, the court may dispose of the case. Where the plea is 'not guilty', the court may proceed to trial at once or it 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 he pleads not guilty, the case is continued to the second 'trial' proceedings in the appropriate court. If he pleads 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 in the Court 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 led (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.

PENAL SYSTEMS

The chief aims of the penal systems of the United Kingdom are to deter the potential law-breaker and to reform the convicted offender. The element of

deterrence is in the probability of detection, public trial and punishment rather than in the severity of the punishment itself.

Treatment of Offenders

Imprisonment and, for certain categories of young offender, other forms of custodial treatment form an important part of British penal practice, but are increasingly seen as the last resort in dealing with people who break the law. Wherever possible and appropriate for the safety of the public, the treatment of offenders within the community is regarded as preferable to custodial treatment.

Traditional 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 there is properly a conviction but the court feels that there is no need to impose punishment; and 'binding over' where the offender is required to pledge money, with or without sureties, 'to keep the peace and be of good behaviour'.

The suspended sentence in England, Wales and Northern Ireland means that an offender does not actually serve his sentence unless he is convicted of a further offence punishable with imprisonment within a specified period (maximum two years). If he is convicted of such an offence within the period of a suspended sentence, the sentence normally takes effect and a further sentence may be imposed for the new offence. An offender given a suspended sentence of over six months may, in England and Wales, be made subject to supervision by a probation officer for all or part of the period of the suspended sentence.

A recent innovation is the scheme for unpaid community service by offenders convicted of imprisonable offences in England and Wales. The scheme began experimentally in several areas but initial results were encouraging and the arrangements have been extended to many other parts of the country. There are provisions for probation hostels, intensive supervision and day training centres. An offender may also with his consent have his sentence deferred for up to six months to enable a court to arrive at the most appropriate sentence, taking into account his conduct after, for instance, some expected change in his circumstances.

The courts may order an offender to pay compensation for any personal injury, loss or damage resulting from his offence and in the case of major crimes against property bankruptcy proceedings may be brought against him in England and Wales. In Scotland a committee is considering the potential role of the criminal court in ordering reparation by the offender to the victim.

In certain circumstances the courts may order the forfeiture of property involved in the commission of a crime. An offender convicted of a serious crime may be disqualified from driving if a motor vehicle was used in its commission.

The mandatory penalty for murder in the United Kingdom is imprisonment for life. This is also the maximum penalty in England and Wales for manslaughter and certain other very serious offences, including rape, robbery offences and arson, but in almost all other cases the courts have complete discretion to select the sentence in the light of the nature and gravity of the offence and the available information about the offender. In certain cases this discretion is modified by statutory provisions designed to ensure that prison sentences are kept to a minimum.

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 three or, in some cases, six months' imprisonment.

In all parts of Britain, there are special provisions for dealing with children in trouble and young adult offenders (see pp. 96-98). 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 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. On the other hand, in England and Wales special sentences longer than the normal maximum term (extended sentences) may be imposed on persistent offenders.

In the interests of the rehabilitation of offenders, anyone in Great Britain who has received a prison sentence of up to $2\frac{1}{2}$ years and then has managed to avoid further convictions for a specified period (the time depends upon the nature of the original sentence) is entitled for most purposes to treat his 'spent' conviction as though it had never occurred (for instance, in some judicial proceedings and in most applications for employment).

Probation

Probation is designed to secure the rehabilitation of an offender while he continues his ordinary life under the supervision of a probation officer, whose duty it is to advise, assist and befriend him. Before making a probation order (which lasts for between one and three years), the court must explain its effects and make sure that the probationer understands that if he fails to comply with the requirements of the order he will be liable to be dealt with again for the original offence. A probation order can be made only if the offender is 17 years of age or over and must have his 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 him to live in a specified place, or in appropriate circumstances to submit to treatment for his mental condition.

The probation service is administered locally by probation and after-care committees. 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 for intensive supervision and social education as a requirement of a probation order), bail hostels, probation hostels and other establishments for use in connection with the rehabilitation of offenders. The service is also responsible for administering the scheme of service to the community, whereby courts have the power to require offenders to perform, in their spare time, up to 240 hours (within 12 months) of such unpaid work as painting and decorating for people in need, building adventure playgrounds and clearing sites at redevelopment areas.

In England, Wales and Northern Ireland, the services of probation and after-care officers are available to every criminal court.

In Scotland, where there is no separate probation service, offenders subject to probation orders or to after-care supervision following release from a penal institution are supervised by specially approved local authority social workers.

Prisons

Since 1950, the courts have made proportionately less and less use of prison as a penalty for criminal activity, but there has been a steady rise in the prison population as a result of the rise in crime. During 1975, the average number of people in prison in Great Britain was about 45,000, roughly twice the 1950 level; the number of prisons and similar establishments was 139, also about twice the 1950 figure; but the size of the prison service, some 21,000-strong, was treble that of 25 years earlier.

In spite of this increase in size and the problems that go with it, however, the keystone of Britain's prison service is still the ability of the individual prison officer to handle relationships with difficult people in the exacting environment of the custodial institution.

The aims of the prison service are, briefly, to provide for the detention of those committed to custody under the law in conditions generally acceptable to society, and to develop constructive methods of treatment and training in the hope that they will lead to the prisoner's rehabilitation and reform. To this end prisoners are classified into groups, taking into account the likelihood of their escaping, the degree to which their escape would offer a threat to the public or the State, and the justification of high expenditure on providing secure conditions. 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.

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. Separate prisons cater for women prisoners.

Many British prisons were built during the nineteenth century and are unsatisfactory by modern standards; overcrowding is also a problem. To improve conditions generally, new prisons are being built and existing establishments redeveloped and modernised, as far as resources allow.

Remission of Sentence and Parole

All prisoners serving a sentence of imprisonment for an actual term 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 their sentence below 31 days (in Scotland, 30 days). Remission may be forfeited for serious misconduct in prison. In addition, prisoners serving fixed sentences totalling 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. (In Northern Ireland there is no parole scheme, but prisoners receive one-half remission on determinate sentences subject to a liability; in the case of those serving over a year, to be ordered to serve the outstanding balance of the remitted period in the event of reconviction for an imprisonable offence.)

The parole licence remains in force until the date on which the prisoner would have been released if he had not been licensed or, for prisoners serving extended sentences (in England and Wales only) and offenders sentenced while under 21 years of age, until the end of the sentence.

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.

Employment

The main aim of prison industries is to give an offender in custody a training and experience that will fit him to get and retain a job on discharge. The primary source of work lies in the domestic requirements of the prison service itself in clothing and equipping prisoners and providing furniture and furnishings. Goods and services are also supplied to other government departments and public bodies, and there is a steady growth of sales of a wide range of products in the open market—for example, textiles, woodwork and engineering products. The profitable farming and horticultural industries also provide work and training, and play an increasing part in contributing to the prison food provision. A few prisoners are employed outside prison.

In England, Wales and Scotland, small payments are made to inmates for the work they do; in some prisons, special incentive schemes provide an opportunity for higher earnings on the basis of output and skill. In Northern Ireland there is a progressive system of earnings, related to work done.

Any prisoner serving a sentence of four years or more may be considered for employment in an ordinary civilian job outside prison for about six months before his discharge. Prisoners selected for the scheme may live either in a separate part of the prison or in a prison hostel; they are paid normal wages, from which they support their families and meet their own expenses.

Education

Education for those in custody is provided by local education authorities in close liaison with central departments. Each prison in England and Wales has an education officer and a number of part-time teachers.

In many prisons the education officer is nowadays increasingly assisted by one or more full-time teachers. Attendance at evening classes is voluntary but full-time day classes are provided for young people under 16 years of age (such as those in borstals and in junior detention centres) and on a selective basis for people over that age. Day release may be granted to certain prisoners to improve their basic education standards or to pursue examination courses. Increasing numbers of prisoners are taking Open University courses. All inmates have access to the prison library. Other recreational activities include: films, plays, concerts, lectures and discussions.

Selected prisoners take vocational training courses leading to recognised qualifications. Others learn construction industry crafts, and their skills are later used in maintaining and improving existing establishments and building new ones. Facilities in Scotland and Northern Ireland are similar to those in England and Wales.

Physical education in custodial centres aims to promote and maintain physical fitness and development; to provide opportunities to attain externally recognised standards of proficiency; and to ensure that men leaving prison are physically competent to sustain the demands of employment outside. All offenders under 21 must attend a certain number of classes, but adults may choose whether to take part.

Medical Services

The physical and mental care of inmates is a statutory duty of the prison medical officer. Large establishments have medical teams, while others need only the services of a medical officer on a part-time basis. All have hospital and out-patient treatment facilities and the necessary support staff.

In a few prisons there are large hospitals where major surgery and treatment can be undertaken by visiting specialists. The patients include inmates from other establishments. There is one psychiatric prison in England and Wales with accommodation for some 300 inmates. Many establishments have psychiatric units to which inmates are transferred from other establishments. Use is also made of hospital and specialist facilities of the National Health Service, there are several joint appointments in forensic psychiatry with regional health authorities and, if necessary, arrangements are made for treatment to continue after release from custody.

Psychological Services

There has been a constant development of the application of psychological principles to the tasks of the penal system over the past 30 years. The work of a prison psychologist varies from one place to another. Psychologists are involved in the analysis of operational processes, the evaluation of treatment programmes and regimes, the assessment of individuals, contributions to management and

treatment and the selection and training of staff. The focus of their work is primarily upon tasks involving design, development and evaluation.

Privileges and Discipline

All prisoners, from the beginning of their sentence, have a general right to write and receive letters and to be visited by their relatives at regular intervals. They also have such privileges as additional letters and visits, the use of 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 board of visitors (visiting committees in Scotland), who have power to order, among other penalties, forfeiture of remission and forfeiture of privileges.

Welfare

Welfare in prisons is the general concern of the prison staff as a whole and in particular of the chaplains and assistant governors, but special responsibilities attach to prison welfare officers—probation officers seconded by the probation and after-care service (in Scotland, social workers from local authority social work departments). The functions of these officers include helping the prisoner in his relationships with individuals and organisations outside the prison, and making plans for the prisoner's after-care, working closely in this connection with colleagues in the probation and after-care service and with other agencies in the community whose help the prisoner or his family may need either during sentence or after release.

Prisoners may also receive visits from specially appointed prison visitors whose work is voluntary and in England and Wales is co-ordinated and guided by the National Association of Prison Visitors.

For the spiritual welfare of the inmates, 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. The chaplaincy programme not only provides for worship, group work and pastoral counselling, but covers involvement with other members of staff in treatment and in management.

Discharge and After-Care

Prisoners granted parole may have preparatory leave. After-care begins at the commencement of a prisoner's sentence, and probation officers arrange interviews for offenders in the cells at court immediately after sentence. Officers often visit prisoners' families to discuss problems and in some areas set up prisoners' wives' groups which meet informally and provide a source of mutual companionship and support.

All prisons in England and Wales arrange pre-release preparations for prisoners, varying according to the needs of the inmates concerned. At many prisons they take the form of open discussion groups at which experts consider with prisoners the domestic, social and employment problems with which they are likely to be faced on release. For adult prisoners serving not less than two years and for women and young prisoners serving not less than 18 months, home leave is extensively granted towards the end of their sentences to enable them to re-establish links with their families and friends or to make new contacts with people, including potential employers, who may be able to assist them on release. For some male prisoners serving four years or more and for some women serving 18 months or more there are special provisions for work outside the prison before release.

There are two systems of after-care in England and Wales, both run by the probation and after-care service. A compulsory system applies to prisoners released from life imprisonment or extended sentences, young prisoners and young people discharged from borstals and detention centres; and 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.

In Northern Ireland after-care duties are similarly carried out by probation and after-care officers. In Scotland responsibility for statutory and voluntary after-care is vested in local authority social workers.

Children in Trouble

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. 85).

To make an order in care proceedings the juvenile court must be satisfied that any one of a number of conditions is met, one of which is that an offence has been committed. The court must also believe that the child is in need of care or control which he is unlikely to receive unless an order is made. This means that the commission of a criminal offence is not in itself a ground for a court care order to be made in care proceedings. A care order made in criminal proceedings is not subject to the care or control test and can be made where the child is guilty of an offence which in an adult is punishable 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'. The care order generally lasts until the child is aged 18 or 19 unless it is in the meantime discharged by a court. For children who are too severely disturbed or disruptive to be treated successfully in other child care homes, 'youth treatment centres' are being 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 attendance at a day or evening centre.

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 may order a stay in hospital in accordance with the mental health legislation.

In criminal proceedings the courts may also order payments of compensation, or impose fines or grant a conditional or absolute discharge. If the offender is a boy, he may be ordered to spend a total of (normally) 12 to 24 hours of his spare time on Saturdays at one of 60 attendance centres (up to three hours on any one occasion). The centres are for boys 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 below), and young people of 15 and over may be committed to the Crown Court with a view to borstal training (see below). In the case of a very serious crime, detention in a place approved by the Home Secretary may be ordered.

Scotland

In Scotland the age of criminal responsibility is eight years, but prosecution is the exception, and no child can be prosecuted for an offence other than at the instance of the Lord Advocate. Children under 16 years who have committed an offence or need care and protection are generally brought before an informal children's hearing (not a juvenile court), where the aim is to discuss difficulties and provide the most appropriate measures of care and treatment (see p. 86). The hearing can commit a child to supervision by a local authority subject to conditions appropriate to the child's needs (this may include a requirement to stay in a residential home).

Young Adult Offenders

Offenders aged 17 to 20 years are recognised as a category distinct from child and adult offenders and special forms of custodial treatment are devoted to them. The main non-custodial measures are generally the same as those used in dealing with adults, although in the London and Manchester areas an attendance centre order (usually made for younger boys, see above) may be given. 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 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 cannot be taught respect for the law by such non-custodial measures as fines or probation. There are also six junior centres for boys aged 14 to 16 years. Detention is usually for a period of three to six months (a fixed period of three months in Scotland). Life in a centre is brisk and formal, demanding the highest possible standard of discipline and achievement. The emphasis is on positive training which provides a normal working week of 40 hours, including an hour each day devoted to physical training, with considerable attention paid to education. All offenders discharged from a detention centre are supervised for a year.

Borstal training aims to bring about a development in the trainee's character and capacities, progressively increasing scope for personal decision, responsibility and self-control, and to enable the trainee to develop as an individual. Offenders are placed as near their homes as possible so as to maintain and foster their ties with the local community. The system is essentially 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. 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 method of dealing with him is appropriate. If imprisonment is imposed, the term must be of either less than six months or more than three years, unless the offender has served a previous sentence of at least six months' imprisonment or a sentence of borstal training, in which case the lower limit is 18 months. (In other cases, if the court considers that a medium-term custodial sentence is desirable, the appropriate sentence is one of borstal training.) 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 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.

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, which is particularly concerned with the use of executive power, industrial law, admiralty law and ecclesiastical law. Scottish civil law has its own, often analogous, branches.

CIVIL COURTS England and Wales

Magistrates' Courts

The limited civil jurisdiction of magistrates' courts extends to matrimonial proceedings for custody and maintenance orders, adoption and affiliation and guardianship orders. The courts also have jurisdiction in respect of such matters as nuisances under the Public Health Acts and the recovery of rates. Committees of magistrates exercise quasi-administrative functions in relation to the licensing of public houses and of betting shops and clubs.

County Courts

County courts (of which there are about 330) are so located that no part of the country is more than a reasonable distance from one of them. In the busier centres, the courts may sit every day; in others they may sit weekly, monthly, or at longer intervals.

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 jurisdiction of the county courts covers, for instance, actions founded upon contract and tort (with minor exceptions) where the amount claimed is not more than £1,000; trust and mortgage cases, where the amount does not exceed £5,000; and actions for the recovery of land where the net annual value for rating does not exceed £1,000. 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.

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 racial discrimination and sex discrimination in education and the provision of goods, facilities, services and premises. Where small claims are concerned (especially those for less than £100 involving consumers), there are special facilities for arbitration and simplified procedures.

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, however, particular types of work are assigned to a particular division—distribution of work being governed by statute, the rules of court and the practice of the court. For instance, the Family Division deals with all jurisdiction of a family kind, including matrimonial cases, and cases relating to wardship, adoption, and guardianship; while Admiralty and prize jurisdiction rests with a specially constituted Admiralty Court of the Queen's Bench Division.

There are 70 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 of the court are held at 23 Crown Court centres which are known as first tier 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 divisional 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 lie 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 (Civil Division) are the Lord Chancellor, the Lord Chief Justice, the President of the Family Division and the Master of the Rolls; the ordinary members are 16 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 takes 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 House's decision is taken by a vote.

Scotland

The main civil courts in Scotland are the sheriff courts which, in their civil capacity, correspond roughly to English county 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

where the value claimed is less than £500—a matter for the sheriff court. 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 lie to the House of Lords.

The Scottish Land Court

The Scottish Land Court is a special court that deals with certain agricultural matters. The court is presided over by a legal chairman, who has the rank and dignity of a judge of the Court of Session.

Northern Ireland

Minor civil cases in Northern Ireland are dealt with in magistrates' courts, but as in England and Wales most civil actions are heard in the county courts. The superior civil law court is the High Court of Justice and appeal may lie to the Court of Appeal. Together, these two courts comprise the Supreme Court of Judicature 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 are usually begun in the High Court by a writ of summons served on the defendant by the plaintiff, which notifies the defendant that the plaintiff has a claim against him and states the nature of the claim. If the defendant intends to contest the claim, he 'enters an appearance' by informing the court to this effect and documents setting out the precise question in dispute (the pleadings) are then delivered to the court. County court proceedings are initiated by a 'plaint' served on the defendant by the court; subsequent procedure is simpler than in the High Court.

A decree for divorce can be obtained only after a hearing in court, whether or not the case is defended. 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 defendant may claim this right. In trials where a jury is present, the jury is responsible for deciding questions of fact (as in criminal trials) and also the amount of damages to be 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). 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 barrister's 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 the service on the defender of a summons or initial writ. In Court of Session actions the next step is the calling of the summons, which is the publication of the action in the court lists. If the defender intends to contest the action, he must 'enter appearance' within two days of calling and thereafter lodge defences, otherwise decree in absence can be obtained against him. In ordinary actions in the sheriff court there is no calling of the summons; the defender is simply required to enter appearance within a certain number of days after service of the initial writ, and if he does so this is followed by the 'tabling of the cause' which involves a formal appearance in court by solicitors or, in some cases, the parties to the dispute. Trial by jury in civil actions in Scotland is more common than in England and Wales, being the usual form of procedure in actions for damages for personal injuries in the Court of Session. In the sheriff court it is relatively rare, being confined to actions between employer and employee.

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 attached to the summons, which in most cases 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 there is some doubt about the method of paying the debt.

Restrictive Practices Court

The Restrictive Practices Court is a specialised United Kingdom court which deals with monopolies, restrictive trade practices and resale price maintenance. 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 during the past 30 years of administrative tribunals with a regular or permanent existence and the function of deciding or adjudicating in disputes arising under regulatory or welfare legislation. Such tribunals include those concerned with: land and property; national insurance; supplementary benefits; industrial matters; the National Health Service; transport; taxation; and many which do not fall into any specified group. Their constitution follows a fairly general pattern; 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; and, with some exceptions, members 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 from all the more important tribunals may be made, at least on a point of law, to the High Court, or, in Scotland, to the Court of Session. 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 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 RESPONSIBILITIES

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 lies upon the Lord Chancellor, the Home Secretary and the Secretaries of State for Scotland and Northern Ireland. The Prime Minister is concerned with the legal system in that he 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 the Cabinet minister responsible in England and Wales for magisterial and all but the most senior judicial appointments. He is concerned with court procedure and is responsible for the administration of all courts other than magistrates' courts. On the civil law side, law reform and supervision of the legal aid and advice scheme are matters for him.

The Home Secretary, also a senior Cabinet minister, is concerned with the criminal law, including law reform. He is responsible for the prevention of crime, the apprehension of offenders and virtually the whole of the penal system. He also exercises a general supervision over magistrates' courts, with some specific responsibilities (such as approving the appointment of Clerks to the Justices). On matters relating to crime prevention and the treatment of offenders, he is advised by the Advisory Council on the Penal System. Although probation and after-care of prisoners is carried out by a locally organised service, the Home Secretary is responsible at a national level for the service's efficiency and he has wide regulatory powers, being advised by the Advisory Council for Probation and After-care. Prison policy and the administration of custodial centres are functions of the Home Office Prison Departments and the Home Secretary appoints to each centre a board of visitors representing the local community to investigate and advise him on the state of the buildings, administration and the 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.

The special provisions within the penal system applying to young offenders are the responsibility of the Home Office and the Department of Health and Social Security. (Local authority social services departments also have many functions relating to children and young people.)

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 the building and maintenance of county courts and providing accommodation for all the

superior courts in England and Wales, except the Central Criminal Court in London, 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 in England and Wales, and the Director of Public Prosecutions (see p. 88) is subject to his superintendence. The Attorney General is concerned with the institution and prosecution of certain types of criminal proceedings, but he must exercise an independent discretion, and must not be influenced by his Government colleagues. The Solicitor General is subject to the authority of the Attorney General, with similar rights and duties.

Scotland

In Scotland, all judges other than the most senior ones (and including justices of the peace) are appointed on the recommendation of the Secretary of State, who also 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 court. District courts are staffed and administered by the district and islands local authorities.

The Secretary of State is responsible for the administration of the penal system and is advised on crime prevention and the treatment of offenders by the Scottish Council on Crime. Prison policy is a matter for the Scottish Home and Health Department and there are visiting committees for each custodial centre similar to the boards of visitors in England and Wales. The Secretary of State is advised on parole matters by the Parole Board for Scotland. Scotland has no separate probation service; local authority social work departments provide the services and officers required by the criminal courts in their areas.

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, he is responsible for the Scottish parliamentary draftsmen, and he is responsible for the public prosecution of all major crimes. He delegates most of the work of prosecution to the Solicitor General, to seven Advocates Depute and to Procurators Fiscal who are full-time legally qualified prosecutors. The permanent adviser to the Lord Advocate on prosecution matters is the Crown Agent who is also head of the procurator fiscal service and is assisted by a staff of civil servants known as the Crown Office.

Northern Ireland

In Northern Ireland the judiciary are appointed on the advice of the Lord Chancellor. The Northern Ireland Office, under the Secretary of State, deals with the staffing and general organisation of the county and petty sessions courts and is responsible for 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) and all appointments to the High Court or the Court of Session are made by the Queen acting on the advice of ministers.

Judges

Full-time judges do not engage in politics, except for the Lord Chancellor, who, as well as being head of the judiciary and speaker of the House of Lords, is a leading member of the Government. With the exception of lay magistrates, judges are normally appointed from practising barristers, advocates or solicitors and neither their training nor their careers are in any way dictated by the State. Lay magistrates in England, Wales and Northern Ireland need no legal qualifications, being appointed for their qualities of integrity and understanding and as broadly representative of the community which they serve. On appointment, however, they give an undertaking to complete a period of basic training, so that they may obtain a 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. Justices of the peace in Scotland likewise need no legal qualifications, and the Secretary of State for Scotland is responsible for providing such training for them as is necessary. 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.

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.

Juries

The jury system is an integral part of the more serious criminal proceedings in all parts of the United Kingdom and can be a feature of certain civil cases, although this is fairly rare outside Scotland. In criminal trials by jury it is, broadly speaking, the judge's duty to determine questions of law and to discharge the accused person or pass sentence on him, but the jury (comprising 12, or, in Scotland, 15 people) has sole responsibility for deciding the question of guilt or innocence. Verdicts need not necessarily be unanimous, but the rules about majority decisions vary according to the legal system.

In some civil actions tried by jury the size of the jury is smaller. It may be responsible not only for deciding questions of fact but also for fixing the amount of damages to be awarded to an injured party.

Juries are also summoned to certain inquests at coroners' courts.

A jury is completely independent of both the judiciary and the executive. Moreover, although there are provisions for both the prosecution and defence in criminal trials to object to particular jurors, once members have been sworn in, they are protected from interference of any kind.

Qualification for jury service is based on residence and the electoral register (or in Scotland a low property qualification). People following certain occupations are either ineligible or entitled to claim excusal and some people with serious criminal records are disqualified.

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'. Each branch of the profession per-

forms distinct duties—solicitors undertake legal business for lay clients, while barristers advise on legal problems submitted through solicitors and present cases in the higher courts—though certain functions are common to both.

Although the law allows an individual to conduct his own defence if he wishes, in important cases most people prefer to be legally represented.

Royal commissions are inquiring into the provision of legal services and considering the structure, organisation, entry, training and remuneration of the legal profession.

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 common professional examination. All students must pass the professional examinations run by the Council of Legal Education and must 'keep terms' in their Inn. After training, a student can be called to the Bar, but may not practise independently until he has completed a year's pupillage with an established barrister. 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 appropriate committee of The Law Society (the professional organisation of solicitors) and he must enter into 'articles of clerkship' with a practising solicitor of not less than five years' standing before he can begin his professional career. The term of articles lasts for two to four years, depending upon the educational qualifications of the student. An articulated clerk must pass the necessary examinations prescribed by The Law Society and, unless he has been a barrister or is a law graduate of a university, he is generally required to attend a course of studies at a recognised law school. Once a solicitor is qualified, he 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 he has been granted exemption from nine months' training) 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 can begin his professional career.

In Northern Ireland 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

Legal aid is provided for people of limited means to pay for the cost of advice and assistance and for legal representation in court proceedings. Lawyers' costs and the expenses of litigation are paid out of a fund provided by the State. The fund is entitled to be reimbursed from contributions which assisted people may have to pay according to their means and costs, damages re-

covered from legally aided people's opponents in litigation and a government grant.

Advice and Assistance

Where court proceedings are not involved, people with limited means can obtain help from a solicitor on any legal matter for little or no cost. This includes giving advice, writing letters, drafting wills and obtaining opinions from a barrister. A solicitor may act for a client until his costs and expenses reach a total of £25, but authority may be obtained for this limit to be exceeded. A person seeking help has to give the solicitor brief details about his income and savings to show that he comes within the financial limits allowed by the scheme. The income limit laid down by the scheme is reviewed at least annually.

In some urban areas law centres exist to provide free legal advice; all have at least one full-time salaried lawyer and most employ community workers. There are also voluntary legal advice centres in many parts of the country, often linked with Citizens' Advice Bureaux.

Aid in Civil Proceedings

Legal aid is available to people whose disposable incomes and disposable capital do not exceed certain prescribed amounts,¹ 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 of any contribution. As in the case of legal advice and assistance, the qualifying income limits for aid are reviewed at least once a year.

The civil legal aid schemes are run by The Law Society, The Law Society of 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.

An applicant for legal aid must show that he has reasonable grounds for taking or defending the proceedings. If his application is successful, he is entitled to select from a panel a solicitor (who, if necessary, instructs counsel), and the case is then conducted in the ordinary way, except that no money passes between the assisted person and his 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. Local committees have the right to refuse assistance if it appears unreasonable that the applicant should receive it in the particular circumstances of a case; both 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 in proceedings in administrative tribunals.

Aid in Criminal Proceedings

In criminal proceedings in England and Wales a legal aid order may be made by the court concerned if it appears to be in the interests of justice and that a defendant's means are such that he requires financial help in meeting the costs of the proceedings in which he is involved. An order must be made when a person is committed for trial on a charge of murder or applies for leave to appeal from the Court of Appeal (Criminal Division) or the Courts Martial Appeal Court to the House of Lords. No person can be given a custodial sentence for the first time unless he is legally represented, or has been refused, or has failed to apply for, legal aid after having been informed of his right to do so.

¹ 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 for which a person may reasonably provide out of income, and deductions for the value of a person's house, furniture and other household effects from his capital.

Voluntary duty solicitor schemes at some magistrates' courts provide 'stand-by' 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 such aspects of the civil and criminal law as may be referred to them by the appropriate minister. The Criminal Law Revision Committee has produced 12 reports, ten recommending legislation, of which nine have been wholly or partly enacted.

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 in relation to the law of Scotland, reports to the Lord Advocate. The work of the two commissions has led to changes in many areas of the law, the repeal of over 500 obsolete Acts and the pruning of the contents of more than 1,000 others.

EXPENDITURE

TABLE 6: Public Expenditure on Justice and Law in the United Kingdom

	<i>£ million</i>				
	1951-52	1961-62	1971-72	1973-74	1974-75
Police	73	156	474	585	742
Prisons	7	23	84	123	156
Legal aid	—	4	23	37	37
Probation and after-care	} 8	} 23	17	26	33
Parliament and law courts			69	101	113
TOTAL	88	206	667	872	1,081
<i>of which capital expenditure</i>	8	16	53	88	94

Source: *Social Trends 1975*

5 Defence

The decisions taken in the 1974 Defence Review, which aimed at reducing defence costs as a proportion of national resources while maintaining a modern and effective defence system, continue to form the basis of Britain's defence policy. As a result of the review, completed in early 1975 following consultations with Britain's allies, defence forces are being concentrated on those areas in which a British contribution to collective defence will be most effective in ensuring the nation's own security and that of its allies. Thus the North Atlantic Treaty Organisation (NATO) remains the first and over-riding charge on Britain's defence resources, and Britain is withdrawing from its non-NATO commitments wherever this is consistent with its fundamental military and political obligations. At the same time, general purpose forces are being maintained as insurance against the unforeseen.

Reductions in planned defence expenditure for the period 1977/78-1979/80 were announced in February and July 1976 as part of the overall reductions in public expenditure programmes (see p. 193). The savings will come mainly from those areas of the support structure not directly associated with front-line units and from rephasing the works programme. They will not cause any reductions in Britain's front-line forces committed to NATO.

POLICY

Europe

Britain's basic security depends on the strength of the North Atlantic Alliance, and it is to NATO that by far the greater part of Britain's military forces is committed. Britain makes a major contribution to the full range of deterrent capabilities, both conventional and nuclear, required to maintain NATO's defensive posture. Within NATO, Britain 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 nine 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, logistics and, most importantly, the procurement of equipment, make an important contribution towards the strength of the Alliance by increasing co-operation among its members. In addition, NATO is pursuing a proposal, first put forward in the Eurogroup, to establish a 'two-way' street' in defence procurement between Europe and North America. Britain also participates in the independent European Programme Group of all European members of the Alliance; the group has been set up to explore the potential for extending co-operation among European countries in the production of defence equipment and for co-ordinating the European end of the 'two-way street'.

Britain is playing a major part in the efforts to reduce tension and achieve more lasting peace in Europe, and is working to ensure that the agreements with the Soviet Union and Eastern European countries on security and co-operation in Europe, concluded in August 1975, will contribute to increased stability and improved relations. It is also helping to achieve progress in the negotiations for mutual and balanced force reductions in Central Europe.

Beyond Europe

Britain is a member of the Central Treaty Organisation (CENTO) and the South-East Asia Treaty Organisation¹ (SEATO) and participates with Australia, New Zealand, Malaysia and Singapore in the Five-Power defence arrangements in Malaysia and Singapore. Britain is also responsible for the defence and internal security of its remaining dependencies. In addition, the armed forces continue to give assistance to communities overseas, particularly in such activities as disaster relief and development work.

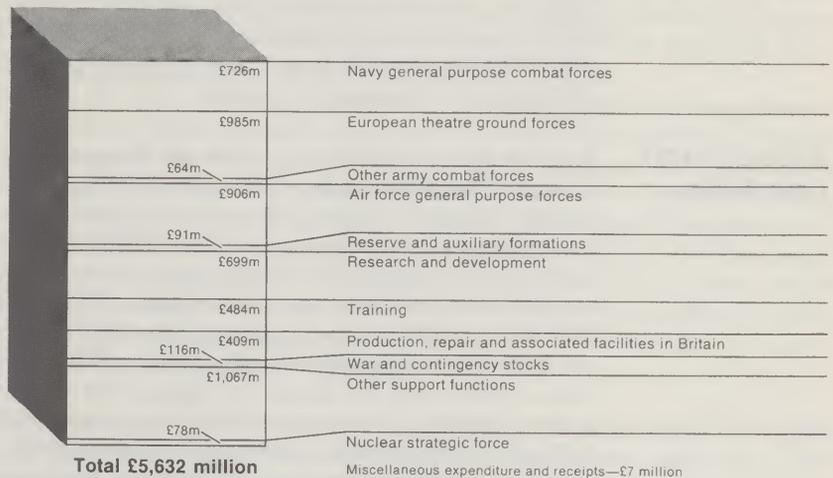
United Nations and other International Organisations

Britain also plays an active part in the UN and other international bodies working to eliminate the sources of tension and conflict between nations and to promote arms control and disarmament. It supports the peacekeeping efforts of the United Nations—supplying the largest national contingent to the UN Peace-Keeping Force in Cyprus. Britain is a frequent contributor to debates in the Conference of the Committee on Disarmament and has played a leading part in strengthening the regime of non-proliferation of nuclear weapons, through the International Atomic Energy Agency and the Review Conference of the Non-Proliferation Treaty.

PLANNING AND CONTROL

Supreme responsibility for national defence rests with the Prime Minister and the Cabinet, who are responsible to Parliament. The formulation of defence policy is the responsibility of the Secretary of State for Defence. In recent years the emphasis in defence organisation has been on increased central

Functional analysis of defence expenditure 1976-77



policy control and the co-ordinated planning of the defence effort as a whole. The Ministry of Defence (see p. 46) ensures effective co-ordination of policy and administration concerning the Services. The Secretary of State 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 Chief of Personnel and Logistics, the Chief Scientific Adviser, the Chief Executive of the Procurement Execu-

¹ The South East Asia Treaty Organisation is to be phased out by 1977, but the Treaty itself will remain.

tive and the Permanent Under-Secretary of State for Defence, form the Defence Council, which deals with major aspects of defence policy under the chairmanship of the Secretary of State. The Chiefs of Staff Committee, comprising the Chief of the Defence Staff as chairman and the Chiefs of Staff of the three Services, 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.

Expenditure

Information about defence policy and the armed forces is provided in an annual *Statement on the Defence Estimates* (Cmnd. 6432 in 1976, published in March). The defence estimates for 1976-77 totalled £5,632 million, which represents about 5.5 per cent of the estimated gross national product. Of the total expenditure £2,566 million (45 per cent) is on personnel (pay, allowances, pensions), £1,990 million (36 per cent) on equipment and the remaining £1,076 million (19 per cent) on buildings and miscellaneous stores and services. (See also diagram on p. 109.)

DEPLOYMENT

NATO Strategy

The basis of the present NATO strategy of flexible response, which retains the principle of forward defence, is that credible deterrence of military aggression of all kinds is essential. While NATO must be ready to use nuclear weapons if necessary, its conventional forces must be maintained to enable it to respond to aggression at a variety of levels, the level of response being that which enables NATO to restore the territorial and maritime integrity of the Alliance and thereby to gain time for negotiations to end a conflict. The strategy requires a comprehensive range of mobile and well-equipped conventional forces and tactical and strategic nuclear weapons.

Britain's NATO Contribution

Britain makes a major contribution to the forces required by NATO's present strategy. The British *Polaris* force makes a unique contribution to NATO's strategic 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 RAF Germany are deployed in the Federal Republic of Germany and there is an independent brigade in Berlin. BAOR is organised as a corps of three divisions with five armoured brigades, one mechanised brigade and two artillery brigades. (The corps is being reorganised, involving the abolition of the brigade command level, and by 1979 will comprise four new-style armoured divisions, an artillery division, and a new infantry formation.) Its peace-time strength of around 55,000 would be more than doubled on mobilisation from Britain's reserves (see p. 115). Virtually all the RAF's combat and combat support aircraft are now allocated to NATO. Royal Air Force Germany is a tactical air force including strike/attack, reconnaissance, close support and air-defence aircraft. In addition, combat units based in the United Kingdom provide an important part of NATO's mobile reinforcement capability. These include the ground elements of the United Kingdom Mobile Force, and the British contribution to the Allied Command Europe Mobile Force (Land). 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).

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.

Outside NATO

Britain continues to maintain forces in certain dependencies, such as Hong Kong, Gibraltar, Belize, and the Falkland Islands and also at the sovereign bases in Cyprus. The forces stationed in Malta are to be withdrawn by 1979. In the Indian Ocean and the Caribbean, occasional deployments of British naval vessels will continue to be made. In Malaysia, British forces make a small contribution to the integrated air defence system of the Five-Power defence arrangements (see p. 109).

THE ARMED FORCES

Service Organisation

Britain's armed forces consist of the Royal Navy and Royal Marines, the Army and the Royal Air Force.

The Royal Navy has four main arms: the Naval General Service, which mans and maintains the surface fleet; the Fleet Air Arm; the Submarine Service; and the Royal Marines, who primarily provide an amphibious striking force.

The Army is organised into some 30 arms and services which include the Guards division and divisions of infantry, the Royal Armoured Corps, the Royal Regiment of Artillery, the Household Cavalry, the Corps of Royal Engineers, the Royal Electrical and Mechanical Engineers, the Royal Corps of Signals, the Royal Corps of Transport, the Army Air Corps, the Royal Army Ordnance Corps and the Royal Army Education Corps.

The Royal Air Force is organised in commands, on a functional basis at home and on a geographical basis overseas. These comprise Strike, Training and Support Commands (which will merge in 1977) and Royal Air Force Germany. The Royal Navy has a unified sea command, Commander-in-Chief, Fleet; shore commands have been reorganised under a single Commander-in-Chief, Naval Home Command, Portsmouth, with subordinate area commands based at Plymouth, Chatham and Rosyth. At home the Army is under a single command, United Kingdom Land Forces; overseas commands are British Army of the Rhine, Near East Land Forces, Land Forces Hong Kong, and British Forces Malta and Gibraltar.

Women's Services

The three women's Services, the Women's Royal Naval Service (WRNS), the Women's Royal Army Corps (WRAC) and the Women's Royal Air Force (WRAF), 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.

Manpower

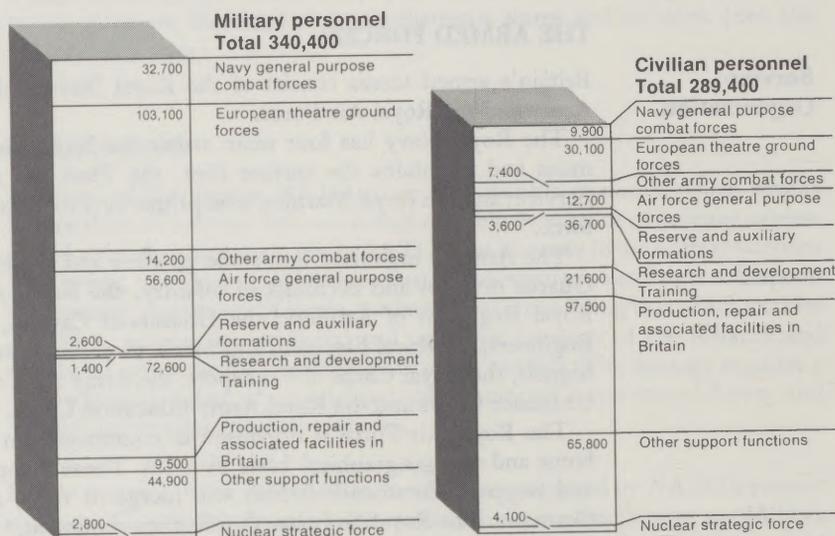
Britain's armed forces excluding non-United Kingdom personnel totalled 338,500 on 1st January 1976, 75,900 in the Royal Navy and Royal Marines, 170,900 in the Army and 91,700 in the Royal Air Force. The forecast total for 1st April 1977 is 327,000. Recruitment to the armed forces in 1975-76 totalled 46,900, an increase of 4,700 on the previous year. The average number of civilian staff expected to be employed by the Ministry of Defence during

1976-77 is 289,400. A functional analysis of personnel is shown in the diagram below.

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 of all three Services are committed for only a minimum period of productive service (about three years) 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. Entry to commissioned

Functional analysis of defence personnel 1976-77



Notes: 1 The above are average strengths and include locally enlisted personnel
 2 Civilian personnel comprise 138,100 non-industrial staff and 151,300 industrial staff

ranks is on the basis of educational and other qualifications (General Certificate of Education O and A level and their equivalents or degrees): all three Services have schemes for university cadetships which enable young men to take a degree before commencing their training.

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 are encouraged to study for educational qualifications, all three Services providing extensive facilities for the consolidation and development of their personnel's education. Trade and technical training, though primarily designed for Service purposes, leads for about half the total number of servicemen to nationally recognised qualifications including qualification for membership of trade unions.

Service technical training is highly valued in industry, which is a significant advantage on return to civilian life. To assist such resettlement the Services provide an advisory service, familiarisation attachments to civilian organisations and, for those without technical qualifications, 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 provide mid-career officers with training for posts involving inter-Service staff work. Specially selected and more senior officers from the Services, the Civil Service, and from the Commonwealth, the United States, and allied European countries attend the Royal College of Defence Studies (formerly the Imperial Defence College) in London, which provides the wider background necessary for senior posts in the direction of defence.

Considerable operational training is done through joint-Service and inter-allied exercises. All three Services provide training facilities for the armed forces of allied and Commonwealth countries.

COMBAT FORCES Combat forces are functionally divided into the nuclear strategic force (costing an estimated £78 million in 1976-77), Royal Navy general purpose combat forces (£726 million), European theatre ground forces (£985 million), other Army combat forces (£64 million) and Royal Air Force general purpose forces (£906 million).

Nuclear Strategic Force The British contribution to NATO's strategic deterrent is provided by the Royal Navy's force of four *Polaris* nuclear submarines—*Resolution*, *Repulse*, *Renown* and *Revenge*. Each has indefinite underwater cruising range and is equipped with 16 *Polaris* missiles with a range of about 2,800 miles (4,506 km) and carrying thermonuclear warheads.

Royal Navy General Purpose Combat Forces The naval general purpose combat forces comprise amphibious and naval air forces, submarines (excluding the *Polaris* force), helicopter-cruisers, destroyers, frigates, mine counter-measures forces and support and other ships.

Equipment The aircraft carrier *Ark Royal* operates *Phantom* and *Buccaneer* strike aircraft, *Gannet* airborne early warning aircraft and *Sea King* anti-submarine helicopters. Amphibious forces are provided by the assault ships *Fearless* and *Intrepid* (only one of which is operational at any time), while the anti-submarine warfare carrier *Hermes* has a secondary role as a commando ship. The command-helicopter-cruisers *Blake* and *Tiger* also carry *Sea King* helicopters and are responsible for directing and controlling naval forces. There are also seven County class guided missile destroyers equipped with *Seaslug* and *Seacat* surface-to-air missile systems; four of them have also been fitted with the *Exocet* surface-to-surface guided missile system. The Type 82 guided missile destroyer *Bristol* is equipped with the *Seadart* area air defence missile system and the *Ikara* anti-submarine guided weapon system. *Sheffield*, first of the Type 42 *Seadart* destroyers, and four of the Amazon class Type 21 frigates are in service, while another Type 42 destroyer will enter service in 1976. There are also 26 Leander class and seven Tribal class general purpose frigates, two anti-aircraft frigates, four aircraft-direction frigates, 15 anti-submarine frigates, and the diesel frigate *Mermaid*. The frigate classes are variously

armed with automatic guns, surface-to-air missile systems, underwater detection and anti-submarine weapons. Most carry the *Wasp* helicopter which is to be replaced, where appropriate, by the *Lynx*. The balance of the fleet is made up of the minesweeper and mine-hunter forces, patrol vessels, survey and trials ships. Under construction is the *Invincible*, the first of a new class of anti-submarine cruiser, which will be equipped to operate *Sea King* helicopters and will have the additional capability of operating maritime vertical-short-take-off-and-landing (V/STOL) aircraft. In addition six of the new Type 42 *Seadart* destroyers and three of the Type 21 frigates are being built. The first of a new class of frigate, Type 22, to be armed with the *Seawolf* surface-to-air missile system, is under construction, with a second on order and work is in hand on a new class of mine countermeasures vessel in glass-reinforced plastics.

Besides the four *Polaris* submarines (see above) there are eight nuclear-powered fleet submarines in service with a ninth due to enter service in 1976, together with 19 conventional patrol submarines. A further two nuclear submarines are under construction. Tankers and store ships of the Royal Fleet Auxiliary Service provide worldwide logistic support afloat.

European Theatre Ground Forces

The European theatre ground forces consist of the BAOR, and the forces stationed in Britain, the main elements of which have primary roles in support of NATO (see p. 110).

Other Army Combat Forces

Other Army combat forces comprise land forces stationed abroad to meet treaty commitments to Commonwealth and other countries (see p. 109).

Equipment

Armoured regiments are equipped with the *Chieftain* main battle tank and the *Swingfire* long-range anti-tank guided missile. A new series of tracked combat reconnaissance vehicles are in service: the *Scorpion* and the *Scimitar*, mounting respectively a 76-mm and a 30-mm gun, which will shortly be joined by the *Striker*, carrying the *Swingfire* anti-tank missile. The primary tracked armoured personnel carriers used by mechanised infantry battalions are the FV 432, some of which are fitted with 81-mm mortars or *Wombat* 120-mm anti-tank guns. Artillery units are equipped with the *Abbot* 105-mm gun, 155-mm and 175-mm self-propelled guns, and Field Artillery Computer Equipment (FACE). Tactical nuclear support is provided by the *Lance* missile system (replacing the *Honest John*) and the 203-mm self-propelled howitzer.

Air defence is provided by the *Rapier* low-level surface-to-air missile system (replacing the *Thunderbird* mobile surface-to-air missile) and the L40/70 gun.

Royal Air Force General Purpose Forces

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

Equipment

Lightning and *Phantom* FG1 and FGR2 aircraft, together with *Bloodhound*, *Tigercat* and *Rapier* surface-to-air missiles, are employed in air defence. Reporting and control are provided by the computerised *Linesman* system, and a number of *Shackletons* have been converted to provide airborne early warning over the sea. *Jaguars*, *Vulcans* and *Buccaneers* operate in the strike/attack role. The primary role of some of the strike/attack and air defence aircraft is the shore-based protection of naval forces at sea. *Vulcans*, *Canberras* and *Phantom* FGR2s are employed in the reconnaissance role; *Harrier*

V/STOL aircraft and *Jaguars* for offensive support (the *Harrier* also having a tactical reconnaissance capability); and *Nimrods* in maritime patrol and anti-submarine warfare. With the introduction of the *Jaguar* in the strike/attack, reconnaissance and offensive support roles which began in 1974, the *Phantom* FGR2s are being gradually transferred to air defence, where they will largely replace the *Lightnings*.

Strategic transport support is provided by *VC10* aircraft. The *Hercules*, which also has a strategic capability, is used for tactical transport support over medium ranges. For short-range tasks the *Wessex* and *Puma* helicopters are available. A force of *Victor* tanker aircraft provides in-flight refuelling which gives added range and flexibility to operations of air defence, maritime strike and other 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. On 1st January 1976 regular reserves totalled 168,600 and volunteer reserves and auxiliary forces 68,700. Cadet forces, which make a significant contribution to recruitment to the regular forces, totalled 130,000.

Royal Navy

The Royal Navy regular reserve consists of various categories of former full-time officers and ratings liable to recall in emergency, including the Royal Fleet Reserve of men with recent experience of regular service. The volunteer reserves comprise the Royal Naval Reserve, with its associated women's reserve, and the Royal Marines Reserve. Both carry out regular part-time training, the former to man a number of operational minesweepers and support maritime and other headquarters, the latter to reinforce the regular corps and in particular the Royal Marine Commandos.

Army

The Army reserves comprise ex-regular servicemen (organised as the Regular Army Reserve of Officers, the Regular Reserve, the Long Term Reserve and the Army Pensioners) and the Territorial and Army Volunteer Reserve (TAVR).

The TAVR's primary role is to reinforce the ground forces committed to NATO and to assist in maintaining a secure United Kingdom base in support of the forces deployed in Europe. It consists of independent units, organised on a local basis with regular Army and permanent civilian staff, and sponsored units of specialists recruited on a country-wide basis. They are liable for call-up in an emergency. There are also a number of miscellaneous units (including university officer-training corps) and pools of individuals (known as Group B) which have a variety of functions.

Ulster Defence Regiment

The Ulster Defence Regiment is a locally recruited, part-time force designed to support the regular forces in their security tasks in Northern Ireland.

Royal Air Force

The Royal Air Force Reserve consists of former regular officers and personnel with a reserve liability, and the Royal Air Force Volunteer Reserve, which includes the university air squadrons. The Royal Auxiliary Air Force consists of maritime headquarter units which would support regular formations in an emergency.

CIVIL DEFENCE

Civil defence arrangements are principally based on the extended and adapted use of existing public services operated by nationalised industries, local authorities, police authorities and government departments. Supplementary effort from individual 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. A central point of recent policy has been to improve the preparedness of local government to meet a war emergency; there is much common ground between such planning and the preparations and organisation for a major peace-time emergency or national disaster. Activities have therefore also been directed towards creating a closer relationship in local planning for the different emergencies of peace and war.

Within an annual budget of £14.5 million emphasis is placed on a high standard 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, including 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, including aircraft, ships, ordnance, guided weapons and electronics, lies with the Procurement Executive within the Ministry of Defence. The Executive was set up in 1971 following a reorganisation of the departments responsible for defence and civil aerospace, the purpose of which was the establishment of a closer liaison between the Service users and the machinery for procurement, closer co-ordination with industry in the formulation of programmes, and stronger and more accountable management, so ensuring a co-ordinated and cost-effective approach.

**Research
and
Development**

The major part of research is undertaken by the Ministry of Defence's research and development establishments, but the Ministry also sponsors a substantial amount of research by industry and the universities. The research and development establishments have a very wide technological capability, which has civil as well as military applications: for example, support is given to civil aerospace projects such as *Concorde* and advanced aero-engines. 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 1976-77 the total cost of British equipment research and development is estimated at £702 million. The search for a more efficient use of these resources has caused attention to be concentrated on collaborative projects, which enable the cost of development and production to be shared with other countries. On occasions, 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 European countries is already extensive,

and may be expected to increase, particularly through the work of the Euro-group. The most important single project is the *Tornado* multi-role combat aircraft being developed by Britain, Italy and the Federal Republic of Germany; agreement on its production was reached in July 1976. A number of Anglo-French projects—the *Jaguar* aircraft, the *Martel* air-to-surface missile, the *Puma*, *Gazelle* and *Lynx* helicopters—are now in service. Britain, the Federal Republic of Germany and Italy are collaborating in the development of 155-mm towed and self-propelled howitzers, while Britain and the Federal Republic are studying the possible collaborative development of a future main battle tank. Britain and Belgium are partners in a programme for the development and production of a family of tracked combat reconnaissance vehicles.

Britain has also co-operated with Australia on the *Ikara* anti-submarine equipment.

Equipment collaboration also facilitates joint logistic support and training arrangements, like those being discussed between Britain and four other 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 the *Hawk* jet trainer, the *Rapier* low-level surface-to-air guided weapon system, the *Sea Wolf* short-range surface-to-air guided missile, navigation and attack systems for aircraft, radar, sonar and communications systems, the anti-submarine cruiser, a new range of logistic vehicles for battlefield support, a new type of tank armour, *Chobham Armour*, giving a high level of protection against all forms of attack, including guided weapons and the *Wisp* and *Wideye* remotely piloted helicopters.

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 1976-77 the value of exports of British defence equipment is expected to reach £700 million.

6 Social Welfare

STATE AND VOLUNTARY SERVICES

Central and local government are responsible for a wide range of health and social services. Central government is responsible directly for social security and the National Health Service which is administered by health authorities and boards acting as its agents. It has an indirect responsibility for many local authority services. Local authorities are directly responsible for education (see Chapter 7), housing (see Chapter 9) and personal social services (described in this chapter). They also have responsibility for environmental health. Public expenditure on health and personal social services is given on pp. 349-50.

The State services are complemented by those provided by voluntary organisations and by individual volunteers. Voluntary organisations, especially the churches, pioneered the development of the 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. Both 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 which often specialise by meeting particular needs. Both local authorities and voluntary agencies provide residential care for elderly, disabled, mentally ill and mentally handicapped people and for children.

Co-ordination of government interests in voluntary social service is the responsibility of the Home Office in England and Wales, the Scottish Office in Scotland and the Department of Health and Social Services in Northern Ireland. The Volunteer Centre, a national centre for information and research on voluntary work, was established in 1973 with the aid of a government grant. About 130 volunteer bureaux have been established to give advice locally.

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

The number of voluntary organisations in Britain runs into thousands; they range from national organisations to small individual local groups. Most organisations, however, 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 these functions.

Organisations concerned with personal and family problems include the voluntary 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; and the Samaritans, who help people who are near to committing suicide.

Community service of many kinds is given by young people, particularly those belonging to a number of national and local organisations, for example, the Young Volunteer Force Foundation, Community Service Volunteers, Task Force, Scouts, Girl Guides and school groups.

Voluntary service to the sick and disabled in general 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, but a number of societies exist to help people with particular disabilities and difficulties. Such societies, some of which are constituent members of the Central Council for the Disabled, 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.

Bodies working on a national scale 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 Work, the Young Men's Christian Association, the Young Women's Christian Association, the Society of Friends, 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.

The main voluntary body in England which aims to provide central links between voluntary organisations and official bodies concerned with social service is the National Council of Social Service, which brings together most of the principal voluntary agencies for consultation and joint action, either as a whole or in groups of those concerned with particular aspects, such as youth work. 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. The Citizens' Advice Bureaux, of which there are nearly 700, give explanation and advice to the citizen who is in doubt about his rights or who does not know about the State or voluntary services which could help him. There are law centres and housing advisory centres in some areas.

URBAN PROGRAMMES

An urban programme providing for government-aided local authority expenditure was launched in 1968 to assist areas of special social need, in particular to relieve problems resulting from overcrowding, inadequate housing and schools and other forms of deprivation. Total expenditure for the period 1968-69 to 1975-76 was about £79 million. Projects approved include advice and information centres, community centres, help for the homeless, literacy schemes, play centres, projects of special help to ethnic minorities, summer holiday schemes for deprived children and schemes to assist maltreated women ('battered wives'). Many projects are run by voluntary organisations.

An experiment in community development is also being undertaken by the Government in association with certain local authorities and universities in selected small areas mainly situated in declining inner city districts. Local projects comprise action and research teams who analyse the needs of their areas, promote experimental programmes and make recommendations for changes in policy and administration where appropriate. The experiment is expected to end in March 1978.

Under the European Community anti-poverty programme, seven pilot projects are being set up in Britain.

SOCIAL SECURITY

National insurance, industrial injuries insurance, family allowances, family income supplement, supplementary benefits, and war pensions constitute a comprehensive system of social security.

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 the first five of these schemes are administered by the Department of Health and Social Services which contains the Supplementary Benefits Commission for Northern Ireland. 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 tribunals.

Although the development of public provision for social security in Britain can be traced back for several centuries (one major early statute was the 1601 Poor Relief Act in England and Wales), the modern social security system is a creation of the twentieth century. In 1908 non-contributory old age pensions were introduced and the first contributory pensions for old people, widows and orphans came in 1926. A contributory scheme of health and unemployment insurance was passed by Parliament in 1911, unemployment insurance being extended in 1920 to cover the great majority of employees. Although Britain's social security provision was among the best in the world by the beginning of the second world war, it lacked co-ordination because of its piecemeal development and not everyone came within its scope.

In the immediate postwar years a series of Acts established the main features of a comprehensive social security system which became operative (together with a National Health Service) in July 1948. In 1961 an earnings-related supplement to retirement pension was started, based on graduated contributions, and this principle was extended in 1966 to unemployment and sickness benefit; in April 1975 the supplement became payable with maternity allowance. In the 1970s new benefits have included pensions for widows aged between 40 and 50 when widowed or when entitlement to widowed mother's allowance ends, and old persons' pensions payable to persons aged 80 and over who have not qualified for a national insurance retirement pension.

Increased provision has been made for sick and disabled people; in 1971 an invalidity pension was introduced for those who had received sickness benefit for 28 weeks with an additional invalidity allowance for people becoming sick more than five years before retirement age. This was followed by attendance allowances for very severely disabled people. Further benefits became payable in 1975 and 1976 to help disabled people and those caring for them. Statutory provision for the war disabled goes back to the end of the sixteenth century, but the main lines of the present war pensions scheme were laid down during

the first world war with further developments during and after the second world war.

The Social Security Pensions Act 1975 introduces, from April 1978, a new State pension scheme under which retirement, invalidity and widows' pensions will be earnings-related and fully protected against inflation. The new pension will have two parts—basic pension (equivalent to the present flat rate pension) and an additional pension. Rights to additional pension will build up year by year over a 20-year maturity period, finally reaching 25 per cent of a person's earnings between a lower earnings limit (equivalent to the basic pension) and an upper earnings limit of seven times that amount. Women will receive equal benefits as men with the same earnings and rights to basic pension will be safeguarded during years of home responsibility. A married man with average earnings will qualify for a combined pension for himself and his wife worth more than half his pay. Employers providing occupational pension schemes will be able to contract their employees out of part of the State scheme and pay a lower contribution to it. Pension rights earned under the former graduated scheme will be protected against inflation for the first time. The same provisions will apply to Northern Ireland under the Social Security Pensions (Northern Ireland) Order 1975.

Family allowances and social security benefits or allowances, other than 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. Family income supplement, attendance allowances and war disablement pensions are not taxable.

Types of Benefit

There are three kinds of social security benefit: those paid in return for contributions to the social security scheme (for example, retirement pension, sickness and unemployment benefit, maternity benefits, widows' benefits and industrial injuries benefits); non-contributory benefits paid to certain groups of people regardless of income (for example, family allowances, attendance allowances and old persons' pensions); and supplementary benefit (also non-contributory) for people not in full-time work with incomes below specified levels. Family income supplement is payable to low wage earners with children to support.

NATIONAL INSURANCE

The Social Security Acts apply, in general, to everyone over the age of 16 living in Britain. There are similar schemes in the Isle of Man.

The national insurance scheme provides benefits in specified contingencies where contribution conditions have been fulfilled. The benefits are paid for by contributions from individuals, by contributions of employers in respect of their employees, and by a contribution made by the Treasury.

Contributors and Contributions

There are four classes of national insurance contribution. Class 1 is paid by employed people, Classes 2 and 4 by self-employed people and Class 3 by voluntary contributors. The Class 1 contribution (which includes a small contribution towards the cost of the National Health Service) is earnings-related and amounts to 5.75 per cent of earnings up to £95 per week provided that these are at least £13 per week. The employer's contribution per employee is 8.75 per cent over the same earnings range. Married women and most widows (if employed) can pay full contributions or may opt to pay 2 per cent. If they pay the lower contribution they rely on their husband's (or late husband's) insurance for maternity grant, retirement pension (at a lower rate), and death grant; the right to choose paying lower contributions is to be phased out

gradually from April 1977. The contributions are deducted at source through the 'Pay As You Earn' income tax system.

The self-employed pay a flat-rate Class 2 contribution of £2.41 a week (£2.20 for women) and in addition, may have to pay a Class 4 contribution amounting to 8 per cent of net profits or gains between £1,600 and £4,900 a year. Self-employed married women and widows must pay any Class 4 contribution due but they have a choice whether or not to pay a Class 2 contribution.

TABLE 7: Examples of Weekly Contributions

Weekly earnings	Employee's	Employer's
£	£	£
13	0.76	1.16
25	1.45	2.21
50	2.89	4.40
75	4.33	6.58
95 or more	5.46	8.31

There is also a Class 3 flat-rate contribution of £2.10 paid voluntarily by employed earners or others who wish to safeguard entitlement to retirement pension and some other benefits. Class 2 and Class 3 contributions are paid by means of stamps bought from a post office which are affixed to a national insurance contribution card or by direct debit of a bank or National Giro account.

Certain people do not have to pay contributions. In general an employed person ceases to be liable for contributions at the age of 70 for a man and 65 for a woman, or when he or she retires after reaching pensionable age (65 for a man and 60 for a woman). The employer, however, remains liable for contributions when the employee's earnings reach the lower earnings limit of £13. Self-employed people with earnings below £775 a year do not have to pay Class 2 contributions.

The graduated pension scheme initiated in April 1961 ended in April 1975 but entitlement to pension on the basis of contributions paid remains.

Benefits

Class 1 contributions cover the employee for retirement pension, unemployment and sickness benefit, invalidity benefit, widow's benefits, maternity benefits, death grant, child's special allowance and industrial injury and disablement benefit. All these benefits with the exception of unemployment, industrial injury and disablement benefits are also covered by Class 2 contributions paid by self-employed people. Class 3 contributors may receive retirement pension, widow's benefits, maternity grant, death grant and child's special allowance.

For most of the benefits there are two contribution conditions. First, before benefit can be paid at all, certain contributions must actually have been paid since entry into insurance; 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 who does not become entitled to a widow's pension at widowhood or when her children have grown up, to qualify for sickness or unemployment 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 national insurance benefits (payable weekly) are summarised below. The rates quoted are those effective from November 1976.

- Retirement pension* Retirement pension is £15.30 for a single insured person and £24.50 for a married couple, payable to men over the age of 65 and women over 60 when they cease working full-time. The pension is paid to men over 70 and women over 65 even if they continue to work. Retirement pensioners under the age of 70 (65 for women) have their pensions reduced in step with their earnings over specified amounts. An age addition of 25p is paid to pensioners over the age of 80. An earnings-related graduated pension is payable to people who contributed to the graduated pension scheme between 1961 and 1975. The maximum payable is £2.10 for men and £1.75 for women.
- Unemployment or Sickness Benefit* Unemployment or sickness benefit is £12.90 plus £8 for an adult dependant and £4.05 for each child inclusive of family allowances (see p. 125). Married women under 60 who pay full contributions receive £9.20. Unemployment benefit is payable for up to a year in any one spell of unemployment (spells which are 13 weeks or less apart count as one spell) and sickness benefit is payable for 28 weeks. Earnings-related supplement (up to a maximum of £12.18 from January 1977) is calculated on reckonable weekly earnings in the relevant income tax year but it, together with the flat rate benefits, cannot exceed 85 per cent of the average weekly earnings on which the supplement is based. The supplement is payable for a maximum of six months from the 13th day of a period of interruption of employment.
- Invalidity Pension* Invalidity pension is £15.30 plus £9.20 for a wife and £7.45 for a child inclusive of family allowances and is payable when sickness benefit ends if the beneficiary is still incapable of work. An invalidity allowance (ranging from £1 to £3.20 according to age) is paid with the pension to those people who become sick more than five years before retirement age.
- Widow's Allowance* Widow's allowance is £21.40 plus £7.45 for each child inclusive of family allowances. It is payable for the first 26 weeks of widowhood and there may be an earnings-related addition calculated on the husband's reckonable earnings in the relevant tax year.
- Widowed Mother's Allowance* Widowed mother's allowance is £15.30 plus £7.45 for each child inclusive of family allowances, payable when widow's allowance ends if the widow has dependent children.
- Widow's Pension* Widow's pension is £15.30 if the widow is over the age of 50 when her husband dies or when widowed mother's allowance ends. It reduces on a scale to £4.59 for widows aged 40 at that time. This continues until the widow has reached pensionable age and retires provided that she does not remarry before that age. On retirement she receives a pension not lower than her widow's pension. All widows' benefits are payable regardless of a widow's earnings.
- Maternity Grant* Maternity grant is £25 for each living child born.
- Maternity Allowance* Maternity allowance is £12.90 payable normally for 18 weeks (11 weeks before the expected week of confinement and 6 weeks after this or the actual confinement). The allowance is payable only to working women who have paid full Class 1 or Class 2 national insurance contributions. An earnings-related supplement may be payable in addition.
- Death Grant* A maximum of £30 is payable on death. Less is payable for a child.

Child's Special Allowance

Child's special allowance is £7.45 inclusive of family allowances. It is payable to a woman whose marriage has been dissolved or annulled and who has not re-married, if her former husband dies and if she has a child to whose support he was contributing before he died.

Industrial Injuries Benefits

The industrial injuries insurance scheme provides benefits (from the national insurance fund) for personal injuries caused by accidents arising from employment and for prescribed diseases due to the nature of employment. It covers practically everyone liable to pay Class 1 contributions and certain others.

Injury Benefit

Injury benefit for an adult is £15.65 a week plus £8 for an adult dependant and £4.05 for each child inclusive of family allowances. It is paid when the insured person is incapable of work as a result of an industrial accident or prescribed disease, 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 any earnings-related supplement (see p. 123) to which he is entitled.

Disablement Benefit

Disablement benefit may be paid (but not at the same time as injury benefit) when, as the result of 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 £25 a week for 100 per cent disablement to £5 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 £15.30; constant attendance allowance of up to £10 weekly normally, or a special rate of £15 or £20 a week in exceptionally severe cases; an allowance of £10 a week for exceptionally severe disablement; a special hardship allowance of up to £10 for a person who is unfit to return to his regular job or to do work of an equivalent standard; and hospital treatment allowance which raises the benefit to that for a 100 per cent assessment during hospital treatment for the industrial disability. Increases of disablement benefit for dependants are payable with unemployability supplement. People receiving unemployability supplement may also receive an additional allowance similar to invalidity allowance.

Death Benefits for Dependants

If the accident or disease results in the insured person's death, death benefit may be paid to his or her dependants.

For a widow a pension of £21.40 a week is payable for the first 26 weeks of widowhood. In addition she receives any earnings-related supplement that would have been paid had she claimed widow's allowance under the main national insurance scheme. Thereafter, the widow can receive a pension of £15.85 a week if she was aged 50 at the date of her husband's death, or has dependent children or other special needs; otherwise she receives £4.59 a week. If she had been living apart from her husband, a pension is payable only if she was receiving or entitled to receive at least £0.25 a week for her maintenance from him.

In addition allowances are paid for children under the family allowances age limits. For widows they are £7.45 for each child inclusive of family allowances. Other beneficiaries receive £4.05.

Certain other dependants, such as parents and other relatives, may be entitled to pensions, allowances or gratuities.

NON-CONTRIBUTORY BENEFITS**Family Allowances**

Family allowances are provided in Great Britain under the Family Allowances Act 1965 and in Northern Ireland by separate legislation. They are paid in Great Britain to about 4.4 million families and in Northern Ireland to some 142,000 families. The rate of the allowance is £1.50 for each child in a family other than the first. They are payable to families with two or more children who are under minimum school-leaving age (or under 19 and either in full-time education or apprentices with low earnings).

Allowances are paid from the Treasury and their object is to benefit the family as a whole; they may be drawn by the wife or husband but they belong in law to the wife who must claim them. Although the allowances are non-contributory, there are certain residence conditions.

Child Benefit

In April, family allowances will be replaced by a child benefit payable to the mother for all children in a family; it will be £1 for the first child and £1.50 for every other child in the family. Benefit for the first child of one-parent families is £1.50. Income tax allowances for children will be phased out.

Guardian's Allowance

Guardian's allowance is a weekly benefit of £7.45 payable to a person who has in his or her family a child who has lost both parents, one of whom must have been born a British subject in Britain or the Isle of Man or must have satisfied certain residence conditions.

Old Persons' Pensions

A pension of £5.60 for a married woman and £9.20 for any other person (including an age addition of £0.25) is payable (subject to conditions of residence in Britain) to people over 80 years old who were excluded from the national insurance scheme when it started or who failed to qualify for a retirement pension or qualified for one at a lower rate.

Benefits for Disabled People

An attendance allowance of £12.20 is paid to severely disabled people requiring a great deal of attention by day and at night. A lower rate of £8.15 may be paid to those who need help either by day or at night. A non-contributory invalidity pension of £9.20 is payable to people of working age unable to work and not qualifying for the national insurance invalidity pension; this will be extended in November 1977 to disabled housewives who are incapable of work and unable to perform their normal household tasks.

In July 1976 a weekly invalid care allowance of £9.20 became payable to people who cannot go out to work because they are caring for a severely disabled relative receiving an attendance allowance. In addition the Government is introducing (over a three-year period from 1976) a mobility allowance of £5 a week for severely disabled people (aged between five and pension age) who are unable, or virtually unable, to walk and are likely to remain so for at least 12 months. The allowance aims to assist all such severely disabled people in their transport costs. This is unlike the previous system when mobility help depended on the use of a motorised vehicle.

SUPPLEMENTARY BENEFITS

The Supplementary Benefit Act 1966 provides for a scheme of supplementary benefits which is administered by a Supplementary Benefits Commission within the Department of Health and Social Security. There is a similar commission in Northern Ireland.

Every person in Great Britain aged 16 or over who is not in full-time work, attending school or involved in a trade dispute and whose resources are insufficient to meet his requirements, as laid down by Parliament, is entitled to supplementary benefit. 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 requirements exceed his available resources, both being defined by rules laid down by the Act. The calculation of requirements 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. For the old and certain other long-term cases a higher long-term scale rate is payable. Additions are payable for special dietary or heating requirements. A single payment of benefit may be made to meet an exceptional need. A claimant's available resources include both income, subject to some modifications, and capital (though a certain amount is disregarded); the main national insurance and industrial injuries benefits, family allowances, family income supplement and maintenance payments from a husband or the father of the claimant's children are taken into account in full.

The payment of a supplementary allowance in the case of an able-bodied person of working age may be conditional on registering for employment at a local office of the Employment Service Agency.

The Supplementary Benefits Commission also has a duty to influence people without a settled way of living to lead a more normal life. In Great Britain the commission provides temporary accommodation for them in 23 reception centres, two of which are administered by local authorities on behalf of the commission. For men who have been unemployed for long periods and who are receiving supplementary allowances, it runs 16 re-establishment centres, three of which have residential accommodation, where they are given help to fit them again for work.

FAMILY INCOME SUPPLEMENT

Family income supplement is a cash benefit for families (including single parents) with small incomes where the head of the family is in full-time work and 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 £39 a week where there is one child plus £4.50 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 £8.50 for a one-child family and this is increased by £0.50 for each additional child.

WAR PENSIONS AND RELATED SERVICES

Pensions and allowances for people disabled or bereaved through war or service in the Forces since the second world war are paid under Royal Warrants and other instruments administered by the Department of Health and Social Security.

The current basic pension for 100 per cent disablement for a private soldier is £25 a week, but the amount varies according to rank and 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 (£16.30 a week), constant attendance (up to £10 and, exceptionally, £20 a week), comforts (£2.15 or £4.30 a week), and lowered standard of occupation (up to £10 a week). An additional allowance of £5 or £10 according to the severity of the disablement is payable to war pensioners who are receiving constant attendance allowance at a rate above the normal maximum. An age allowance (between £1.80 and £5.50 a week) is payable to disablement 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 £19.80 a week, with additional allow-

ances for their children and, in certain cases, a rent allowance (up to £7.50 a week). There is an additional allowance of £1.95 for widows aged 65 which is increased to £3.90 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 which is available to help any who require advice or assistance.

Many voluntary associations and ex-Service organisations give financial aid and personal service to disabled ex-Service men and women and their families. The department's welfare officers work in close co-operation with these and statutory bodies.

SOCIAL SECURITY AGREEMENTS WITH OTHER COUNTRIES

The European Community Regulations on social security, framed to protect the benefit rights of people moving within the Community, apply to employed workers (and to pensioners who were employed workers) who are nationals of any of the Community countries. People covered by these regulations are entitled to benefit under the social security arrangements of any Community country, and Gibraltar, where they are working or visiting, on the same basis as nationals of that country. There are also bilateral reciprocal agreements between the United Kingdom and individual member states of the European Community which apply to self-employed and non-employed people who are outside the scope of the European Community Regulations. Reciprocal agreements on industrial injuries, family allowances and most national insurance benefits are in operation with Austria, Finland, Jersey and Guernsey, Norway, Spain, Sweden, Switzerland and Yugoslavia. Agreements with Cyprus, Israel, Malta, and Turkey cover industrial injuries and most national insurance benefits. With Australia and New Zealand there are agreements on family allowances and most national insurance benefits. There are limited agreements with Bermuda, Canada, Jamaica and the United States. The Isle of Man is party to most of the bilateral agreements with other countries and Jersey and Guernsey to a few; neither the nationals of these areas nor their social security schemes are covered by European Community Regulations. The social security and family allowance schemes of Great Britain and Northern Ireland operate as a single system.

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. 105), rent rebates and allowances (see p. 180), rate rebates (see p. 69), exemption from health service charges (see p. 130) and free school meals (see p. 147).

HEALTH AND PERSONAL SOCIAL SERVICES

The concern of the State with the nation's health is chiefly a development of the years since the passing of the Public Health Act of 1848. The second half of the nineteenth century was notable for the growth of the environmental or public health services, such as provision of pure water, sewerage, disposal of refuse and cleaning of streets, and the first half of the twentieth century for the development of publicly provided personal health services culminating in the introduction in 1948 of a comprehensive National Health Service available to residents and to visitors taken ill or meeting with an accident while in Britain. Reciprocal health agreements have been made with some other countries (see p. 135).

Scientific discoveries of importance to medicine and health, including the development of new drugs, and the improved services of the last 70 years, particularly in maternity and child health, school health services and school meals, are reflected in declining mortality rates and improved physique. The infant mortality rate has almost halved since the National Health Service was inaugurated; this and the maternal death rate are among the lowest in the world. The health of children has steadily improved, and deaths from such diseases as tuberculosis, poliomyelitis and diphtheria have fallen so markedly that they are no longer major health problems. As part of the general growth of facilities under the National Health Service, staffing has improved markedly. Since 1965, for example, the hospital medical staff in England, Wales and Scotland has increased by nearly 50 per cent and the nursing staff by over 40 per cent. The numbers of home nurses and health visitors have also increased by nearly 50 per cent and about 30 per cent respectively.

Although major advances have been made in the provision of health facilities, certain problems remain, notably regional disparities in health provision and a shortage of resources resulting from the need to restrain the growth in public expenditure. An additional problem is the high cost of technologically advanced equipment required for diagnosis and treatment. To help alleviate some of these difficulties the Government is allocating more funds to the less-favoured regions at the expense of those which have the best provision. Greater emphasis is being placed on preventive services and on the development of primary health care—the services provided by family doctors, dentists and ophthalmic practitioners, supplemented by the work of home nurses, midwives and health visitors. Cuts in capital expenditure are being made but reductions will not take place in services to patients. A continued rise in standards in general practice is expected as a result of increased vocational training schemes for family doctors, a development favoured by the medical profession.

A Royal Commission is considering the best use and management of the financial and manpower resources for the National Health Service.

HEALTH SERVICE ADMINISTRATION

The health ministers—the Secretary of State for Social Services in England and the Secretaries of State for Scotland, Wales and Northern Ireland—are responsible for all aspects of the health services in their respective countries.

The organisation responsible for administering these health services is three-tier in England and two-tier in Scotland, Wales and Northern Ireland. Within each of the four countries the health departments (the Department of Health and Social Security in England, the Scottish Home and Health Department, the Welsh Office and the Department of Health and Social Services in Northern Ireland) are responsible for strategic planning. Area health authorities in England and Wales, health boards in Scotland and health and social services boards in Northern Ireland are responsible for area planning and operational control of all health services in their area. In England only, 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 and 15 health boards in Scotland. They are all 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 and Wales have a duty to co-operate in order

to secure the best provision of services. This is done through joint planning arrangements 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.

Area authorities and health boards in Great Britain have discretion to determine the pattern of services best suited to their area but they 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 150,000 and 300,000, though some are considerably larger (in Scotland they may be much smaller in the remoter areas). In Scotland a Common Services Agency organises those services that can be provided most efficiently by one agency. A Central Services Agency performs similar functions in Northern Ireland.

The health authorities and boards consist of unpaid part-time members. The chairmen and members of the regional authorities and health boards, and the chairmen of the area health authorities are appointed by the health minister concerned after consultation with professional, local authority, university and other interests. Two-thirds of the members of the area health authorities are appointed by the regional health authorities in England and the health ministers in Wales; these include at least one university nominee and some professional members who work within the service. The remainder are appointed by the corresponding local authorities. Area authorities in areas containing a teaching hospital are known as area authorities (teaching) and in addition to two university nominees contain at least two members with teaching hospital experience. In Scotland all board members are appointed by the health minister.

Medical and dental schools are not under the control of the health ministers but it is their responsibility to provide hospital clinical facilities for the training of medical students. The universities are responsible for teaching.

There is statutory provision for professional advisory committees and 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 the Secretary of State.

Public representation in the service for England and Wales is provided by district 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 this capacity.

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

The three Health Service Commissioners (for England, for Scotland and for Wales) are statutory independent officers whose function is to investigate complaints from members of the public that they have suffered injustice or hardship as a result of failure in a service provided by a health authority, or failure to provide a service which it was its duty to provide, or maladministration. Health

authorities include regional health authorities, area health authorities, boards of governors and family practitioner committees. Before a commissioner can investigate, the complaint must have been brought to the attention of the authority concerned, and an adequate opportunity given for it to investigate and reply. Matters which are outside his jurisdiction include action taken solely in the exercise of clinical judgment and the action of general practitioners and dentists in connection with medical and dental services; these, however, may be investigated under a separate procedure.

The commissioners report annually to the respective Secretaries of State who lay the reports before each House of Parliament. The terms of reference of the Select Committee on the Parliamentary Commissioner for Administration (see p. 38), who also holds the three posts of Health Service Commissioner, have been expanded to cover these reports.

In Northern Ireland the Commissioner for Complaints (see p. 70) investigates complaints concerning the health service, but not the actions of medical practitioners or other professions supplementary to medicine.

Finance

Public expenditure on the health services in Great Britain was about £5,458 million in 1975-76. Most of the cost falls on the Treasury while the rest is met from the national health service contribution paid with the national insurance contribution and charges paid by people using certain services. There are charges for medical prescriptions (except for 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, and families with very low incomes, including those receiving supplementary benefits and family income supplement); for treatment in the general dental service (but not for examination only or for treatment given to people under 21 years or women who are pregnant or have borne a child in the past year); for dentures (except for children under 16 or still at school, and women who are pregnant or have borne a child in the past year); for spectacles (except children's standard spectacles); and for certain other articles. Certain low income groups are exempt from dental and optical charges (those receiving supplementary benefit or family income supplement and those receiving free prescriptions or welfare foods). A limited amount of accommodation may be made available for hospital patients wishing for privacy, provided that it is not needed on medical grounds for non-paying patients; a charge for part of the cost of the accommodation is made. 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. The Government is, however, planning to phase out private pay beds in National Health Service hospitals.

Hospital medical staffs are either full-time and salaried, or part-time; part-time medical officers are usually paid on a sessional basis and are free to accept private patients. General medical practitioners in the National Health Service are paid according to the number of patients on their list with adjustments to reflect differences in work and responsibility; certain practice expenses are also directly reimbursed.

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 basis 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, the front line of the personal health services, is in the hands of doctors, dentists, opticians and pharmacists working within the service as independent practitioners, and home nurses, midwives and health visitors employed by the health authorities.

Practitioner Services

The family practitioner services cover the services given to individuals by doctors, dentists, opticians and pharmacists of their own choice. They are administered by family practitioner committees established by the health authorities and boards. In Northern Ireland the family practitioner services are administered by the Central Services Agency.

Some 24,500 general medical practitioners (principals and assistants) in Great Britain take some part in the service. The maximum number of patients' names permitted to be on a family doctor's list is normally 3,500; the average number in Great Britain is about 2,400. In Northern Ireland there are some 740 general practitioners with about 2,100 patients each. Access to most other parts of the health service is obtained through the family doctor.

There are over 13,200 dentists taking part in the health service.

Some 1,000 ophthalmic medical practitioners and about 6,500 ophthalmic and dispensing opticians are engaged in the general ophthalmic services which provide for the testing of sight and provision of spectacles. Patients requiring treatment are dealt with through the hospital eye service.

There are about 13,000 retail establishments under contract to the National Health Service with responsibility for the dispensing of all prescriptions except for the small number dispensed by certain general medical practitioners and hospital pharmacies.

Home Nurses, Midwives and Health Visitors

Health authorities are under a duty to provide home nurses, midwives and health visitors, to meet the demand of patients. Home nurses attend to people needing nursing in their homes or elsewhere outside hospitals. Midwives assist the family doctor at home confinements (about 6 per cent of all confinements), and care for mothers and babies (whether born at home or in hospital) for about 10 days after the birth. Health visitors are concerned with the health of the household as a whole, and have an important part to play in health education and preventive measures. They work in close co-operation with general medical practitioners, the paediatric and geriatric wards of hospitals and social workers.

Group Practices and Health Centres

Increasingly family doctors work as members of co-ordinated primary health care teams. About three-quarters of them are in partnership or group practices, and it is becoming more common for home nurses, midwives and health visitors to work from the larger premises established for such practices. Nearly a fifth of the doctors work in 830 health centres which are built and maintained by the health authorities and which provide modern and well-equipped accommodation for primary health care teams consisting of general practitioners and home nurses, midwives and health visitors. Additional services which may be provided at health centres include dentistry, chiropody, family planning, ante-natal care, health education and sessions for children. Occasionally, when necessary, provision is made for general ophthalmic services. In some cases, a social worker is attached to or co-operates with the primary health care team. Out-patient facilities for local hospitals may also be provided.

HOSPITALS AND SPECIALIST SERVICES

The hospital and specialist services provide hospital accommodation of all kinds, including district general hospitals with treatment and diagnostic facilities for in-patients, day-patients and out-patients, hospital maternity depart-

ments, 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 and mentally handicapped people are also provided. In the long term the Government plans to replace the majority of mental illness hospitals by facilities based on psychiatric units in district general hospitals. Mentally handicapped people are cared for in hospital and in the community; it is long-term government policy to shift the emphasis from hospital to community care but, where hospital treatment is required, it will be provided in small units near to the patient's own home.

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 a number of new hospitals have been built.

There are nearly 2,770 NHS hospitals in Britain; they have some 498,000 beds and a nursing and midwifery staff of 258,000 full-time and about 170,000 part-time. There are 36,770 medical staff including over 13,600 consultants.

Rehabilitation

Rehabilitation is an important aspect of medical care and today treatment is not limited to the relief of pain or cure of pathological conditions but aims at helping people to resume normal living as soon as possible. Rehabilitation has been applied with advantage in the care of many patients, including the younger disabled, the mentally ill and the aged and has enabled many patients to become self-sufficient and to resume an independent life in their own homes. Rehabilitation facilities are provided in the majority of hospitals and at special centres. The work is carried out by doctors, nurses, physiotherapists, remedial gymnasts, occupational therapists and speech therapists together with social workers acting as a team. The hospital departments work closely with the Disablement Resettlement Service of the Employment Service Agency (the Department of Manpower Services in Northern Ireland).

Medical rehabilitation may include the provision, free of charge, of artificial limbs and eyes, hearing aids, surgical supports, invalid chairs, certain types of invalid vehicles, and other appliances. Very severely physically handicapped patients may be issued with electrical control equipment which enables a person to operate up to 11 electrical 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 through the service.

Local authority social workers, home helps and occupational therapists are available to hospital patients who have difficulties connected with their illness. Social workers help to solve problems and are concerned with the rehabilitation and resettlement of patients especially where the illness has been long or where the disability results in changes in the patient's life.

Drug Dependence

The hospital service plays a major part in the treatment of drug dependence, either in specialised drug dependence units or as part of the general psychiatric service. Only doctors licensed for the purpose by the Home Secretary may prescribe heroin and cocaine to addicts in the treatment of addiction and all medical practitioners are required to notify the Chief Medical Officer of the Home Office of any patient they consider to be addicted to certain con-

trolled drugs. In Northern Ireland licensing of the doctors is the responsibility of the Department of Health and Social Services.

Preventive and rehabilitative services are available for drug misusers; these include advisory and counselling services, day centres and therapeutic residential care. Several voluntary organisations provide accommodation for addicts needing care and help in establishing a new pattern of life.

Alcoholism

Treatment is provided for alcoholics as part of the general psychiatric service. In addition a number of specialised hospital units (including a day hospital) have been set up. A few experimental detoxification centres are planned as an entry point to treatment and rehabilitation services for habitual drunken offenders. Closely linked with treatment are community services covering prevention, advice to alcoholics and their families, and rehabilitation including, where necessary, residential care.

Mothers and Children

Special preventive health services, including free dental care, are available for expectant and nursing mothers and young children. Maternity and child health centres are provided either in health centres, purpose built or rented premises, or in mobile units. Special sessions are held for vaccination and immunisation and for early testing of babies for vision deficiencies or hearing loss. A feature of the service is the education of mothers before and after the birth by means of talks, discussion groups, demonstrations and classes.

About four-fifths of babies in their first year of life are taken to the centres. Family planning advice and help is provided at many of the centres and welfare foods (dried milk and vitamins) are distributed from them.

Whenever possible sick children are treated in their own homes, but for those who need hospital treatment most hospitals have children's departments under the oversight of paediatricians and specially trained nurses.

The school health service, which is part of the National Health Service, provides health surveillance of all children at school with medical 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 facilities provide help and advice concerning children with psychological or emotional problems. These are run by local authority social services and education authorities and by the health authorities. In Scotland child guidance clinics are run by education authorities.

Family Planning

A free family planning service is provided to all irrespective of age, sex or marital status through family planning clinics, hospitals and family doctors.

Abortion

The Abortion Act 1967, which came into force in Great Britain in 1968, permits the termination of a pregnancy by a registered medical practitioner if two registered medical practitioners are of the opinion that its continuance would involve risk to the life of the pregnant woman, or of injury to the physical or mental health of the pregnant woman or any children of her family greater than if the pregnancy were terminated, or if there is a substantial risk that if a child were born it would be seriously physically or mentally handicapped. Abortions may be carried out in National Health Service hospitals or in premises officially approved for the purpose.

Blood Transfusion

The National Blood Transfusion Service is administered by regional health authorities in England and by the South Glamorgan Area Health Authority

(Teaching) in Wales. Donors give their blood voluntarily without payment. There are three central laboratories: the Blood Group Reference Laboratory, administered by the Medical Research Council on behalf of the Department of Health and Social Security, which distributes blood grouping sera and investigates blood grouping problems referred to it; the Blood Products Laboratory, administered by the Lister Institute of Preventive Medicine on behalf of the department, which prepares blood products and researches into the production and uses of plasma fractions and plasma substitutes; and the Plasma Fractionation Laboratory which is associated with the Blood Products Laboratory. In Scotland the Blood Transfusion Service is administered by the Common Services Agency. In Northern Ireland the Blood Transfusion Service is operated by the Eastern Health and Social Services Board, which provides a service for all four boards.

Ambulance Services

Free transport by ambulance in England and Wales between home and hospital is provided, where necessary, by the health authorities. The Hospital Car Service (organised by St. John Ambulance, the British Red Cross Society, and the Women's Royal Voluntary Service) augments the ambulance service in some areas. In Scotland ambulances are run by the Common Services Agency and in Northern Ireland by the health and social services boards.

HEALTH EDUCATION

Health education in England, Wales and Northern Ireland 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. Expenditure for health education is met largely from central government funds.

SAFETY OF MEDICINES

Under the Medicines Act 1968 the health and agriculture ministers are responsible for licensing the manufacture, marketing and importation of medicines for human and veterinary use. The Medicines Commission advises the ministers on policy regarding medicines and a Committee on Safety of Medicines advises the health ministers on the safety, efficacy and quality of medicines and monitors adverse drug reactions. The Act also controls the advertising, labelling, packaging, distribution, sale and supply of medicines.

THE MEDICAL, DENTAL, NURSING AND ALLIED PROFESSIONS

Only people whose names are on the medical and dentists' registers may practise as doctors and dentists in the National Health Service. Dental auxiliaries (who have undergone a two-year training course) and dental hygienists (who have undergone a nine-month training course) may carry out some kinds of simple dental work under the direction of a registered dentist. The qualification for registration as a doctor requires six years' training in medical school and hospital, with an additional year's experience in a hospital; for a dentist, four or more years at a dental school are 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



The Countryside

Comberstone Tor, Devon, England.

The Countryside

Ringstead Bay,
Dorset, England.

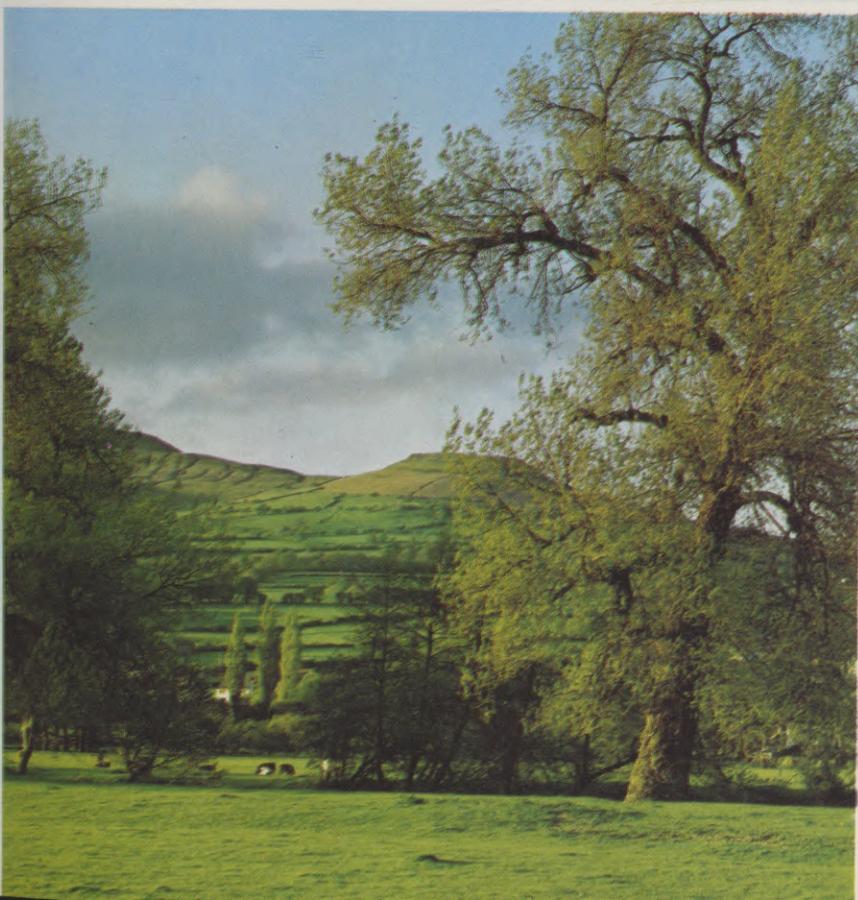


Glen Clunie,
Grampian,
Scotland.





Ballintoy Harbour,
Co. Antrim,
Northern Ireland.



Crickhowell,
Powys, Wales.



The Countryside

The new town of
Milton Keynes,
Buckinghamshire.



Milton Keynes
leisure centre.

and in Scotland are the General Nursing Councils, and in Northern Ireland the Northern Ireland Council of Nurses and Midwives. Midwives in England and Wales and in Scotland must have the certificate of the appropriate Central Midwives Board, and in Northern Ireland of 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. Home nurses are state registered or state enrolled nurses, the majority of whom have undertaken additional training.

To practise as a retail or hospital pharmacist, a pharmaceutical chemist must have his or her name entered in the register maintained by the Pharmaceutical Society of Great Britain, the governing body of the profession, or, in Northern Ireland, by the registrar appointed by the Department of Health and Social Services. 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 pharmaceutical chemist. Under the Opticians Act 1958 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 technicians, 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.

HEALTH AGREEMENTS WITH OTHER COUNTRIES

Reciprocal health agreements have been concluded between Britain and a number of other countries. In addition, under the terms of the social security regulations of the European Community, United Kingdom nationals and nationals of other Community countries who are resident in Britain and who normally work for an employer or are pensioners are entitled to urgent medical treatment in another Community country on the same basis as insured nationals of that country; the regulations also apply to dependants.

PRIVATE MEDICAL TREATMENT

Though practically all residents in Britain use the National Health Service, a number of people sometimes prefer 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. Although it is the Government's policy to phase out private beds from National Health Service hospitals, patients will remain free to seek medical treatment, and doctors to practise, in private hospitals or nursing homes. Some of these are run by charitable institutions.

ENVIRONMENTAL HEALTH

Local authorities are responsible for environmental health. Environmental health officers are employed by the authorities to assist them to carry out functions concerning the control of air pollution and noise, working conditions in offices and factories, the investigation of unfit housing, and refuse collection and disposal. Community physicians (administrative doctors employed by the health authority) are available to local authorities; they serve as Medical Officers for Environmental Health and advise local authorities on the medical aspects of environmental health. Community physicians may also assist the water authorities (see p. 273) which have responsibility for water supply and sewerage.

Environmental health officers are also employed 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 hygiene.

Safety of Food

The composition, labelling and description of food, food hygiene and the safety and fitness of food are controlled by the Food and Drugs Act 1955 in England and Wales and similar legislation in Scotland and Northern Ireland and statutory regulations. 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. The Department of Health and Social Security and the Ministry of Agriculture, Fisheries and Food are the central departments responsible for giving advice and making regulations. 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 for sale for human consumption. There are special regulations for milk, meat and ice-cream.

In Scotland the local authorities chiefly concerned are regional and islands councils who are responsible for food standards and labelling and district and islands councils who have responsibility for food hygiene.

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 planned programmes of vaccination and immunisation against diphtheria, measles, rubella (females only), poliomyelitis, tetanus, tuberculosis and whooping cough. Such protection is given in family doctors' surgeries, health centres or at child health centres.

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 Scotland there is no separate public health laboratory service and 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 the services which they provide are directed towards the same groups of people who also have a great need for health services, for example, 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. Many adults and children in these groups are also in need of medical and psychiatric services. Close co-operation is maintained between local authority social services departments and health authorities.

In England and Wales the powers and duties of local authorities to provide these varied social services derive from a number of statutes; some of the main Acts are mentioned in their context in the succeeding pages. In Scotland many of the corresponding duties derive from the Social Work (Scotland) Act 1968 in accordance with which Scottish local authorities also undertake duties similar to those of the separate probation and after-care service in England and Wales. 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.

The Handicapped

Social services authorities have a duty to provide social services for disabled people, the blind and partially sighted, those with impaired hearing and other physically handicapped groups. Local authorities in Great Britain are required to inform themselves of the number of handicapped people in their area and to publicise services. A wide range of facilities may be available, including advice on personal, social and occupational problems arising from disability; assistance in overcoming the effects of disability; help in carrying out adaptations in the home—for example, by fitting ramps, wide doorways, ground floor toilets, guide rails, and the provision of various aids to living to meet individual needs, including, in certain circumstances, help towards obtaining a telephone and a television set; social and occupational centres and clubs; residential homes; teaching of handicrafts and other occupations either at home or in centres; and the provision of recreational facilities, outings and holidays.

Help available from other sources includes social security, preventive and medical treatment, special education, employment and training services and specially designed housing and means of access to public buildings.

(For the provision of special educational treatment for handicapped children see p. 148 and the child health centres and the school health service, p. 133.)

The Elderly

Services for elderly people in their own homes are provided by statutory and voluntary bodies to help them to live there for as long as possible. These include the advice and help of social workers, domestic help, sitters-in, night attendants and laundry services as well as day centres, clubs, recreational workshops and meals services. In many areas 'good neighbour' and friendly visiting services are also arranged by the local authority or a voluntary organisation. Chiropody services for the elderly are provided by area health authorities.

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 30 to 50 residents. About 2,500 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. Similar homes are provided in Scotland, Wales and Northern Ireland.

For many years local authorities have, under the Housing Acts, provided an increasing number of smaller dwellings for old people, and flatlets for frail or infirm old people who can lead independent lives with some help. Local authorities may contribute towards the cost of employing a warden in such specially designed housing.

The Mentally Ill and the Mentally Handicapped

Social services authorities have a duty to 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, though helping to contain and reduce the need for in-patient treatment. 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 mental handicap.

Help to Families

Social services authorities, through their own social workers or through a voluntary organisation, make available help and advice to families facing special problems.

Domestic help (commonly called 'home help') is provided mainly for elderly people but others receiving it include pregnant women and severely disabled, mentally ill and mentally handicapped people.

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.

For the homeless, local authorities arrange temporary accommodation.

Child Care

Social services authorities are responsible for child care. This includes the provision of day care for children, often with special social or health needs, and is done through day nurseries and part-time nursery groups, voluntary and private day nurseries, child minders and play-groups.

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 diminish the need to receive children into care or bring them before a juvenile court.

The authorities have a duty to 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. The child remains in care until he is 18 years old unless discharged to the care of parents, other relatives or friends before that time. Under the Children Act 1975 local authorities in Great Britain, when taking a decision on a child in care, 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 child to return home.

The Children and Young Persons Act 1969 (for England and Wales) provides for children to be brought before a juvenile court if they are neglected or ill treated, exposed to moral danger, beyond the control of parents, not attending school or have committed an offence. At the same time it must be shown that the child is in need of care or control which he is unlikely to receive unless a care or other relevant order is made by the court. The Act gives local authorities responsibilities for undertaking, through social workers, inquiries and consultations with parents, schools and the police.

Children under 17 who are charged with offences or thought to be in need of care or control are almost always dealt with in a juvenile court (or a children's hearing in Scotland).

In England and Wales a child may be committed to the care of a local authority under a care order if the juvenile court is satisfied that he is in need of care or control. A care order remains in force until a child's eighteenth birthday (or nineteenth if made after he is 16) unless revoked earlier by the court. As an alternative the court may issue 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 the child to a training school, commit him to the care of a fit person (which may include a health and social services board) or make a supervision order. In Scotland, under the provisions of the Social Work (Scotland) Act 1968, children's hearings, composed of people from the local community, have powers to impose compulsory measures of care on a child by means of a supervision requirement which can remain in force until he is 18 years old.

When practicable, children in care are boarded out with foster parents, who receive an allowance to cover the cost of maintenance. If a foster home is not the most suitable place for a child or if a suitable foster home cannot be found for him, he may be placed in a children's home, a voluntary home or other suitable residential accommodation. Community homes for children in the care of local authorities in England and Wales are provided under plans formulated by regional planning committees in accordance with the Children and Young Persons Act 1969. These homes comprise local authority and voluntary children's homes and 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 providing accommodation for children in their care and arrangements exist for the development of services on a regional basis. 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 for England and Wales by the Secretary of State for Social Services and the Secretary of State for Wales and, for Scotland, by the Secretary of State for Scotland. There is similar control over the health and social services boards and voluntary organisations in Northern Ireland.

Voluntary Organisations

Voluntary organisations, many of which were pioneers in child care, continue to play a valuable part in this work. Children's homes run by voluntary organisations must be registered. Arrangements for the care of children and their accommodation are subject to inspection by social work service officers of the Department of Health and Social Security, the Welsh Office, the Scottish Education Department and the Northern Ireland Department of Health and Social Services.

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

Provision for legal adoption was first made in England and Wales in 1926, in Northern Ireland in 1929 and in Scotland in 1930. About 23,000 adoption orders are made annually by the courts in Great Britain and some 400 in Northern Ireland. Adoption is regulated by the Adoption Act 1958 in Great Britain, as amended by the Children Act 1975, and by the Adoption Act (Northern Ireland) 1967 in Northern Ireland. The Registrars General keep registers of adopted children. In Great Britain local authorities have had the power since 1959 to act as adoption agencies and many do so. Under the Children Act 1975 local authorities will be obliged to offer an adoption service. Adoption societies (over 70 societies arrange adoptions) must be registered with the local authority.

Adoptions of minors under the laws of most European and Commonwealth countries are recognised in Great Britain by virtue of the Adoption (Designation of Overseas Adoptions) Order 1973. The recognition does not confer on the adopted person citizenship of the United Kingdom and Colonies.

Social Workers

The effective operation of the social services is dependent upon the availability of professionally qualified social workers trained in the methods of social work. The length of training is usually two years. The Central Council for Education and Training in Social Work is responsible for recognising 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. 92).

EQUAL OPPORTUNITIES FOR WOMEN

The Sex Discrimination Act 1975, one of the most comprehensive in the world, came into force in December 1975 and makes discrimination between men and women unlawful in employment, education, provision of housing, goods, facilities and services and advertising. Sex discrimination is defined as treating a person less favourably than another on the grounds of his or her sex. Although the Act does not apply in Northern Ireland, similar legislation will come into effect there on 1st December 1976.

Under the Equal Pay Act 1970 (and corresponding legislation in Northern Ireland), which came into effect in December 1975, women are entitled to equal pay with men when doing work that is the same or broadly similar. The Equal Opportunities Commission assists in the enforcement of both Acts and promotes equal opportunities between the sexes.

Sex Discrimination Act

Employers must not discriminate against a man or woman because of his or her sex. This applies to recruitment, promotion and training. It is also unlawful for employers to discriminate against a person on grounds of marriage. There is 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.

Discrimination is also unlawful in the provision of goods, facilities and services. For example, banks, building societies or finance companies cannot refuse to give credit, mortgages or loans to women on the same terms as 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 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 discriminatory advertisements whether for jobs, goods, facilities or services. These are not unlawful if they apply only to the exceptions set out by the Sex Discrimination Act.

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. 101). Complaints concerning State educational establishments must first be made to the relevant Secretary of State before they can be brought before a court. The Equal Opportunities Commission is solely responsible for handling complaints about discriminatory advertisements and can bring proceedings in matters concerning advertising. Where necessary legal aid (see p. 106) is available for complainants with low incomes.

Equal Opportunities Commission

The Equal Opportunities Commission helps to enforce the Sex Discrimination Act and the Equal Pay Act. It has power to conduct formal investigations and if satisfied that practices are unlawful, it can issue non-discrimination notices requiring that they cease. For certain formal investigations, the commission has the power to require a person to give information and to attend hearings to give evidence. Another of its functions is to advise people of their rights under the Act. In certain circumstances it may also assist an individual to prepare and conduct a case before a court and may attempt to secure a settlement. The Commission also keeps under review the workings of both Acts and may submit proposals for amending them to the Home Secretary.

IMMIGRATION AND COMMUNITY RELATIONS

After the 1950s considerable numbers of people entered Britain from Commonwealth countries in the West Indies, Asia and Africa to take up employment, many with the intention of settling permanently. It is estimated that coloured Commonwealth and Pakistani immigrants and their families numbered some 1.33 million at the time of the 1971 census, (about 2½ per cent of the total population of Great Britain) nearly 40 per cent of whom were born there.

Welfare of Immigrants

The ethnic minorities make an important contribution to the economy and public services and have settled mainly in urban areas where opportunities for employment are greatest. Two-thirds live in the major urban areas of

England—Greater London and Birmingham having the greatest numbers. The difficulties experienced by residents of the older inner urban areas are being alleviated by continuous social service programmes in housing, education, hospitals, health and personal social services, which benefit the whole community and by other social programmes which are directed at areas of special need. Additional teachers have been appointed to schools in immigrant areas and government grants are available to local authorities with substantial immigrant populations 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. The welfare of immigrants and good relations between minority groups and the local community are promoted by community relations councils and other voluntary bodies.

Community Relations

The co-ordination of government action to promote harmonious community relations is the responsibility of the Home Office. Voluntary efforts are co-ordinated nationally by the Community Relations Commission, a statutory body set up under the Race Relations Act 1968. The commission co-ordinates the activities of local community relations councils, of which there are about 85 operating in areas with significant minority-group populations. It makes grants towards the salaries of community relations officers and assistants and towards special projects which help to improve community relations and makes recommendations to the Home Secretary on matters affecting community relations. The commission gives specialist advice to those working in social services, including education, employment and youth services. Under the new race relations legislation before Parliament the commission's functions will pass to the Commission for Racial Equality (see below).

Race Relations Acts

Discrimination on grounds of colour, race, or ethnic or national origin in places of public resort was first made unlawful in Great Britain by the Race Relations Act 1965, which established a Race Relations Board to secure compliance with the Act. The Race Relations Act 1968 extended the provisions of the 1965 Act, making discrimination unlawful in the provision of goods, facilities and services in employment and housing and in advertising. The board investigates complaints of discrimination, seeking to resolve them by conciliation. If this fails, it may take court proceedings.

Under a Bill introduced in Parliament in February 1976 the legislation would be further strengthened and brought into line with the law against sex discrimination. The Race Relations Board and the Community Relations Commission would be replaced by a new body, the Commission for Racial Equality, which would be largely responsible for policy matters and would co-ordinate the work of the local community relations councils. Complaints of discrimination would be dealt with mainly by specially designated county courts in England and Wales (sheriff courts in Scotland) with the exception of employment complaints which would be considered by industrial tribunals.

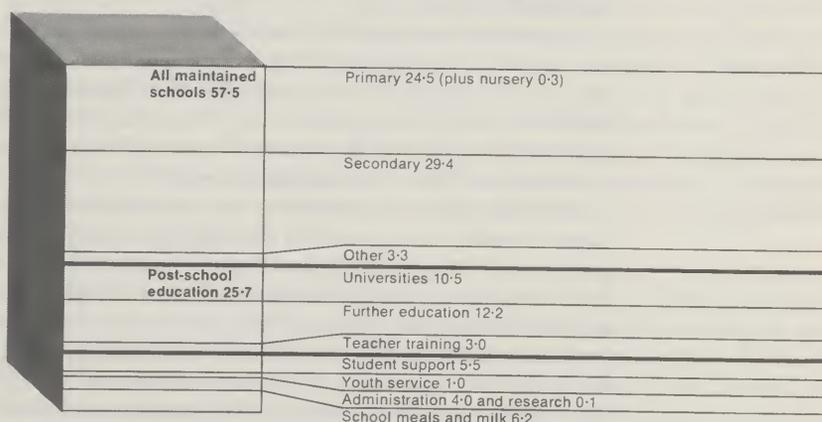
7 Education

There are nearly 12 million pupils and students in full-time attendance at schools and institutions of further and higher education in Britain. The great majority of schools, attended by over 95 per cent of school children, and most further education establishments are publicly maintained or assisted. Universities are autonomous self-governing institutions but are also aided from public funds.

The bulk of expenditure on education in Britain comes from public funds although some older-established schools and colleges continue to benefit from private endowments. In 1975-76 estimated total public expenditure on education, including school meals, milk, local libraries and museums, amounted to over £6,350 million, which was 12.4 per cent of all public expenditure.

In England and Wales the main development of publicly provided primary education started over a hundred years ago. In 1833 the Government had begun to make annual grants to the voluntary societies which were providing schools, but the Elementary Education Act of 1870 first established the principle of compulsory education. By the end of the nineteenth century elementary education had become virtually both compulsory and free of charge. Public provision of secondary education (already begun in Wales) started in England under the Act of 1902. The Education Act of 1944 now governs public education in England and Wales. The Scottish and Northern Ireland educational

Percentage distribution of public education expenditure in England and Wales, 1974-75



Note: Discrepancies between totals and their constituent parts are due to rounding

systems both have long and separate histories, and are now governed by the Education (Scotland) Act 1962 and the Education and Libraries (Northern Ireland) Order 1972, but the same general policy is implemented throughout Britain, with some national variations.

A ten-year education programme for England and Wales was announced by the Government in 1972. It involved substantially increased expenditure in five sectors: a new programme of nursery education (see p. 147); a larger

building programme for the renewal of secondary and special, as well as primary, schools; a larger teaching force to improve further the staffing standards in schools; new measures to improve the pre-service and in-service training of teachers; and the development in higher education of a wider range of opportunities for both students and institutions. It also stressed the need to give priority treatment to certain deprived areas. Similar proposals were made for Scotland. The original programme has been somewhat scaled down as from 1975 in the light of the economic situation and of revised (lower) estimates of future school population. Improved provision for those of compulsory school age, however, remains a priority. Broadly parallel developments are taking place in Northern Ireland.

As part of a policy of special educational help to children suffering from particular social difficulties, including immigrants, the Government during 1974 established an Educational Disadvantage Unit and in 1975 set up a related non-government advisory centre. Both work in co-operation with an Assessment of Performance Unit with the wider brief of finding out in England and Wales why some children, of all ranges of ability, fall below their potential. In addition government funds of about £3 million have been allocated to promote measures to reduce adult illiteracy (see p. 157).

Educational 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, for further education in Wales, and for universities, civil science and the arts throughout Great Britain; the Secretary of State for Wales is responsible for nursery, primary and secondary education in Wales; the Secretaries of State for Scotland and Northern Ireland have full educational responsibilities in their countries except that the Secretary of State for Scotland is consulted about Scottish universities but is not responsible for them.

Administration of publicly provided schools and further education is divided between the central government departments (the Department of Education and Science, the Welsh Office, the Scottish Education Department, and the Northern Ireland Department of Education), local education authorities (education and library boards in Northern Ireland), and various voluntary organisations. Their relationship is based on consultation and co-operation.

The 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 the universities). In Scotland the central institutions (colleges of higher education) and colleges of education (for teacher training), which are administered by independent governing bodies, are financed directly by the Scottish Education Department and grants to students are also paid by the department. In Northern Ireland the Ulster College (an institution of higher education) is likewise administered by an independent board of governors and is financed directly by the Northern Ireland Department of Education. Colleges of education are controlled by the department or voluntary agencies.

The universities are administratively independent 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 through the University Grants Committee (see p. 152).

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.

There were over 11 million children attending some 38,000 schools in Britain in 1975. Most were receiving free education financed from public funds (9.2 million in England and Wales and 1.05 million in Scotland), while a small proportion were attending schools wholly independent of public financial support (434,476 in England and Wales and 18,054 in Scotland). In addition, 131,204 children in England and Wales and 20,268 in Scotland were attending schools receiving grants direct from the education department concerned. This direct grant system is being phased out (see p. 148). In Northern Ireland 373,160 children were attending publicly maintained or assisted schools.

Boys and girls are taught together in most primary schools and in an increasing number of secondary schools. Some 79 per cent of pupils in maintained secondary schools in England and Wales and about 52 per cent in Northern Ireland attend mixed schools. In Scotland nearly all secondary schools are mixed. In the independent sector most of the 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 (the largest group), provided and maintained by local education authorities wholly out of public funds; and voluntary schools, mostly 'aided' or 'controlled' by a voluntary body, usually of a religious denomination. The local education authority is responsible for the running costs of all voluntary schools and for the cost of all building work at controlled schools. Each school has a group of managers or governors, some or all of whom are appointed by the local education authority. Aided schools have more independence than controlled schools and are responsible for part of the cost of external repairs and any building work (see p. 150). About a third of the 28,315 schools maintained by local education authorities in England and Wales are voluntary schools and the majority of these are Church of England schools. There are 2,646 Roman Catholic voluntary schools and smaller numbers belonging to other religious bodies. In Scotland most of the schools supported from public funds are provided by education authorities and are known as public schools (in England this term is used for a type of independent school, see p. 149). In Northern Ireland controlled schools managed by education and library boards and voluntary schools managed by maintained school committees, boards of governors and individual managers (usually clergymen) are both grant-aided from public funds.

Fees

In England and Wales no fees are charged to parents of children attending maintained schools (over 94 per cent of the school population) and books and equipment are free. In Scotland, education authorities have power to charge fees where this can be done without prejudice to the adequate provision of free school education. In Northern Ireland no fees are charged to parents of children attending grant-aided schools, with the exception of grammar schools, where qualified pupils receive from the education authorities scholarships which cover the whole or most of the fees charged by the school.

Curricula

In England and Wales the secular curriculum in maintained schools is the responsibility of the local education authority, or, in the case of voluntary aided secondary schools, of the schools' governors. In practice there is a very high degree of devolution to headteachers, particularly in nursery and primary schools. In Wales, the Welsh language is taught and is used as either the main or secondary medium of teaching in many schools. Her Majesty's Inspectors of

Schools are responsible for the inspection of all schools including independent schools. They review and report on the content and value of the education provided and are available as advisors. Local education authorities also employ inspectors to guide them on maintained schools. Teachers' organisations and institutions concerned with the education and training of teachers are additional sources of advice. 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 carries out research and development work on curricula, teaching methods and examinations in primary and secondary schools.

In Scotland the function of Her Majesty's Inspectors is in general the same; 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 provides help and advice to teachers and is responsible for the inspection and evaluation of the work of all schools.

Religion 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 in certain circumstances in voluntary schools, religious instruction of a non-denominational character is given which may include the study of comparative religions. (In areas with large immigrant populations this can take the form of lessons on comparative cultures.) 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 or, more commonly, 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.

Curricula Innovation

The schools' freedom to frame their own curricula has facilitated a rapid increase in study and experiment, partly stimulated by the Schools Council and other organisations. The general purpose is to adapt the curriculum to the everyday life and needs of children and young people.

The rapid advance of knowledge, social change, technical progress and new understanding of children's emotional and intellectual development have encouraged changes in the content and methods of teaching.

Among the most clearly observable general trends have been the increased emphasis, particularly for younger children, on 'learning by doing'; the efforts to reduce or modify 'streaming' (grouping according to ability) in such a way as to minimise its ill effects on children placed in a lower stream; and the increased importance attached to motivation. At the same time greater use is being made of new educational aids produced by technical progress.

Broadcasting is a major resource for school teachers—about nine out of ten schools can receive television, and almost all have radios. Nearly all primary schools and some seven out of ten secondary schools use educational broadcasts. Relaxation of copyright for educational purposes now enables schools to record and replay programmes to pupils and greatly helps their efficient and flexible

use. Schools co-ordinate different methods of audio-visual presentation, including (in addition to television, radio and tape recordings) films, colour slides, wall charts, maps and models. The BBC's 'Radiovision' programmes for schools use, for example, colour film strips in conjunction with a tape recording of the broadcast, and a similar technique is used in the support activities provided with some Independent Television schools broadcasts.

The Council for Educational Technology for the United Kingdom and the Educational Foundation for Visual Aids advise all bodies connected with education (and with training in industry and in the services) on the use of audio-visual aids.

The language laboratory, the teaching machine and the computer have all made their impact—notably through their general influence in teaching methods (the oral approach to language, the programmed teaching book). Computers are used to some extent to assist learning by means of calculation and the simulation of situations; they are used widely in secondary schools in the planning of timetables; and they help in the management of courses in some schools.

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. Organised games include tennis, cricket, football, hockey, lacrosse and netball.

The School Health Service (part of the National Health Service) provides for medical inspection of school children and for advice and treatment of specific medical and dental problems associated with children of school age.

Milk (normally one-third of a pint, 0.19 litre, a day) is given free to children of 7 years or under, to children aged between 7 and 12 if they have a medical requirement, and to pupils in special schools for the handicapped. The School Meals Service provides a mid-day meal at a subsidised charge (remitted where there is need). About 70 per cent of pupils in England and Wales, 50 per cent of pupils in Scotland and 57 per cent of pupils in Northern Ireland schools make use of the service. Education authorities have a statutory duty under certain conditions to provide free school transport; and have discretionary powers to assist financially in the provision of transport for pupils between home and school and for other school activities.

Priority Areas

In Great Britain the Government has allocated resources for the improvement of educational facilities in 'priority areas' (educationally deprived areas) under several schemes, including the Urban Programme (see p. 119), the Educational Priority Area Project (sponsored jointly by the Department of Education and Science and the Social Science Research Council) and the Community Development Project (sponsored by the Home Office). Special annual increments have been introduced for teachers employed in schools of exceptional difficulty, and additional funds have been allocated for school building in these areas. Community schools, pre-school experiments and new approaches to adult education have been encouraged.

Nursery and Primary Schools

Facilities for informal education and play for children aged two to five are provided free in public sector nursery schools and nursery classes in public sector primary schools, and are also available for a fee in a few independent schools and a large number of 'pre-school play groups' organised by voluntary organisations or by groups of parents. Apart from children only just under five, the proportion of children aged two to four who attend public sector schools remains

low (the supply of places being inadequate to meet the demand for them) though attendance, and particularly part-time attendance, has been increasing very rapidly in recent years. 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 an increasing number of local authorities in England are establishing 'first' schools for pupils aged 5-8 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 some areas there are separate infant schools.

Secondary Schools

England and Wales

The public or State system of education aims to give all children an education suited to their particular abilities. About 70 per cent of the maintained secondary school population in England and Wales attend 3,069 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; the middle schools whose pupils move on to senior comprehensive schools at 12 or 13, leaving at 16 or 18; and the comprehensive school with an age-range of 11 or 12 to 16 combined with a sixth-form college for pupils over 16. Most of the remaining children receive their secondary education in schools to which they are allocated after selection procedures at the age of 11. Schools receiving pupils on a selective basis are: about 740 grammar schools providing a mainly academic education (including 174 direct-grant grammar schools); some 1,216 secondary modern schools giving a general education with a practical bias; a few secondary technical schools offering a general education related to industry, commerce and agriculture; and schools providing all three, or any two, types of education, in separately organised streams and known as multilateral or bilateral schools.

In 1975 the Government introduced legislation designed to hasten progress towards a fully comprehensive system of secondary education including the phasing out of the direct-grant system. A number of direct-grant schools have agreed to end selection and join the State comprehensive system, while others have announced their intention of becoming independent (see below).

Scotland

Secondary education in Scotland is almost completely organised on comprehensive lines and in 1975, about 98.6 per cent of all pupils in education authority secondary schools were in schools with a comprehensive intake. The majority of schools are six-year comprehensive schools. Because of local circumstances there are some comprehensive schools whose courses may extend to four years or less and from which pupils may transfer at the end of their second or fourth years to a six-year comprehensive school.

Northern Ireland

In Northern Ireland there are grammar schools and secondary (intermediate) schools, the latter being the equivalent of the secondary modern schools in England and Wales. Some comprehensive-type schools exist, and arrangements for transfer between the other types of schools are flexible. In 1976 the Government published a consultative document containing a feasibility study on the reorganisation of secondary education.

Special Education

Special education is provided for children who require it because of physical or mental disability, including maladjustment, either in ordinary schools or

special schools (including hospital schools). It has long been government policy not to send to special schools those handicapped children who can be educated satisfactorily at an ordinary school. There are, however, some 1,800 special schools including hospital schools, day and boarding schools and there are also boarding homes for handicapped children attending ordinary schools.

There are 11 categories of handicapped pupils in England, Wales and Northern Ireland and nine in Scotland for whom local education authorities must provide special educational treatment: blind, partially sighted, deaf, partially hearing, delicate, educationally subnormal (mentally handicapped in Scotland), epileptic, maladjusted, physically handicapped, autistic and children 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 needs to over-all medical condition and to use the system of categories for administrative purposes only.

Independent Schools

Independent schools in England and Wales receive no grants from public funds but all are open to inspection and must register with the Department of Education and Science or the Welsh Office 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 Schools Tribunal against any of the requirements. The schools whose standards are regarded by the department or the Welsh Office as comparable with those of well-run maintained schools are, on application, granted the status of 'recognised as efficient'. Such schools (1,482 of 2,615 independent schools registered) contain 80 per cent of the pupils in independent schools. In Scotland where there are 103 registered schools, the position is generally the same except that there is no 'recognised as efficient' status. In Northern Ireland there are only four independent schools; these have to be registered with the Department of Education for Northern Ireland and be open to inspection. As in England and Wales they receive no grants from public funds.

Independent schools cater for pupils of all ages. The largest and most important of them are the public schools,¹ which accept pupils at about 12 or 13 years of age usually on the basis of a fairly demanding examination. There are about 260 public schools, most of them still single sex (about half of them for girls) and at least partly boarding; but there are some coeducational schools and certain boys' schools have recently begun to admit some girls direct to their top forms. Combined tuition and boarding fees in the public schools are usually between £1,200 and £1,600 a year, but some of this may be remitted for children winning competitive scholarships. A number of preparatory schools, day and boarding, coeducational and single sex prepare children for entry to the public schools.

School Leaving and Secondary School Examinations

Over the past decade there has been a large increase in the number of pupils staying on at each age beyond the minimum school-leaving age, which was raised from 15 to 16 in 1972.

There is no national school-leaving examination in England and Wales, but secondary school pupils may attempt examinations, in various subjects, leading

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.

to the Certificate of Secondary Education (CSE) or the General Certificate of Education (GCE). The CSE is designed for pupils completing five years' secondary education and is normally taken at the age of 16. It is controlled by 14 Regional Examining Boards, consisting mainly of teachers serving in the schools which provide the candidates. The highest grade in the CSE (grade 1) is widely accepted as being of the same standard as at least grade C at GCE 'Ordinary' level. Control over the scope and standards of the examinations is exercised by the Schools Council (see p. 146) to ensure national comparability. The GCE is conducted at 'Ordinary' (O) and 'Advanced' (A) levels. Normally candidates taking 'O' level are about 16 years of age, although some take it earlier, at the discretion of their head teacher. Most pupils in grammar, direct grant and independent schools take the 'O' level examination, and so do a number of pupils in comprehensive and other secondary schools.

Grade C or above in various subjects at GCE 'O' level and the equivalent CSE grade 1 are usually considered to be qualifications for entry to courses of further education and training. Since the inception of the CSE the number achieving the highest grade has increased steadily as the popularity of the examination has grown while GCE 'O' level subject performances have also improved. The 'A' level examination is at the standard for entrance to university and for entry to many forms of professional training. Since 1965 the number of school-leavers obtaining two or more 'A' levels (the minimum qualification for entry to first degree courses at university) has increased by about 25 per cent. Entries for both levels of the GCE are accepted from candidates at further education establishments and from candidates entering privately.

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.

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.

School Building

Local education authorities and voluntary bodies 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 by means of building bulletins and in other 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 State schools; over 9 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.

Teachers

Teachers in publicly maintained schools are appointed by local education authorities or school governing bodies or managers. Such teachers must hold qualifications approved by the appropriate education department (see p. 144). Their salaries are determined by nationally negotiated scales taking account of qualifications, responsibilities and experience. In 1975 there were about 520,000 teachers (including the full-time equivalent of part-time teachers) in publicly maintained schools in Britain. The expected fall in school population will, in the longer term, permit continued improvement in the pupil-teacher ratio (about 20 to one) without further expansion of the teacher force.

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. 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 further education. Adults of every age make extensive use of widespread and varied facilities for the educational and cultural leisure activities included under the term 'adult education' (see p. 156).

Institutions

The principal institutions of post-school education are the 45 universities (see p. 153); 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 College in Northern Ireland; and about 790 other colleges, some of which have a very wide range of courses, while others concentrate on particular subjects. These colleges include the 'liberal arts' colleges 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 general-purpose establishments of post-school education and many specialist establishments are maintained and administered by the local education authorities. The Scottish central institutions, however, the Scottish colleges of education and the Ulster College 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. Tuition fees at these establishments are moderate and nearly always remitted for young people under 18 years of age. Where industrial training is provided by a college, the charges are the responsibility of the employer, and broadly reflect the economic cost of provision. Many full-time students are helped by awards from public funds. These awards are mandatory for students who are taking university first degree and other comparable courses. They are assessed to cover tuition fees and a maintenance grant; but parents who can afford to contribute towards the cost are required to do so. In England and Wales these awards are made by local education authorities up to first degree level, while in Scotland awards to students on advanced level courses are made by the Scottish Education Department. In Northern Ireland awards up to first degree level are made 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. There are also some scholarships available from endowments and from particular industries or companies.

The universities, like most of the other main post-school educational establishments, are ultimately dependent on public finance. They have, however, remained autonomous institutions, largely because of the special system by which they are financed. 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. (The Open University, see p. 154, is financed directly by the Department of Education and Science, not through the University Grants Committee; and in Northern Ireland, government grants are made direct to the universities by the Department of Education which first seeks the advice of the University Grants Committee.) So, although the Government is responsible for financing about 90 per cent of universities' central expenditure (colleges within universities may have their own investments, endowments and budgets), it does not control their work or teaching.

Students

In 1974-75 there were about 773,000 students taking 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. Of these about 258,000 were at universities while another 239,000 were following advanced courses outside universities, mainly at colleges of education, polytechnics and Scottish central institutions. Another 276,000 were taking non-advanced courses, over 80 per cent of them studying for recognised vocational or educational qualifications.

Additionally, there were about 1.66 million part-time students, some 630,000 of whom were mostly young people released by their employers for study during working hours. The remainder were for the most part taking some of the wide variety of adult education classes (see p. 156).

Higher Education

There has been a rapid expansion in higher education in the last 12 years; the numbers in full-time higher education in Britain increased from 222,400 in 1962 to 497,000 in 1975. This expansion has been achieved by creating ten new universities; by developing a number of colleges into universities, 30 of them

into polytechnics specialising in advanced work; by widening the range and flexibility of courses; and by the establishment of the Open University.

Universities

There are 45 universities in Britain, including the Open University, compared with 17 in 1945. In addition, the University College at Buckingham, which receives no assistance from public funds, began courses in 1976 but has not yet achieved university status.

The English universities are: Aston¹ (Birmingham), Bath,¹ Birmingham, Bradford,¹ Bristol, Brunel¹ (London), Cambridge, City¹ (London), Durham, East Anglia,¹ Essex,¹ Exeter, Hull, Keele, Kent at Canterbury,¹ Lancaster,¹ Leeds, Leicester, Liverpool, London, Loughborough,¹ Manchester, Newcastle upon Tyne, Nottingham, Oxford, Reading, Salford,¹ Sheffield, Southampton, Surrey,¹ Sussex,¹ Warwick,¹ and York¹. 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,¹ Edinburgh, Glasgow, Heriot-Watt¹ (Edinburgh), St Andrews, Stirling,¹ and Strathclyde¹ (Glasgow). In Northern Ireland there is the Queen's University of Belfast, and the New University of Ulster¹ in Coleraine.

The Universities of Oxford and Cambridge date from the twelfth and thirteenth centuries and the Scottish Universities of St. Andrews, Glasgow, Aberdeen and Edinburgh from the fifteenth and sixteenth centuries. All the other universities were founded in the nineteenth or twentieth centuries.

Admission to the universities is by examination and selection; there is no religious test and no colour, nationality or sex bar, though in practice there are about twice as many men as women. 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 1974-75 there were about 258,000 full-time university students in Britain, including nearly 49,000 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 32,000 full-time university teachers paid wholly from university funds. The ratio of staff to students was about one to eight, 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. A full-time course at a university remains the most usual way of obtaining a first degree, in spite of the extension of facilities for obtaining a degree in other ways. About four-fifths of all students on full-time first degree courses are at universities. The range of courses is wide and has been increasing, and becoming more flexible with greater choice of combinations of subjects. Nearly half the university undergraduates, however, are taking courses within the categories of 'science' or 'social administration and business studies'.

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) and Doctor of Philosophy (PhD), while in Scotland Master is used for a first degree. On the other hand, uniformity of standards between universities

¹ Has become a university since 1960.

is promoted by the practice of employing outside examiners for all university examinations, while the general pattern of teaching (a combination of lectures, small group seminars or tutorials with practical classes where necessary) is fairly similar throughout Britain.

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 January 1971 and in July 1976 some 50,000 students were following courses. The Open University 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 interested in 'teaching at a distance' projects.

Teacher Training

Until 1975 the majority of teachers in England and Wales qualified by taking a three-year course at one of some 150 colleges of education, so as to obtain a teacher's certificate. Since 1970 professional training for newly qualified people with degrees and certain other specialist qualifications (who before then were entitled to teach without further training) has become mandatory for all school teachers except, temporarily, mathematics and science teachers in secondary schools. Such courses were at colleges of education and in university education departments.

Since August 1975, a basic reorganisation of the system of teacher training in England and Wales has been started. All higher and further education outside the universities including teacher training is being assimilated into a common system under the control of local education authorities. A number of the existing colleges of education have been merged either with each other or with other colleges of further education to form 'liberal arts' colleges; some are to discontinue completely the initial training of teachers. As the first move towards a wholly graduate profession, three- and four-year degree courses incorporating educational studies are being developed, although the three-year certificate courses will also be maintained as long as they are needed.

In Scotland all teachers in education authority and grant-aided schools must be registered with the General Teaching Council for Scotland. 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. For primary teaching the course extends to one year for graduates and three for non-graduates. 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 College 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.

The education departments, universities, local authorities and other bodies provide a variety of short in-service training courses for practising teachers.

Other Advanced Courses

In 1974-75 about 252,000 students, almost half of them full-time, were taking advanced courses other than in universities and colleges of education in a wide variety of subjects, including architecture, art and design, catering, engineering, natural sciences, social work and business and management studies. An increasing proportion of the students were taking courses leading to the awards of the Council for National Academic Awards. 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. In the academic year 1974-75 over 800 courses were being followed by about 58,000 students. These courses ranged from science and technology to the arts, social studies, business studies and law, but the proportion of technological, business or other explicitly vocational courses was much higher than in universities and the proportion of arts, language and science courses lower.

In England and Wales higher education provision outside universities and the former colleges of education is being concentrated within 30 major national institutions named 'polytechnics'. They are comprehensive institutions providing 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 level. 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 College.

Vocational Courses

The British educational systems offer facilities for obtaining all types of vocational education and training 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.

There is a wide variety of courses for young people in various trades and occupations, leading to appropriate qualifications at the end of a course of up to five years. Other, more academic, courses lead to the National Certificates and Diplomas awarded by joint committees consisting of representatives of education departments, teacher organisations and the appropriate professional bodies. The Technician Education Council has responsibility for developing a unified system of courses for technicians in England, Wales and Northern Ireland, leading to awards which will eventually replace those of the joint committees. A similar council has been established in Scotland. Courses are normally at two levels, ordinary and higher. The Ordinary National Certificate (ONC) courses normally last two years part-time and students usually follow them between the ages of 16 and 19; the level of the certificate is generally considered to approach that of GCE 'A' level. The Ordinary National Diploma (OND) courses are the full-time or sandwich counterparts of the ONC but involve wider and deeper study. The Higher National Diploma (HND), which requires a further two years' full-time or three years' sandwich study, is recognised, within its more restricted field, as approaching the standard of a pass degree; the Higher National Certificate (HNC), after two further years' part-time study, is lower in standard because it is more narrowly based, but is nevertheless classified as an advanced course.

Many further education colleges offer courses in shorthand, typing, book-keeping, and office studies. More advanced level work, however, is generally concentrated in polytechnics or other colleges with a department of business

studies, notably those designated as regional centres of management education. Courses for the post-experience postgraduate Diploma in Management Studies are run by about 75 colleges; and some polytechnics run courses leading to the Master's degree of the Council for National Academic Awards.

Much business education is related to the specialised examination requirements of various professional bodies; and courses leading to them are provided in many further education colleges, although numbers of the candidates taking such qualifications do so through correspondence courses. A Business Education Council was established in 1974 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. Courses leading to the certificate of business administration are provided for students in junior administrative positions.

Adult Education

Adult education is generally taken to mean courses of post-school education outside the main areas of higher, professional and technical education. In 1974 about 2.2 million people over the age of 18 attended such courses which were provided by local education authorities, various voluntary and statutory bodies, certain residential colleges, and the adult education ('extra-mural') departments of universities.

The residential colleges, the university departments and certain voluntary bodies recognised as competent to provide adult education, receive government grants. So do various national bodies which promote educational activities of a non-political kind, such as the National Federation of Women's Institutes and the National Council of Young Men's Christian Associations. Many of these bodies also receive grants from local education authorities for services rendered locally.

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). Most of the courses are part-time, and about 1.9 million students attended such local authority adult education classes in 1973-74. In addition local education authorities maintained or aided most of the short-term residential colleges or centres, of which there are 33 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 (six in England and Wales, one in Scotland) which are grant-aided by the education 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 at mandatory rates. The extra-mural 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 there has been a tendency for more short courses organised for special (including vocational) interests. Often the WEA provides the organisation and the teaching is provided by the extra-mural departments, many of which have full-time staff appointed for this purpose and can also call on the services of other departments of the university. In 1973-74 about 300,000 students attended such courses. Similar work is promoted in some local education authority centres.

There are a large number of other organisations (both national and local,

some maintained or assisted and others commercially or privately financed) which provide many kinds of education and training. Some make their facilities available 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.

A recent development has been the spread of community schools and colleges and community centres. Community schools and colleges are secondary schools planned to serve also as cultural community centres, providing educational, social and cultural opportunities for the whole community. Community centres have a more social character and, though aided financially by the local education authorities, are usually managed by voluntary community associations many of which are affiliated to the National Federation of Community Associations.

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 National Institute of Adult Education has created an Adult Literacy Resource Agency to administer additional resources which the Government is making available to assist local education authorities and other organisations working to combat adult illiteracy. The Scottish Institute of Adult Education and the Scottish Adult Literacy Resource Agency are the corresponding bodies in Scotland.

In Northern Ireland extra-mural departments of the Queen's University of Belfast and the New University of Ulster organise and staff adult education classes which are supplemented by classes organised by various non-official bodies. The Workers' Educational Association is responsible for classes at other than university level and receives grants from the Department of Education and the education and library boards. The department has established a Council for Continuing Education which will advise on the co-ordination of the work being done and assist planning for the future.

New Methods of Learning and Teaching

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. Nevertheless, each institution has different ways of preparing its course material and different approaches and emphases in teaching it. They make wide and varying use of the new teaching and learning aids provided by radio and television and of other visual aids. Considerable use is also made of teaching machines and language laboratories, and of computer-assisted and computer-managed learning. Most universities and many colleges have closed television circuits. All universities have ready access to computers for education as well as research purposes and many have their own computers.

Radio and television programmes, both specially instructional and general, are perhaps the most penetrating purveyors of adult education, and are often linked to a range of supplementary publications and activities. Most BBC radio study programmes are grouped in hourly sessions on five nights a week and week-end afternoons. Television study programmes are shown on Saturday and Sunday mornings and at midday and in the later evening on weekdays. Both the BBC and Independent Television provide programmes at successive intellectual levels from domestic, social and craft skills to progressive vocational training. The BBC channels and production teams are also used to produce radio and television programmes in support of Open University courses.

EDUCATIONAL RESEARCH

Research into the theory and practice of education and the organisation of educational services is supported financially by the education departments, local education authorities, philanthropic organisations, universities and teachers' associations. The Schools Council and the Social Science Research Council are additional 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 corporate members, including local education authorities, teachers' organisations and universities and from 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.

Some research is undertaken at the former colleges of education, at polytechnics and by a few independent research organisations.

INTERNATIONAL RELATIONS

There are many opportunities for overseas students to study in Britain and for British students to study abroad and some British teachers serve overseas for a period.

Britain and the European Community

British membership of the European Community is creating closer educational ties with other member countries. Both at school level 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 by government-sponsored schemes which are administered by the Central Bureau for Educational Visits and Exchanges. The bureau also makes appointments available to European teachers wishing to teach in Britain and negotiates posts on an in-service training basis for British teachers wishing to further their experience in another European country. Britain has adhered to the Statute of the European Schools (six of which have been established throughout the Community) to provide school education for children of people employed in the European Community institutions. Negotiations are in progress to promote recognition of professional qualifications which will enable qualified people to practise anywhere in the Community.

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 1974-75 there were about 100,000 overseas students in Britain, of whom about 28,000 were at universities, another 34,000 at technical colleges and the remainder learning English or training as teachers, nurses, for the law, banking and accountancy, or in industry. About 46 per cent of all overseas students were from the Commonwealth and about three-quarters were from developing countries.

As part of British technical assistance to developing countries, the Ministry of Overseas Development supports some 10,000 students with subsistence and fees, encourages the development of special courses of particular value to students from developing countries and of advisory and welfare services to meet their needs.

A wide range of public and private fellowships and scholarships for advanced study in Britain are awarded annually to students and research workers from other countries. Under the Commonwealth Scholarship and Fellowship Plan, the governments of certain Commonwealth countries have made awards available at their own institutions of higher education to men and women from other Commonwealth countries. At the beginning of the academic year 1975-76,

716 scholarships and fellowships (including medical awards) were held in Britain under the plan. The Commonwealth Education Fellowship Scheme provides opportunities for further training, study and research for teachers and others with appropriate experience. In 1975-76 there were 600 study fellowships tenable for periods of between three months and three years.

About 590 British Council¹ scholarships tenable usually for one year in Britain, and 140 British Council Fellowships tenable for two to three years, are offered annually to graduates of overseas universities. Some 56 Marshall Scholarships for two years' study at any university in Britain are offered annually by the British Government to graduates from the United States of America. Over 70 Rhodes Scholarships are awarded annually to graduates from the Commonwealth, the United States and the Federal Republic of Germany for two years of study at the University of Oxford. Other universities and colleges themselves offer many scholarships for which graduate students of any nationality are eligible.²

Fellowships and training awards for study in British institutions are available under the Central Treaty Organisation, the Colombo Plan, the Special Commonwealth African Assistance Plan and British technical assistance programmes for many countries. Over 1,400 awards for study or training in Britain are also made under the United Nations Programmes of Technical Assistance and by the United Nations specialised agencies such as UNESCO, FAO, and WHO, and also under OECD and certain Council of Europe schemes.

The Commonwealth Education Liaison Committee supplements normal direct dealings on education between the countries of the Commonwealth, and regular Commonwealth education conferences are held.

The Atlantic College at St. Donat's, South Wales, provides two-year residential courses for selected fee-paying pupils of different nationalities prior to their entering university.

Arrangements for Overseas Students

The national representatives in London (Office of the High Commissioner or Embassy) of a number of countries accept certain special responsibilities for their students in Britain. The British Council acts as an agent for the British Government in matters affecting the welfare of overseas students, and provides certain services, such as meeting on arrival, introduction courses, an accommodation bureau and a student centre in London which organises a varied programme of lectures, discussions and social and other activities and arranges introductions of students to people who wish to invite them to their homes. In

¹ The purpose of the *British Council* (founded in 1934) is defined in its Royal Charter as the promotion of a wider knowledge of the United Kingdom and the English language abroad and the development of closer cultural relations between Britain and other countries. The council is governed by a board broadly representative of many elements of British life, and including six members nominated by ministers. It is financed almost entirely from public funds. The activities of the council, which has staff in 78 overseas countries, are advising and assisting in English teaching and other educational work including science; fostering personal contacts between British and overseas people, especially in the educational, professional and scientific fields; running, or helping to maintain, libraries of British books and periodicals overseas; and presenting overseas British achievements and the arts. Its work in Britain is concerned mainly with professional visitors and with the welfare of overseas students.

² The Association of Commonwealth Universities publishes two handbooks, *Awards for Commonwealth University Staff and Scholarships Guide for Commonwealth Post-graduate Students* (see Bibliography p. 459) which include information about sources of financial aid tenable in Britain. The association promotes co-operation between Commonwealth universities. Its activities include the provision of publication, information and academic appointments services, and of secretariats for various bodies affecting its member institutions, such as the Commonwealth Scholarship Commission and the Marshall Aid Commemoration Commission.

the vacations there are courses in many parts of the country which offer opportunities for getting to know more about British life in town and country. In term time there are visits to various places of interest, and theatre and concert parties are arranged.

Among many voluntary organisations which offer a welcome to overseas students are Rotary and Round Table clubs, the Victoria League, the Royal Over-Seas League, the Royal Commonwealth Society, the National Union of Students, the English-Speaking Union and churches of all denominations. The United Kingdom Council for Overseas Student Affairs, established in 1968, is an independent central body serving overseas students and organisations and individuals concerned in overseas student affairs; it provides both a forum for the exchange of ideas and machinery for consultation with government and other authorities. In many London boroughs and in other large cities there are committees which help students to make contact with local residents and organisations. These organisations also help by entertaining overseas students and many of them have established hostels with the financial help of the Overseas Students Welfare Expansion Programme which is administered by the British Council. By the beginning of 1976 grants had been approved for 190 projects, providing places for about 6,000 students.

British Students Overseas

In 1975-76 21 awards were accepted by British students in Commonwealth countries under the Commonwealth Scholarship and Fellowship Plan (see p. 158). In addition the Study and Serve Scheme, administered by the Inter-University Council for Higher Education Overseas, enables British students to spend two years in a developing country, the time being devoted equally to study, which may or may not lead to a postgraduate qualification, and service, usually in the form of university employment in the country concerned.

The United States-United Kingdom Educational Commission (still sometimes called the Fulbright-Hays Commission) offers travel and maintenance grants for postgraduate study in the United States. Notable among other scholarships are the Kennedy scholarships, to enable British students to study at an American university, and the Churchill travel scholarships, for men and women in all walks of life. British students are also offered scholarships at institutions of higher education in many European and non-European countries outside the Commonwealth.

Teachers Serving Overseas

Some 4,566 teachers were serving overseas in 1975, in schools, colleges of education, technical colleges, universities, and as teacher trainers and educational advisors in developing countries. Most of them were in Commonwealth countries; almost all were supported by public funds. Recruitment is carried out by the Ministry of Overseas Development, the British Council and the voluntary teacher recruiting agencies, such as Christians Abroad. Some developing countries carry out their own recruitment of British teachers through their offices in London.

During 1975 several hundred British teachers served in universities overseas, most of them placed through the Inter-University Council for Higher Education Overseas, the Association of Commonwealth Universities and the British Council. Government encouragement also includes support for a number of schemes of assistance for overseas universities which are administered by the Inter-University Council, including the scheme for Special Commonwealth Awards, which are made to leading scholars from British universities who are willing to work for a minimum of two years in important posts in the universities of developing Commonwealth countries.

Outside these schemes, four voluntary organisations, co-ordinated under the British Volunteer Programme (BVP), recruit graduate and qualified volunteers for service overseas. Of the 1,915 overseas in 1975, 1,198 were teachers. The BVP receives financial assistance from the Government.

Schemes under which teachers in Britain exchange posts for a year with teachers overseas include one with the United States and another with Commonwealth countries involving each year about 200 British teachers.

Official exchange schemes also operate between Britain and several European countries both for teachers and for assistants' posts for language specialists. The largest of these schemes is the modern languages assistants' scheme, administered by the Central Bureau for Educational Visits and Exchanges, which enables students and young teachers to serve overseas, particularly in Europe, and for their counterparts to serve in Britain.

Academic Interchange

Several schemes designed to assist interchange between institutions of higher education in Britain and overseas countries through staff visits are administered by the British Council. Study and research visits by British and overseas scholars are supported through programmes of the British Academy, the Royal Society, the Science Research Council, and other British and international bodies.

Other Educational Aid

Britain provides assistance, on request, to the developing countries in several other ways, including the loan of educational experts for specialist missions and technical and consultant services. Areas of particular activity include the introduction of new materials, methods and techniques. This assistance is provided through various educational organisations, the Ministry of Overseas Development and the British Council.

THE YOUTH SERVICE

The aim of the youth service is to help young people to broaden their interests, to enjoy recreational pursuits, and to mix socially in their leisure time.

The service (which in Scotland forms part of the Youth and Community Service) is provided by local education authorities and voluntary organisations, in co-operation with the government education departments. Membership of youth groups is voluntary and groups vary greatly in their activities, there being no attempt to impose uniformity or to create anything in the nature of a national youth movement.

Organisation and Finance

Organised activities for young people were first promoted by voluntary bodies, often of a religious nature, during the nineteenth century, and the number of such organisations and the range of their activities have continued to grow over the past 100 years. The involvement of local authorities and the education departments in the youth service dates back principally to the 1940s when the service first became recognised as part of the education system.

The education departments formulate broad policy objectives for the service and encourage their achievements through financial assistance and advice. They make known the Government's attitude by means of circulars to local education authorities and through contacts between departmental officials and representatives of the authorities and the voluntary organisations. The Scottish Education Department is advised by a council representing both statutory and voluntary bodies concerned in youth and community work, while in Northern Ireland the advisory body is the Youth Committee for Northern Ireland.

Financially the education departments assist voluntary organisations through grants towards their costs for central administration and building projects.

Local education authorities assist local voluntary groups by lending premises and equipment and by contributing to their capital and running costs. Many authorities also construct and run youth centres and clubs; in Great Britain there are several thousand youth centres fully run by local education authorities. Most authorities have appointed youth committees on which official and voluntary bodies are represented, and employ youth organisers to co-ordinate youth work in their areas and to arrange in-service training. In Scotland these committees and organisers are normally concerned with services for both young people and adults.

Although the number of local education authority youth clubs and centres is growing, 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 membership of over 6 million. Some 50 national youth organisations and 42 local co-ordinating bodies are full members of the National Council for Voluntary Youth Services (NCVYS), a consultative body which takes action only in the name and with the consent of its member bodies; a further 18 organisations are observers. In Scotland, Wales and Northern Ireland there are similar representative bodies.

Among the largest of the voluntary youth organisations belonging to NCVYS are the Scout and Girl Guides Associations (with about 600,000 and 800,000 members), the National Association of Youth Clubs (over 500,000), the National Association of Boys' Clubs (over 170,000) and the Youth Hostels Association (about 276,000).

Certain pre-Service organisations for boys, which provide facilities for social, educational and physical development along with training for possible entry to the armed forces, are also members of NCVYS; they are assisted financially by the Ministry of Defence.

Membership

Local education authority youth groups in England and Wales normally cater for young people of both sexes mainly in the 14-20 age-range.

Some voluntary organisations cater for young people on a single-sex basis and their membership often covers a wider age-range. An official survey published in 1972 on the Youth Service and similar provision (see Bibliography p. 461) showed that some two-thirds of young people aged 14-20 were members of a club or association (including associations attached to schools, colleges and universities, and places of work). The survey also indicated that 68 per cent or more had at some time been members of a youth club. A smaller proportion of girls than boys takes part in youth club activities and the main involvement is between the ages of 14 and 20.

Training of Youth Workers

There are over 3,000 full-time youth workers in Great 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 further education colleges, the course leads to a professional qualification. In addition a number of colleges of education provide a study of youth work as a principal or subsidiary subject within

a teacher-training course. In Scotland one- and three-year courses are provided at certain colleges of education and in Northern Ireland courses are provided by the Ulster College.

Other Organisations Concerned with Young People

There are a number of organisations, which, although primarily concerned with the welfare and out-of-school pursuits of young people, operate in a context broader than that of any individual youth movement. Among the most important are the Sports Councils for England, Wales, Scotland and Northern Ireland (see p. 439), which provide practical and advisory services for many youth organisations; the National Playing Fields Association, which advises local authorities and sports organisations on the acquisition, layout, construction and use of sports grounds; and the Outward Bound Trust, which maintains five schools in areas of outstanding natural beauty and offers full-time residential courses designed to encourage a sense of adventure, responsibility, confidence and achievement.

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 to reach certain standards in leisure-time activities with the voluntary assistance of adults. Some 200,000 young people between the ages of 14 and 25 from Britain and other Commonwealth countries took part in the scheme in 1975. There are three awards—Bronze, Silver and Gold—for each of which young people must attempt activities in four out of five sections: service; interests; expeditions; and either physical activity or design for living.

The King George's Jubilee Trust is a charitable body which, since its creation in 1935, has distributed more than £3.1 million in grants to voluntary youth organisations and towards experimental youth projects.

The National Youth Bureau is a forum for association, discussion and joint action for those concerned with the social education of young people. It provides information services, training services and services to research and experiment including the maintenance of a research register. The bureau also has a specialist information unit on social work with young people. In Scotland the Board for Information in Youth and Community Service undertakes similar functions.

Community Service by Young People

There has been considerable growth in voluntary service by young people to those in need in the community, for example, the elderly, the sick, the mentally ill and the handicapped. Organisations such as International Voluntary Service, Task Force and Community Service Volunteers receive grants from the Government, and through them thousands of young people are doing full- or part-time voluntary work for the community. Many schools organise community service activities as part of the curriculum.

The Young Volunteer Force 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 granted-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 encouraging and promoting voluntary service. In Scotland, a similar organisation, 'Enterprise Youth', exists to co-ordinate and promote voluntary service to the community.

8 Planning and the Environment

Over many years successive British Governments have taken action to manage and protect the environment, and have established a legal and administrative framework, particularly of planning law, to control development, to reduce pollution and to encourage positive planning to ensure the wise use of land. The Department of the Environment (see p. 48) brings together the major responsibilities for land use, planning, housing and construction, countryside policy and environmental protection; all government departments in Great Britain have a legal duty when exercising functions relating to land to keep in mind the desirability of conserving the countryside's natural beauty and amenity.

The basis of the modern system of land use planning—derived from legislation passed in 1947—is contained in the Town and Country Planning Acts of 1971 (for England and Wales) and 1972 (for Scotland). There is a centralised planning structure under the Secretaries of State for the Environment, Scotland and Wales, and compulsory planning duties are imposed on all local planning authorities. Large-scale strategic 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.

The Community Land Act of 1975 introduced a system under which local authorities have new duties to consider the supply of land for development. Progressively, as resources are available, authorities will take on the responsibility of supplying all land needed for private development. Under associated tax legislation local authorities will buy development land at a price net of the tax payable on its development value. A separate Land Authority for Wales has been set up under the Act to assume in Wales the functions in connection with acquisitions and disposals of development land carried out in England and Scotland by local authorities.

In Northern Ireland the Northern Ireland Department of the Environment is responsible for planning matters through its local offices which work closely with the district councils and the local offices of the Housing Executive (see p. 184). District councils have local environmental health responsibilities.

Development Plans

A new development plan system of structure and local plans was provided for in legislation introduced in England and Wales in 1968. Structure plans are prepared by county planning authorities and require ministerial approval.

They set out broad policies for the future use and development 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 periodically. A similar planning system was introduced in Scotland in 1975.

Within the context of these plans local authorities exercise control over particular proposals for development. With a few exceptions, all other development (which in planning law includes most forms of construction, engineering and mining and any material change in the use of land or existing buildings) can be carried out only after the local planning authority has given its permission.

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 public participation requirements 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 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. There is a right of appeal to the appropriate Secretary of State if planning permission is refused or granted subject to conditions; in England some 72 per cent and in Wales 70 per cent of appeals are transferred to inspectors for decision (a similar system of delegation was introduced in Scotland in 1976). An appellant always has the right to put his case before an inspector 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.

Amenity Societies

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 over 580,000 members. For the benefit of the public it owns and protects

from harmful development 430,000 acres (174,000 hectares) of land, 200 historic buildings and large stretches of coastline. Properties in Scotland covering some 80,000 acres (32,000 hectares) are protected by the National Trust for Scotland, an independent body founded in 1931, which has over 70,000 members.

The Town and Country Planning Association, founded in 1899, seeks to improve the qualities of land use and planning in Britain, and helped to promote, for example, the first new towns legislation. The Civic Trust, established in 1957, encourages higher standards in architecture and planning and makes annual awards for good developments of all kinds. It supports and advises over 1,200 amenity societies. Associate trusts exist in Scotland, Wales and the north-east and north-west of England.

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 Commons, Open Spaces and Footpaths Preservation Society; the Ramblers' Association; the Society for the Protection of Ancient Buildings; the Ancient Monuments Society; the Georgian Group and the Scottish Georgian Society; the Ulster Architectural Heritage Society; the Victorian Society; the Pilgrim Trust; the Council for British Archaeology and the Historic Churches Preservation Trust. 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. In Wales, the Prince of Wales Committee promotes projects to improve the environment and encourages a greater awareness of environmental problems.

Regional Planning

Economic planning councils (see p. 192) in each region of England and Wales, together with economic planning boards and local planning authorities, jointly sponsor the preparation of regional strategies. These are intended to advise the Government on the long-term development of particular regions and to provide a framework for the preparation of structure plans by county councils. In Scotland, regional reports are prepared and submitted for comment to the Secretary of State by the regional councils after consultation with the district councils.

The Location of Industry

Special provisions, in addition to the general town and country planning measures, control the location of industry and offices (see p. 214). 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.

New Towns

In Great Britain the New Towns Act 1946, later consolidated in Acts of 1965 and 1968, gives the Secretaries of State for the Environment, Scotland and Wales power to designate any area of land (which may include an existing centre of population) as the site of a new town. The New Towns Act (Northern Ireland) 1965 makes similar provision for Northern Ireland.

The appropriate minister must consult the local authorities concerned and allow the public an opportunity to comment on the proposed designation. A development corporation is appointed by the Government to create and plan

the growth of the town. It is responsible for the master plan, which is prepared in consultation with the appropriate minister, government departments, and the local authorities in the area. Residents are given an opportunity to state their views and, if necessary, a public inquiry is held. When the plan has been agreed, the development corporation draws up detailed proposals for particular areas, based on the master plan, and submits them to the responsible minister for approval which (given after consultation with the local planning authorities) constitutes planning permission. A development corporation has general powers to acquire by agreement or compulsory purchase any land or property within the designated area necessary for its purposes, and is empowered to provide houses, offices, factories and other essential buildings, estate roads and, in certain circumstances, the main services essential to the development of the town.

The capital cost of developing the new towns is advanced from public funds and is repayable over 60 years. Under the New Towns Act 1946 Parliament approved a fund of £50 million to provide for advances to the development corporations for work on the new towns. This fund was increased by subsequent Acts and now stands at £1,750 million, but may be further increased, by an Order made by the Secretary of State, to a sum not exceeding £2,250 million. A total of £1,721 million had been advanced by 31st March 1976. The corporations submit annual reports (which include copies of their audited accounts) to Parliament.

Of the 29 new towns¹ designated in Great Britain since 1946, 21 are in England, two in Wales and six in Scotland. Eleven of the new towns in England (Basildon, Bracknell, Crawley, Harlow, Hatfield, Hemel Hempstead, Milton Keynes, Northampton, Peterborough, Stevenage and Welwyn) are designed to help to relieve housing problems in the Greater London area. Of the others, Aycliffe, Corby, Peterlee and Washington are serving the special needs of their areas; Runcorn and Skelmersdale are helping to meet the overspill needs of Liverpool and north Merseyside; Telford and Redditch are taking population from Birmingham and the West Midlands conurbation; and Warrington aims to attract people from the Liverpool and Manchester areas. Central Lancashire New Town has been designated to ease further the housing problems of Liverpool and Manchester and to provide a growth point for the region's economy.

In Mid-Wales, Newtown is being developed to promote growth and to stem depopulation, whereas Cwmbran in South Wales is serving the needs of local industry.

The Scottish new towns (Cumbernauld, East Kilbride, Glenrothes, Irvine, Livingston and Stonehouse¹) are helping to relieve congestion in the Glasgow conurbation and are major growth areas in the central belt of Scotland. In Northern Ireland responsibility for the former new towns (Antrim, Ballymena, Craigavon and Londonderry) now rests, through its Development Offices, with the Northern Ireland Department of the Environment.

Four new towns (Crawley, Hatfield, Hemel Hempstead and Welwyn) have been substantially completed and are now the responsibility of the Commission for the New Towns, a government-appointed agency.

The population of the new towns in Great Britain is about 1.9 million. Since the start of the new towns programme in the late 1940s, over 900,000 people have moved to live in them. Young people form a higher proportion

¹ The Government has announced its decision not to proceed with the further development of Stonehouse new town in Scotland. The process of de-designation will require legislation.

of new town populations than of the country as a whole. An extensive building and civil engineering programme has provided houses, flats, factories, schools, shops, churches, health centres and libraries as well as public buildings including town halls and law courts. Roads, water supplies, sewerage, gas and electricity, police, fire and bus stations, postal, telegraph and telephone facilities have also been provided; most of the towns are well equipped with parks and sports facilities of various kinds. All the new towns have become concerned with the increasingly high level of car ownership and are making more adequate provision for parking and the segregation of pedestrians from motorists; a few are creating special facilities for different modes of transport, for example, roads for bicycles or buses only.

A number 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 arts centres and full entertainment and recreational facilities (skating rinks, dance halls, bowling alleys, swimming pools, sports stadia, golf courses and youth centres) are gradually being provided. The expansion of large existing towns such as Northampton, Peterborough and Warrington has the advantage, among others, that many of these facilities are already available.

The new towns represent a notable achievement in positive land use. They are generally recognised as one of the most successful post-war experiments, both socially and industrially, and as a profitable long-term investment.¹

Town Development Schemes

The Town Development Act 1952 makes provision for the relief of congestion in large cities in England and Wales (such as London and Birmingham) by encouraging the transfer of population, and industry where necessary, to areas suitable for expansion. Schemes have been approved, providing some 163,000 dwellings in this way, of which about half have been built. Most of the expanding towns (for example, Aylesbury, Basingstoke, Swindon and Thetford) are well established and are providing homes, jobs and amenities for people from large cities. The Housing and Town Development (Scotland) Act 1957 makes similar provision for Scotland, where the only congested area so far involved is Glasgow.

Urban Renewal

Existing towns and cities¹ are being renewed and re-shaped to improve the environment and to meet the growth in population and traffic. Local authorities have extensive powers (often aided by government grants) to clear slum dwellings, to improve individual houses or whole residential areas, to reclaim derelict land, to secure clean air and to manage traffic. Studies of six urban areas in England have been undertaken by the Department of the Environment and local authorities to emphasise an integrated approach to urban problems. Three of the studies were concerned with the problems of industrial towns. The other three studies are investigating those of 'inner city' areas, in particular the nature of 'urban deprivation' and ways of dealing with it.

Research into urban planning problems is also undertaken by a number of institutes and university departments and by the Centre for Environmental Studies, which is financed jointly by the Government and other sources, including the Ford Foundation.

¹ In a policy statement in September 1976 the Secretary of State for the Environment announced the Government's intention to review the future role of the new and expanding towns and future policies on population dispersal in the light of the need to attract industrial and residential development back to inner city areas.

Historic Buildings and Ancient Monuments

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; over 250,000 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. Over 3,300 buildings in Great Britain have received grants and loans totalling some £15 million under the Historic Buildings and Ancient Monuments Act 1953. Local planning authorities have designated for special protection over 4,000 'conservation areas' of particular architectural or historic interest. Grants and loans are also available under the Town and Country Planning (Amendment) Act 1972 for works for the preservation or enhancement of conservation areas designated as outstanding. Studies have been made in Bath, Chester, Chichester and York of the difficulties of preserving features of historic interest in ancient towns in the face of commercial development and increasing motor traffic. 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. Some 15.3 million people visited them in 1975. The Ancient Monument Boards for England, Scotland and Wales recommend to the respective Secretaries of State which monuments are considered to be of national importance and therefore worthy of preservation. In Northern Ireland 138 historic monuments are maintained and protected by the state, and there is planning legislation on the listing of buildings of special architectural or historic interest (over 1,000 have been listed since work started in 1974). Grants for repairs and maintenance are made by the Northern Ireland Department of the Environment, which is also responsible for the designation of 'conservation areas'.

During European Architectural Heritage Year 1975 more than 1,300 projects of restoration and rehabilitation were undertaken in Britain and there was a net gain of more than 19,000 listed buildings. A government-supported Architectural Heritage Fund was established to provide loans for local historic building trusts. Additionally, £180,000 was set aside for projects of enhancement and preservation in non-outstanding conservation areas and a further £150,000 is being made available for this purpose in 1976-77.

Tree Preservation

The local planning authorities have power to preserve 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, wherever appropriate, impose conditions to secure the preservation or planting of trees; and landowners are generally required to replace 'preserved' trees, which die or are removed or destroyed.

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 around all or part of certain urban areas. About three-quarters of London's green belt is agricultural land or woodland, some of which can be used for recreation. There are also country parks, public open spaces, playing fields and golf courses specifically for recreational use. In Scotland there are green belt areas around the main cities.

The Coast

The maritime local planning authorities are responsible for planning land use at the coast, for example, providing 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 was undertaken by the Countryside Commission in 1966-70 which recommended that certain stretches of underdeveloped coast of particular scenic beauty should be treated as heritage coast. Policies for these areas are being incorporated in the planning authorities' structure and local plans.

In 1965 the National Trust launched its Enterprise Neptune campaign to raise funds for the nation to acquire stretches of coastline of great natural beauty and recreational value. Nearly £3 million has been raised so far and as a result the National Trust has brought under its protection over 360 miles (580 kilometres) of coastline in England and Wales. Over 70 miles (112 kilometres) of coast in Scotland are protected by conservation agreements with the National Trust for Scotland; and to deal with the planning questions raised by oil-related developments the Secretary of State for Scotland has issued coastal planning guidelines.

The protection of the coastline against erosion, for which the Department of the Environment and 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 80 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 p. 288). To help to prevent the pollution of the sea and coastline, international conventions restrict the discharge of oil into the sea (see p. 175).

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) encourage 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. By 1976, 126 country parks and 155 picnic sites had 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 Countryside Commission for Scotland has approved six country parks. The commissions are also responsible for encouraging and promoting measures to conserve and enhance the natural beauty and amenity of the countryside and may undertake research projects and experimental schemes, working in consultation with local authorities and such bodies as the Nature Conservancy Council (see p. 172) and the Sports Councils (see p. 439). In England and Wales, the Countryside Commission may give financial assistance to public bodies and individuals carrying out countryside recreation and amenity projects.

National Parks

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 5,250 square miles (13,600 sq km), or 9 per cent of the area of England and Wales. Administration is based on local authority representation, with a third of the members appointed by the Government. By 1976 33 areas of outstanding natural beauty had been designated, covering some 5,600 square miles (14,500 sq km).

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 1,500 miles (2,414 km) of long-distance footpaths and bridleways had been approved by 1976. Large stretches of these paths are already public rights of way. A number of the routes are open and further routes are being established.

Under the Amenity Lands Act (Northern Ireland) 1965 the Ulster Countryside Committee advises on the establishment of national parks and the designation of areas of outstanding natural beauty. Eight areas have been designated. Thirteen amenity areas, acquired by the Northern Ireland Department of the Environment, are being managed as country parks. Although there are no national parks as such in Scotland, there are five national park direction areas, within which all planning applications are subject to scrutiny by the Secretary of State. The areas are: Loch Lomond-Trossachs; Glen Affric-Glen Cannich-Strath Farrar; Ben Nevis-Glencoe-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 as such 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 countryside within the jurisdiction of the Countryside Commission for Scotland.

Forest Parks

The Forestry Commission (see p. 297) has formed, and opened to the public, seven forest parks in some of the finest country in Great Britain: Argyll, Glen Trool, 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. Camping and other recreational facilities are provided in all the parks. The historic New Forest, in Hampshire, although not a forest park, is also open to the public. The parks and the New Forest together cover some 491,000 acres (196,000 hectares). In addition, the Forestry Commission welcomes the public to many parts of the 3 million acres (1.2 million hectares) under its management. In Northern Ireland, the Department of Agriculture has established five forest parks (Tollymore, Castlewella, Gortin Glen, Drum Manor and Gosford) and there are also five forest scenic drives; in some 50 forests recreational facilities have been provided.

Local Footpaths and Open Country

Under the National Parks and Access to the Countryside Act 1949 county councils in most areas of England and Wales have prepared maps showing all public rights of way, which must be kept free of obstructions and properly maintained. If a path is not shown on the map, a private citizen can show that it is a public right of way if it has been used and regarded as such without interruption for at least 20 years. Public footpaths are maintained by local highway authorities who must also provide signposts and supervise the duty of landowners to repair stiles and gates. Local authorities in Great Britain can create paths and ways, close existing paths which are no longer in public use, and divert paths to secure a more efficient use of the land or simply a shorter route. Local planning authorities can convert minor roads into footpaths or bridleways and provide recreational facilities.

The 1949 Act is also concerned with access to open country, which includes mountains, moors, heaths, downs, cliffs and foreshores, woodlands, rivers and canals and their banks, but not farmland unless it is used for grazing. There is no automatic right of public access to open country, but 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. These powers have been extended to Scotland.

Common land, a large proportion of which is open to the public, totals an estimated 1.5 million acres (600,000 hectares) 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 Nature Conservancy Council is the official body responsible for nature conservation in Great Britain. By May 1976 there were 151 national nature reserves, covering 296,000 acres (120,000 hectares). Over 40 nature reserves are run by local authorities; in woodland areas there are nine forest nature

reserves; in addition a number of reserves have been established by voluntary bodies. There are also 3,500 sites of special scientific interest in Great Britain, notified because of their flora, fauna or geological or physiological features: local planning authorities must consult the Nature Conservancy Council before granting planning permission for development affecting them. In Northern Ireland over 30 nature reserves have been established by the Northern Ireland Department of the Environment on the advice of the Nature Reserves Committee.

Throughout Britain voluntary organisations co-operate in the conservation of nature (and in many cases establish their own reserves or other specially protected areas). These include: the National Trust, the Royal Society for the Protection of Birds, the Society for the Promotion of Nature Reserves, the County Naturalists Trusts and the Council for Nature (which consists of some 350 natural history and conservation societies).

Land Reclamation

Local authorities, and in Scotland and Wales the newly formed Development Agencies (see p. 211), bear the main responsibility for reclaiming land so damaged by industrial or other development that it is incapable of beneficial use. Local planning authorities have powers for reclaiming land in pursuit of the general well-being of their districts—for example, in the course of providing open spaces and schools; they can acquire and develop land and carry out restoration and improvement; and they can require an owner of land which is damaging and offensive to the surrounding area to improve its condition. Exchequer grants are available to cover half the cost of individual restoration schemes, higher grants being available for clearance of dereliction in the designated areas (see map, p. 209) and in national parks and areas of outstanding natural beauty.

New arrangements were introduced in December 1975 under which the entire net cost of derelict land reclamation in the designated areas is met from the Exchequer. In Scotland and Wales responsibility for financing and implementing reclamation schemes has been transferred to the Development Agencies. In England responsibility for the clearance of dereliction remains with the local authorities and the Department of the Environment continues to administer government financial assistance and provides central information and advice.

Planning controls to prevent the spread of dereliction require that, when permission is granted for mineral working, various measures are required 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 tipping is also subject to conditions restricting height or requiring treatment on completion.

CONTROL OF POLLUTION

Responsibility for the control of environmental pollution is shared by central government departments, local authorities, water authorities and the Scottish river purification boards. 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, set up in 1970, advises the Government on national and international matters concerning the pollution of the environment, on the adequacy of research (see p. 398) and on the future possibilities of danger to the environment. The commission has so far published five reports.

The Secretary of State for the Environment has a general co-ordinating role concerning pollution matters as a whole, exercised through a Central Unit on Environmental Pollution within his department. Specific responsibilities of the Department of the Environment in England include air pollution control, fresh water pollution control, waste disposal, control of radioactive wastes, of oil on beaches and of noise other than aircraft noise and noise in the workplace. 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 Northern Ireland Department of the Environment. The Department of Trade is responsible for the control of oil pollution at sea and of aircraft noise. The Ministry of Agriculture, Fisheries and Food, the Department of Agriculture and Fisheries for Scotland and the Northern Ireland Department of Agriculture are responsible for the control of agricultural chemicals such as pesticides, for the protection of fisheries from pollution and for the prevention of food pollution. Pollution arising within factories is the responsibility in Great Britain of the Department of Employment and is controlled by HM Factory Inspectorate which forms part of the Health and Safety Executive (see p. 345); 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; sewerage and sewage treatment and disposal; control of air pollution from domestic and certain industrial premises and noise abatement measures. The regional water authorities in England, the Welsh National Water Development Authority in Wales, the river purification boards and islands councils in Scotland and the Northern Ireland Department of the Environment are responsible for control of water pollution.

The European Community has adopted a programme of environmental improvement for which decisions are taken by Community Environment Ministers.

The Control of Pollution Act 1974

The Control of Pollution Act 1974 is a major legislative measure extending earlier statutory provisions dealing with certain aspects of public health and pollution control in Great Britain; these relate particularly to waste on land, including waste collection and disposal, pollution of inland and coastal waters, noise and pollution of the atmosphere. The Act also increases the penalties for a large number of pollution offences. It is, as yet, only partly in operation.

The Land

The main risks of land pollution lie in the deposit or dumping of waste materials of all kinds in tips or elsewhere, application of pesticides and chemicals, fall-out of materials from the atmosphere and the deposition of materials from floodwater. The Control of Pollution Act 1974 will, when fully implemented, lay a duty on the waste disposal authorities (the councils of counties in England, of districts in Wales and of districts and islands in Scotland) to ensure that satisfactory arrangements are made for the disposal of all 'controlled waste'. It also makes special provision for regulations governing the disposal of dangerous waste. Contravention of any such regulations or of the licensing system is subject to penalty.

The non-statutory Pesticides Safety Precautions Scheme ensures that new pesticides intended for use in agriculture and gardens, forestry and food storage, or new methods of using existing pesticides, are not introduced until

enough experimental work has been done on their possible hazards (including those to users, consumers of treated produce, livestock or domestic animals and wild life) to allow the Government to make recommendations for their safe use. A key role in the administration of the safety scheme is played by the Government's Advisory Committee on Pesticides and Other Toxic Chemicals which reviews all risks that may arise from the use of pesticides.

Under the Litter Act 1958 and the Dangerous Litter Act 1971 it is an offence, subject to a fine of up to £100, to leave litter on land in the open air to which the public have free access. Under the Civic Amenities Act 1967 the deliberate dumping of rubbish attracts a similar maximum fine with the possibility of a £200 fine and three months' imprisonment for subsequent offences.

Recycling and Materials Reclamation

Recycling and reclamation of waste materials is undertaken both to reduce pollution and to help in the conservation and re-use of scarce resources. It is estimated that materials to the value of over £1,500 million are reclaimed annually. The Government has a Waste Management Advisory Council which is looking at possibilities for extending reclamation and reducing waste. There is extensive government research and development on such aspects as mechanical sorting plants. The Department of Industry has a Waste Materials Exchange which brings together producers and possible users of industrial wastes beyond obvious categories such as scrap. The waste disposal authorities already have powers under the Control of Pollution Act 1974 to undertake the recycling of waste materials and are responsible for operating a licensing system for waste disposal facilities.

Food

The general provisions of the Food and Drugs Acts (see p. 136) make it illegal to sell food which is injurious to health, not of the nature, substance or quality demanded, or unfit for human consumption. Expert committees of the agriculture, food and health departments periodically review regulations dealing with food, including contaminants.

Fresh Water

The water authorities and the Scottish river purification authorities (see pp. 273 and 274) are responsible for the control of pollution in rivers and certain tidal water in their areas, and their approval must be sought before effluents are discharged. The Government's aim is to improve the quality of water in all the main rivers by the early 1980s. The *River Pollution Survey* and the Scottish report, *Towards Cleaner Water, 1975*, record in detail progress made in reducing river pollution. (As a result of pollution control policies, the Thames is now believed to be one of the cleanest metropolitan estuaries in the world).

Marine Pollution

The discharge of oil into British territorial waters was first restricted in 1922. The United Kingdom is a party to the International Convention for the Prevention of the Pollution of the Sea by Oil 1954, as amended in 1962. Amendments to the convention agreed upon in 1969 prohibit the discharge of persistent oil or mixtures containing any oil anywhere at sea except at a rate which has been shown not to cause harmful pollution; no oil whatever may be discharged from cargo spaces of tankers within 50 miles (80 kilometres) of land. The 1969 amendments are not yet in force, but Britain already enforces these restrictions on United Kingdom registered ships through the Prevention of Oil Pollution Act 1971, administered in respect of ships by the Department of Trade. The Act also covers discharges of oil, or mixtures of oil, arising from the development of offshore oil and it was amended in 1975 to allow certain exemptions to be made in respect of off-shore installations and

associated onshore terminals. This part of the Act is administered by the Department of Energy. The Department of Trade and coastal local authorities are equipped to deal with oil spills which threaten or cause coastal pollution or are likely to endanger wildlife.

The International Convention for the Prevention of Pollution from Ships 1973 will, when in force, replace the 1954 convention (see p. 175) by more stringent requirements and will regulate pollution by chemicals, sewage and garbage as well as by oil.

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 and the appropriate departments in Scotland and Northern Ireland, through the Dumping at Sea Act 1974, which gave statutory backing to voluntary arrangements which had been operated for several years. Under the Act a licence has to be obtained for the permanent deposit of any substance or article into tidal waters and the sea. Dumping at sea is permitted on the basis of the scientific criteria set out in the annexes to the Oslo Convention (International Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft 1972) and the London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972. The Act does not, however, control discharges of liquid effluent from pipelines, which will be covered by the Control of Pollution Act 1974 when fully implemented, nor discharge incidental to or derived from the normal operation of a ship, aircraft, hovercraft or marine structure.

Clean Air

Responsibility for clean air in towns and cities rests with local authorities who may, under the provisions of the Clean Air Acts 1956 and 1968, 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. Central government is responsible through the Alkali and Clean Air Inspectorate of the Health and Safety Executive (the Industrial Pollution Inspectorate in Scotland) for controlling certain industrial processes which give rise to particularly dangerous or offensive emissions or which are technically difficult to control. The Clean Air Council (set up in 1956) and a similar council for Scotland review the progress made in abating air pollution in Great Britain. (London no longer experiences dense fogs or serious smogs and in central London winter sunshine has increased by 70 per cent since 1958. Similar improvement has been achieved in other cities such as Glasgow.) Emissions from motor vehicles are separately controlled by regulations.

Noise

Local authorities are also responsible for the enforcement of noise control and are required to inspect their areas for noise nuisances and to take action (which can be enforced by the courts) to secure abatement. Measures against noise, based on recommendations of the Noise Advisory Council (set up in 1970), were included in the Control of Pollution Act 1974. This improved and strengthened local authorities' existing powers and enabled them to set up 'noise abatement zones' within which they can require noise levels to be held constant or reduced and within which noise levels may not be increased without their permission. The Act contained special provisions to control noise from construction and demolition sites. There are also regulations governing maximum noise emissions by motor vehicles and various noise abatement measures are in force at airports, including the stipulation of maxi-

mum noise levels at take-off, routing flights away from densely populated areas and restrictions on night movement of jet aircraft. New subsonic aircraft are required to satisfy noise criteria agreed by the International Civil Aviation Organisation. (*Concorde* aircraft, see p. 320, are exempted from the statutory noise limits at London's Heathrow Airport, but revised operational procedures are being introduced which should result in a reduction in the noise experienced in the vicinity of the airport.) Where airports or new public works such as roads cause unacceptably high levels of noise, powers exist to provide insulation for houses.

Radioactivity

In Britain 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 Acts (see below) are required to be registered by the Secretary of State for the Environment. Authorisation under the 1960 Act is also required for the disposal of radioactive waste from all premises. Very minor uses and disposals of waste are exempted from the 1960 Act controls. Comparable controls are exercised by the Secretaries of State for Scotland, Wales and Northern Ireland. The responsibility for granting site licences for nuclear installations under the Nuclear Installations Act 1965 and subsequent Acts rests with the Health and Safety Executive (see p. 345) to which the Nuclear Installations Inspectorate was transferred in 1974. Conditions attaching to site licences ensure, among other things, an efficient system for detecting and recording ionising radiations and adequate measures for treatment and disposal of nuclear wastes and irradiated nuclear fuel.

Control of the disposal of radioactive wastes from sites operated by the United Kingdom Atomic Energy Authority and from sites licensed under the Nuclear Installations Acts is exercised jointly in England by the Secretary of State for the Environment and the Minister of Agriculture, Fisheries and Food; in Wales jointly by the Secretary of State and the Minister of Agriculture, Fisheries and Food; in Scotland by the Secretary of State; while in Northern Ireland, should future developments involve the application of the Radioactive Substances Act 1960, the Secretary of State would be responsible.

The National Radiological Protection Board (see p. 398) established under the Radiological Protection Act 1970 provides an authoritative point of reference on radiological protection and represents British interests internationally.

9 Housing

There are over 20 million dwellings in Britain: nearly 17 million in England, 1 million in Wales, 1.9 million in Scotland and nearly 500,000 in Northern Ireland. Nationally, the numbers of households and dwellings are about equal, but they are unevenly distributed or the houses available may not be the type in demand. Housing shortages persist in the more prosperous commercial and industrial centres such as London and Birmingham.

Some 78 per cent of households in Great Britain occupied a whole house according to the 1973 General Household Survey, 21 per cent lived in flats including some in maisonettes or rooms, and the rest in accommodation rented with business premises or mobile homes such as caravans.

Over half of all dwellings are owned by their occupiers, some 31 per cent 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 the different countries of Britain—in Scotland more than half the dwellings are rented from public authorities—and in different regions and areas of those countries. Private rented accommodation is generally more common in the central districts of large towns, while owner-occupation is more frequent in their outer suburbs and in country areas.

New house construction in Britain is undertaken by both public and private sectors. Of the 320,700 dwellings completed in 1975 some 48 per cent was provided by private interests, about 48 per cent by public authorities, and nearly 5 per cent by voluntary housing associations and societies. Public housing authorities provide dwellings mainly for renting while private interests build mainly for sale to owner-occupiers. The construction of private dwellings to rent has dwindled to a very low level.

Over 8.8 million new dwellings have been built in Britain since 1945 and more than two families in every five now live in a post-war dwelling. There remain a large number of older dwellings, some of which have been kept in good repair and modernised, but many others—particularly in the centres of cities—are unsatisfactory by modern standards. The demolition of slum dwellings, improvement of sub-standard houses and more advanced standards for new house-building (particularly in the public sector) have led to significant improvements in the quality of British housing.

Administration

Responsibility for formulating housing policy and supervising the housing programme is borne by the Secretary of State for the Environment in England and by the Secretaries of State for Scotland and Wales.

In Great Britain 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. These 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 in Great Britain are the new town authorities (see p. 166) and the Scottish Special Housing Association (SSHA), which was established in 1937 to supplement building by local authorities in Scotland.

The central government departments specify certain standards for the construction and equipment of all new dwellings; these are enforced by the local authorities. Subsidies are made available to the authorities to assist them with housing costs, and guidance is given on design and layout.

Besides providing public housing, local authorities are involved in many other aspects of housing policy, including paying house renovation grants to the private sector, granting mortgages to owner-occupiers and carrying out slum-clearance and redevelopment programmes. A growing number are establishing housing advisory centres to provide information on most aspects of housing. Local authority social services departments and, in England and Wales, housing departments arrange accommodation for homeless people.

Policy

The main objectives of government housing policy are to secure a decent home for every family at a price within its means, and to ensure fairness between one citizen and another in giving and receiving help towards housing costs. Government subsidies are available to assist local authorities with the cost of clearing slums and providing adequate public sector housing. The Government is concerned to ensure that best use is made of the existing housing stock and subsidies are also available for the improvement of older houses.

Special emphasis is being placed on gradual renewal rather than clearance, on building for smaller households to match the changing demographic pattern and on providing for the needs of the worst housing areas.

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, under the control of the Director General of Research. It is carried out by the Building Research Establishment and the department's 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 in universities 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.

Public Sector Housing

Public housing authorities in Britain own some 6.4 million houses and flats and in 1975 completed over 159,000 new dwellings. The number of houses owned by each authority varies widely, some having a stock of well over 100,000 houses. In 1974 the Government authorised additional public expenditure on housing to enable authorities to increase their building programme. However, as part of the cuts in public expenditure announced in July 1976 (see p. 193) controls are to be introduced in April 1977 to limit the rate of approvals for new house building by local authorities. Reductions will not be made in areas where housing needs are greatest. A start has also been made on programmes for municipal ownership of privately rented housing in the worst areas of housing stress.

Finance

Local authorities in Great Britain meet the capital costs of new house construction by raising loans on the open market or by borrowing from the Public Works Loan Board (see p. 69). Current expenditure, including maintenance and management costs and loan interest and repayments, is met from rents,

supplemented by subsidies from the Exchequer and (particularly in Scotland) from the rates. Subsidies for public housing in 1975-76 totalled an estimated £840 million in England and Wales and about £142 million (excluding SSHA subsidies of some £11 million) in Scotland.

The Housing Rents and Subsidies Act 1975 and the Housing Rents and Subsidies (Scotland) Act 1975 introduced certain changes in the system of rent fixing for public sector housing and in England and Wales a new housing subsidy system. Local authorities are required to charge their tenants reasonable rents—which keep a balance between the interests of tenants and rate-payers—without making a profit. Under the new subsidy system most of the help goes to new building, acquisition of land and housing and improvement of existing stock. In Scotland certain changes were made in the existing subsidy system, providing increased support for housing expenditure.

Supplementary subsidies are available to assist local authorities throughout Great Britain with slum clearance. In addition, there is a national system of rent rebates and allowances which assists poorer tenants in meeting rents of accommodation suited to their needs. Payments are made by local authorities and financed largely by government subsidy.

Tenants

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 houses according to their own schemes. Authorities normally establish waiting lists and treat applicants (outside priority categories) in order of application; some require applicants to fulfil residence qualifications before they are accepted on waiting lists.

Construction and Design

Although a number of authorities employ direct labour to build houses, most building is undertaken by private firms under contract. Some authorities work in consortia to make the best use of industrialised systems.

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. In England and Wales in 1974 some 91 per cent of new dwellings had central heating and houses built for families of five people had an average floor space of 958 square feet (89 square metres) and cost an average of about £7,300 to build.

Home Ownership

In 1975 over 153,000 private sector dwellings were completed in Britain, almost all of which were intended for owner-occupation. The number of people owning their own houses has more than doubled in the last 20 years, and the 10.7 million owner-occupied dwellings in Britain now account for over half of the total housing stock.

Mortgage Loans

Loans to enable people to buy their own houses by a system of instalment purchase are available from various sources, including building societies, insurance companies, industrial and provident societies and local authorities.

Building societies (see also p. 365) are the most important of these agencies. They do not build houses themselves but provide long-term loans on the security of property bought for owner-occupation. They usually advance up to 80 per cent of their valuation of a house but it is possible to borrow up to 95 per cent, or in rare cases, 100 per cent. Loans are normally repayable over periods of 20 or 25 years (up to 30 or 35 years in certain circumstances) by

equal monthly instalments to cover capital and interest. A scheme introduced in May 1975 enables people buying homes for the first time (subject to certain conditions) to defer part of their mortgage payments in the first five years until the eleventh and subsequent years. The average price in Britain of new houses mortgaged to building societies in 1975 was £12,000; new houses in London and the south-east of England cost some 30 per cent more than the national average. In 1975 the societies advanced some £4,965 million. As a result of policy decisions announced in July 1976, local authority mortgage lending, which amounted in 1975 to £636 million in England and Wales, will be reduced from April 1977. The building societies have expressed willingness to help fill the gap.

Financial Assistance

Owner-occupiers are entitled to tax relief on their mortgage interest payments on loans related to their principal private residences, and in 1975-76 this amounted to about £865 million. An alternative form of assistance—the option mortgage scheme—designed to help those with smaller incomes was introduced in 1968. Under the scheme, borrowers receive, through the lending agency, a subsidy (instead of tax relief) which reduces the rate of mortgage interest which they pay by up to 5.2 per cent. Subsidy payments under the option mortgage scheme in Great Britain amounted in 1975-76 to about £106 million. Associated with the scheme is the option mortgage guarantee scheme, whereby mortgage loans of up to 100 per cent of the valuation of a house (not exceeding £12,000) may be made to those participating.

Building Standards

For building in the private sector the National House Building Council (NHBC) sets standards and enforces them by inspection and certification. Almost all new private houses are covered by the council's scheme which carries a ten-year guarantee against major structural defects. A two-year guarantee is also given against faulty workmanship. Most lenders will not grant mortgages on a new house unless it is covered by a NHBC certificate.

Privately Rented Housing

During the last quarter of a century there has been a steady decline in Great Britain in the number of rented dwellings available from private landlords (including tied accommodation)—from nearly 52 per cent of the housing stock in 1951 to about 16 per cent (3.2 million) in 1975. Major factors in this decline have been the increased demand for owner-occupation, the greater availability of public rented housing, and the operation of rent restriction. Privately rented dwellings form a high proportion of Britain's older housing with 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 eviction from any dwelling (without a court order) and harassment of occupiers are serious offences.

Rent restriction can take three forms: rent control, rent regulation and the fixing of a reasonable rent by a rent tribunal. Rent control applies to dwellings of low rateable value in which the tenant has lived continuously since before 1957. Tenants of controlled dwellings pay fixed rents determined by reference to 1956 rateable values or, in Scotland, to historic rent levels. These are very low by comparison with other rents, but they can be increased to reflect expenditure on improvements and repairs. Landlords of controlled dwellings whose houses reach a satisfactory standard are able to transfer them to the alternative system of rent regulation.

Rent regulation was introduced under the Rent Act 1965 for private unfurnished dwellings (but not while they remain controlled under previous legislation) which fall within defined limits of rateable value up to 1973 values of £1,500 in London, £750 elsewhere in England and Wales, and £200 (values at 1965, or when first added to the valuation roll) in Scotland. The Rent Act 1974 extended the system to apply to tenants of furnished accommodation whose landlords do not live on the same premises. Under the rent regulation procedure, a 'fair rent' may be fixed for the premises by independent rent officers at the request of the landlord, the tenant, or both. Factors taken into account by rent officers in determining rents include the age, character and locality of the house and its state of repair. To eliminate any artificial value derived from scarcity, the assumption is made that for similar dwellings to let in the area demand does not substantially exceed supply. If the landlord or tenant objects to the decision of the rent officer, the case is referred by him to a rent assessment committee. Once determined, the rent is not normally reviewed for at least three years. Where the new registered rent is substantially higher than the previous one, phasing provisions have the effect of applying the increase in equal annual steps over the three-year period. Since 1965, some 850,000 fair rents have been registered.

Tenants with resident landlords and tenants of a few other types of furnished accommodation 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.

Poorer tenants of private accommodation are eligible for assistance with their rent under a national scheme of rent allowances. Operated by local authorities, the scheme is financed mainly by government subsidies.

Housing Associations and Societies

Since the early 1960s the Government has encouraged the growth of non-profit-making housing associations and societies, which between them own over 250,000 dwellings in Great Britain; some 14,700 were completed or acquired in 1975.

Voluntary housing associations, set up to provide low-rent accommodation for people in need, fulfil an increasingly important housing function. There is a National Federation of Housing Associations, of which 2,150 associations are members. The associations have in the past borrowed money to finance house building mainly from local authorities which provide the loan funds for entire projects. A separate Scottish Federation of Housing Associations covers housing associations operating in Scotland.

In 1964, a statutory Housing Corporation was set up, with government funds, to stimulate the formation of co-ownership societies. Its role has been considerably extended since then. In 1972 the Housing Finance Act made provision for housing associations to borrow from the corporation and in 1974 the Housing Act introduced a scheme under which housing associations and societies, in order to qualify for government financial assistance, must register with the corporation. The Act also provides that approved new projects to provide housing by housing associations registered with the Housing Corporation (whether funded by the Housing Corporation, by local authorities or privately) qualify for a housing association grant which reduces the debt to one which can be serviced from fair rents charged to tenants. A register was opened in March 1975. Projects for new and improved homes approved by the Housing Corporation in 1975-76 numbered 36,000.

Early in 1976 the Government announced that it had accepted the recommendations of a working party that the development of housing co-

operatives (a system which includes a range of types of house ownership, tenure and management on a co-operative basis) should be encouraged on local authority estates and within the housing association sector. The Housing Corporation agreed to set up a specialist unit on housing co-operatives and an advisory committee has been established by the Secretary of State for the Environment to provide guidance for the corporation in this new role.

Rented dwellings owned by housing associations come within the fair rent and rent allowance schemes.

Improvement of Houses

Private owners in Great Britain can obtain grants from local authorities to improve their houses by providing amenities such as baths, for carrying out other modernisation works, and for converting large buildings into flats. These are: 'improvement grants' for improvements to a high standard or conversions into flats, which may be awarded on a maximum eligible expense of up to £3,200 (sometimes £3,700); 'intermediate grants' on up to £700 for the provision of standard amenities, and £800 for associated repairs; 'special grants' (not available in Scotland) depending on the number of standard amenities to be provided in a house in multiple occupation; and 'repairs grants' on up to £800 expenditure and available only in 'housing action areas' and 'general improvement areas' (see below). The amount of the award depends on the location of the dwelling: up to 75 per cent (sometimes 90 per cent) of the eligible expense in housing action areas; 60 per cent in general improvement areas; and 50 per cent elsewhere. A government contribution amounting to 75 per cent (90 per cent in housing action and general improvement areas) of each grant is paid to the local authority. Aid in the form of annual subsidy is given by the Government to local authorities and housing associations, but this can include part of the cost of buying properties for conversion and improvement as well as that of carrying out works.

Since renovation grants were first introduced in 1949, some 3.2 million dwellings in England and Wales and (since 1950) some 397,000 in Scotland have been improved with their aid; in 1975 house renovation grants were approved for over 159,000 dwellings in Great Britain.

In order to tackle systematically the improvement of whole areas of older housing, local authorities in England and Wales were given powers under the Housing Act 1969 to declare 'general improvement areas'. The aim in these areas is to encourage householders to improve their dwellings with the aid of grants, while the local authority uses its comprehensive powers to improve the environment. A government contribution is available of half the local authority's expenditure on environmental improvements on costs of up to £200 a dwelling. Under the Housing Act 1974 local authorities in England and Wales are empowered to declare 'housing action areas' in places of housing stress. In such areas authorities have powers in certain circumstances to compel landlords to improve their houses to a given standard and preferential rates of renovation grant are payable. Compulsory powers are also available to local authorities in general improvement areas. The Housing (Scotland) Act 1974 makes broadly similar arrangements for Scotland where, however, the term 'general improvement area' is not used and where the 'housing action area' powers are available for areas in which at least half the houses fail to meet prescribed physical standards.

Slum Clearance About 3.2 million people have been rehoused in England and Wales since the mid-1950s as a result of slum clearance programmes and during 1975 some 60,000 houses were demolished or closed in Great Britain as a result of slum

clearance and other action. Some housing authorities have eliminated all their slums and others expect to achieve this within a few years, but in certain of the older industrial towns, clearance will take longer. Local authorities receive special financial assistance from the Government if they incur a loss on slum clearance operations.

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.

Northern Ireland The Northern Ireland Department of the Environment is responsible for housing policy in the Province and the Northern Ireland Housing Executive for the provision and management of all public authority housing (some two-thirds of total output) and for dealing with unfit housing, whether publicly or privately owned. The Executive is helped and advised by the Northern Ireland Housing Council representing all district councils. Almost half the Northern Ireland housing stock has been built since 1945.

In the public sector capital expenditure of the Housing Executive is financed by loans raised on the open market or borrowed from the National Loans Fund. New dwellings completed by the Executive qualify for government subsidy at a rate varying according to the number of persons for whom each dwelling is designed. There is a scheme of grants payable to the Housing Executive by the Department of the Environment for improvement and conversion work to its property and for the provision of standard amenities. (Where houses are basically sound, but have become derelict, vandalised or abandoned, rehabilitation is 100 per cent grant-aided by the Government. A major programme to bring such houses back into use has been begun by the Housing Executive.) The Department of the Environment exercises a statutory power of approval of rents of all public sector housing. There is a rent rebate scheme, similar to that in Great Britain, to help poorer tenants.

In the private sector, home ownership is encouraged by subsidies payable by district councils for houses built for owner occupation or for letting; while improvement grants are also available. Grants are also payable towards the cost of new or renovated farm houses and houses for farm workers. Under a non-statutory scheme grants may be paid for rehabilitation of private property when it has been the subject of action under the Public Health Acts. The introduction has been recommended of a rent regulation system broadly similar to that in Great Britain (see p. 182) for unfurnished accommodation outside designated redevelopment areas and of rent allowances for poorer tenants.

A Northern Ireland Committee of the National Federation of Housing Associations encourages the development of housing associations, particularly to help the elderly, the handicapped and those living in older houses which can be improved. It is financed largely by the Department of the Environment.

10 The Churches

Everyone living in Britain has the right of religious freedom and may manifest his faith in teaching, worship and observance without interference from the community or the state. Churches and religious societies of all kinds 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.

In the services administered by the state, such as the armed forces, the national hospitals and the prisons, the clergy of the established Churches of England and Scotland provide the principal ministrations and are paid a salary by the state for this part of their work. Clergy of other denominations are also appointed. Voluntary schools (see p. 146) provided by churches of any religious denomination may be wholly or partly maintained from public funds.

There is no precisely accurate or uniform method of assessing the number of adherents to the various churches in Britain, since no inquiries are made about religious beliefs in population censuses¹ or other official returns, and each church adopts its own criteria in counting its members. The membership figures given in this chapter are therefore approximate.

The Church of England

The Church of England's status as the established church of England derives from a long and stormy relationship between the Church and the state culminating in the Reformation in the sixteenth century. The Church'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 on his or her accession 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 had to have Parliament's consent to change its form of worship until 1975, when the Worship and Doctrine Measure became law. This gave the Church freedom to 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) have permanent seats in the House of Lords (see p. 29). Clergy of the Church of England (together with those of the Church of Scotland, the Church of Ireland and the Roman Catholic Church) are legally disqualified from sitting in the House of Commons (see p. 31).

Church Organisation and Government

The Church is organised into 43 dioceses, grouped into two provinces: Canterbury, comprising 29 dioceses, and York, 14 dioceses. The dioceses are subdivided into ecclesiastical parishes, of which there are some 14,260. The Archbishop of Canterbury is styled 'Primate of All England', and the Archbishop of York is 'Primate of England'. Of the population born and resident in the two provinces (roughly 47 million in 1973), about 60 per cent are baptised into the Church and some 20 per cent are confirmed members.

The central governing body of the Church, the General Synod, is invested with both spiritual authority and legislative and administrative powers; and

¹ In Northern Ireland, recent full censuses have contained an optional question about people's religious professions.

bishops, clergy and lay members are involved in decisions affecting the whole range of the Church's concern. In the dioceses, diocesan and deanery synods are linked both with the General Synod and parish organisations. Certain important issues must be referred for the approval of the dioceses before they are finally decided by the General Synod. Lay members of the Church are associated with church government in the parishes through the ancient office of churchwarden and the modern parochial church councils on which are members appointed by baptised members of the Church over the age of 17 who are on the church electoral roll of their local parish.

The General Synod is the centre of an administrative system dealing with various aspects of the Church's work—such as education, recruitment and training for the ministry, and church work at home and overseas. It is concerned with the Church of England schools and some independent schools (see p. 149); church colleges of education in England and Wales; theological colleges; and establishments for the training of women in pastoral work.

The Church has its own courts whose jurisdiction today extends only to matters of purely ecclesiastical concern.

Church Finance

Church finance is administered locally by the parishes and the dioceses, with contributions to a central General Synod Fund which the Central Board of Finance administers for the maintenance of central services, including capital expenditure on training and theological colleges and grants for training candidates for ordination. (Although the state pays for or contributes towards some services provided by the Church—see p. 185—it makes no direct financial contribution to church expenses.¹) The Church's endowment income (from assets amounting to £505 million in 1975 in land and investments) is mainly administered by the Church Commissioners, the body largely responsible for the payment of clergy stipends and the provision of finance for pensions. Increase in the total net income (£34.1 million in 1974-75) has meant a rise in the stipends of the poorer clergy and the introduction of schemes for better parsonages, for church buildings in new areas of population, and for better pensions for clergymen and their widows.

The Anglican Communion

The Anglican Communion comprises 22 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 established Church of England and the unestablished Church in Wales, Episcopal Church in Scotland, and Church of Ireland.

Every ten years (the next meeting will be in 1978) the Lambeth Conference meets for unofficial consultation between 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 years—is designed to provide consultations within the Anglican Communion and to serve as an instrument of common action. The council met in Trinidad in 1976.

¹ In 1975 the Government agreed in principle to provide a measure of state aid for historic churches and other ecclesiastical buildings still in use. This aid is also available for other denominations.

The Church of Scotland

The Church of Scotland has a presbyterian form of government. It has been described as 'the supreme example of a church which is established and yet is free'. Its status as the national church derives from the Treaty of Union 1707 and the Church of Scotland Act 1921 which confirmed its complete freedom in all spiritual matters. The Church appoints its own officers and its decisions on questions of doctrine and discipline are not subject to parliamentary discussion or modification.

All ministers of the Church of Scotland are of equal status, each of some 2,000 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 one million.

The Free Churches

The phrase 'Free Churches' is commonly used to describe the 'nonconformist' churches of England (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 some 558,000 adult full members, originated in the eighteenth century following the evangelical revival by John Wesley, and is nowadays based on a 1932 union of most of the separate Methodist Churches. The Methodist Churches which did not join the union include the Independent Methodists (5,400 members) and the Wesleyan Reform Union (with some 4,500 members).

The United Reformed Church, with some 187,000 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.

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 187,000; in addition there are separate Baptist Unions for Scotland, Wales and Ireland and other Baptist churches.

Among the other Free Churches are the Presbyterian Church in Ireland (with some 123,000 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 nearly 97,000; 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 Scotland; the Reformed Presbyterian Church of Ireland; and the Non-Subscribing Presbyterian Church of Ireland.

Other Protestant denominations in Britain 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 Society of Friends (Quakers)—with over 20,000 members in Britain—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 82 other countries. Within Britain it has some 100,000 active members operating from more than 1,000 centres of worship and there is a worldwide community strength of about 2 million. Believing in a very practical expression of Christian concern, the Salvation Army in Britain also has 209 centres providing help for 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 4.2 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 Roman Catholic children in Britain are staffed by members of the religious orders for men and women, 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 were expelled at the end of the thirteenth century by an edict of Edward I. The Anglo-Jewish 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. There has been an increase in the number of Jewish denominational schools, which are now attended by about one in five Jewish children. The first woman to become a rabbi in Britain was ordained in 1975.

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. It is estimated that there are nearly 1 million 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 has its headquarters in London, with a Shrine Room and a Buddhist library claimed to be one of the finest in Europe; there are also Shrine Rooms in the two Viharas in London, one of which is run by Thai monks and supported by the Thai Government. In Scotland there is a Shrine Room at the Tibetan Centre. Hindu and Sikh temples have been established in many areas where Asian immigrants have settled.

Co-operation among the Churches

The British Council of Churches, composed of representatives or consultant observers from all the main Christian churches in the British Isles, facilitates common action among the churches and seeks to further Christian unity. It works with the Conference of Missionary Societies of Great Britain and Ireland.

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 and aims to promote unity and joint action among the Free Churches and to provide a channel for communication with central and local government authorities.

The Permanent Anglican-Roman Catholic Commission explores points of possible unity between the two Churches.

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 250 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 translation into modern English completed in 1970, is the result of co-operation among many of the Christian churches in Britain.

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 characterised by the contribution of manufacturing industry and services¹ to national output—accounting, respectively, for about 30 and 45 per cent of total domestic income—and the importance of international trade (exports of goods and services equal about 30 per cent of gross domestic product). 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 trade between the market economies. It takes over 9 per cent of the world's exports of primary products, and contributes about 9 per cent to the main manufacturing countries' exports of manufactured goods.

The discovery and exploitation of North Sea oil and gas resources is having a fundamental effect on the economy.

As a result of a high level of agricultural productivity, Britain provides just over half the food it needs from its own soil, although only 2.7 per cent of the working population are engaged in agriculture—a lower proportion than in any other major industrial country. The remaining agricultural supplies are imported, Britain being among the world's largest importers of such products as wheat, meat, butter, fodder grains, fruit, tea, tobacco and wool. Other imports include raw materials (such as metallic ores, crude oil and timber) and semi-manufactures (for example, chemicals and textile yarns), as well as manufactured products.

Britain earns overseas currency by exports of (mainly) manufactured goods and by invisible transactions—earnings on overseas investment, travel, civil aviation, British-owned shipping, and financial, banking, insurance and other services. Britain is one of the world's largest exporters of aircraft, motor vehicles, electrical equipment, finished textiles and most types of machinery. The gross domestic product per head of population rose in real terms by about 19 per cent between 1965 and 1975.

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 worldwide financial services. The City of London contains perhaps the most comprehensive and advanced capital market in the world.

Earlier Development of the Economy

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 lead

¹ Services in this context cover transport, communication, distributive trades, insurance, banking, finance and business services, public health and education, and other services excluding public administration, defence and ownership of dwellings.

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. Quantitative restrictions on most imports were gradually removed, exchange controls on transactions between the sterling area and the rest of the world were also for the most part lifted, and convertibility of sterling on current account was introduced for non-residents.

ECONOMIC MANAGEMENT

The objectives of the Government in managing the economy are to achieve a steady and sustainable rate of growth, rising exports and investment, a sound balance of payments, a high level of employment and a more equitable distribution of income. Its policies are carried out by the main government departments with economic responsibilities on a national scale: the Treasury, the Departments of Trade, Industry, Employment, Energy, Prices and Consumer Protection, the Environment, and Transport, and the Ministry of Agriculture, Fisheries and Food.

An important advisory body on general economic policy is the National Economic Development Council, which brings together representatives of government, management and trade unions under the chairmanship of the Prime Minister. It has an independent but publicly financed secretariat and has established a number of economic development committees dealing with different industries and services and different aspects of industry. Other bodies responsible for advice on specific aspects of policy include the Monopolies and Mergers Commission (on action to prevent the abuse of monopoly power, see p. 207) and the Office of Manpower Economics (which provides the secretariat for the three pay review bodies, see p. 338).

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 (see p. 41).

Regional Economic Planning Machinery

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 Councils and Economic Planning Boards. There is a council and 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 councils, which are advisory bodies, comprise part-time members with wide experience of their regions. They help in the preparation of broad economic and land-use strategies which provide a regional framework for national and local planning and investment decisions. 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 and provide the councils with information and advice.

Scotland also has an Economic Council and an Economic Planning Board; there is a Welsh Council and a Welsh Planning Board; and Northern Ireland has an Economic Council.

Guidance of the Economy

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 rather slower than in most other western European countries. There were also certain persistent economic problems, such as periodic difficulties with the balance of payments especially during periods of relatively high pressure of demand. 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 by 1971.

In 1973, the economy achieved an annual growth rate of about 5 per cent in response to government policies introduced from 1971 onwards, designed to raise the growth rate and so reduce unemployment. However, with the onset of the world energy crisis towards the end of 1973, the growth rate began to slow down. During 1974 the world economy entered a phase of recession, caused mainly by accelerating inflation and the large increase in the cost of oil (see p. 370). The main impact on the British economy came early in 1975, rather later than in many other countries. By the third quarter of 1975 the gross domestic product (GDP) had fallen by about 4.5 per cent in volume terms from the level in the third quarter of 1974, with a greater fall in manufacturing output, and unemployment was rising.

In the April 1975 Budget, the Government took measures designed to release resources for exports, strengthen Britain's industrial base and reduce the public sector borrowing requirement as a percentage of gross national product. More generally, the measures reflected the need to ensure greater

security of employment in the medium term and a balanced economic recovery as the expected revival of world trade occurred. Towards the end of 1975, the first signs of improvement were apparent. The rate of increase of retail prices showed a sharp deceleration while the current deficit on the balance of payments for 1975 was less than half that for 1974 (though with falls in both export and import volumes). By the beginning of 1976, there were signs of rapid growth in export volume in part at least reflecting the improvement of world trading conditions. Unemployment continued to rise, however, and selective measures designed to slow down the rate of increase were introduced in late 1975 and early 1976.

Measures were introduced in the April 1976 Budget designed to reduce inflation further so as to enable the fastest possible achievement of full employment, external balance and the regeneration of British industry. As part of the strategy to reduce inflation, certain proposed changes in income tax were made conditional on the acceptance by the Trades Union Congress of a new pay limit (see p. 194).

The Government's general aims for public expenditure and for growth were reaffirmed in *Public Expenditure to 1979-80*, published in February 1976. Further measures to reduce the public sector borrowing requirement were announced in July 1976 including cuts in public expenditure plans for 1977-78 which would give a total saving of over £1,000 million and an increase in the employers' national insurance contributions which would yield over £900 million. The measures would reduce the borrowing requirement from an estimated 9 per cent of GDP in 1976-77 to 6 per cent in 1977-78.

Control of Inflation

Inflation, which began to gather momentum in the 1950s and 1960s, has continued to rise in Britain, as in most other developed industrial countries, in the first half of the 1970s. The relatively rapid acceleration in Britain from 1970 until mid-1975 was due first to sharp increases in world prices of food and raw materials (especially oil) which Britain must import in large quantities, and secondly to very high rates of pay settlements from mid-1974, which led to substantial increases in industrial costs. From 1975, however, there has been a decline. In the last 30 years successive governments have adopted policies (including statutory controls of prices or wages or of both) to slow down the rate of inflation. Since the Government took office in early 1974, counter inflation policy has had three phases, each related to the 'social contract' between the Labour Party and the Trades Union Congress (see p. 341) under which the Labour Party originally undertook to maintain free collective wage bargaining without statutory control, to control prices, to help the lower-paid and pensioners and to aim at full employment; while the TUC acknowledged that, in the absence of a statutory incomes policy, trade unions have loyalties not only to their own members but to other members of the community, and should therefore aim to keep pay increases in step with the cost of living.

In June 1974 the TUC issued a policy statement, *Collective Bargaining and the Social Contract*, reviewing the situation and containing recommendations (or 'guidelines') to unions and negotiators about the conduct of collective bargaining in the period ahead. The statement was a response to the Government's commitment to a wide range of economic and social policies (including the payment of subsidies on certain basic foodstuffs, control of housing rents, higher pensions and other social benefits).

While the majority of wage negotiations during the 1974-75 pay round took account of the guidelines, the social contract did not prove altogether effective in restraining pay increases and in the first half of 1975, wage rates were running

at about 33 per cent more than in the preceding year and retail prices at about 25 per cent more. After urgent consultations between the Government, the TUC and the CBI in mid-1975, the TUC issued a new statement, *The Development of the Social Contract*, which proposed a new voluntary limit on pay increases of £6 a week, with no increases at all for those earning annual salaries above a certain cut-off point. The limit was to apply for 12 months from 1st August 1975. In *The Attack on Inflation*, published on 11th July 1975, the Government endorsed the £6 limit and set the cut-off point at £8,500 a year. It undertook for its part to continue its action on prices (including maintaining the existing system of price control and spending more than previously envisaged on food and housing subsidies) and to limit dividend increases to 10 per cent. The Remuneration, Charges and Grants Act 1975 was introduced in order to relieve employers of any contractual obligation to make pay increases in excess of the £6 limit. As a further measure to combat inflation, the Government announced that it would be reinforcing control of public expenditure in 1976-77 by making extensive use of cash limits, to be applied to 75 per cent of central Government voted expenditure (see p. 351) other than social security benefits.

The £6 pay limit was universally observed and proved very successful. In the year to July 1976, average earnings had increased by little more than half the rate of increase over the year to July 1975. Largely as a result, the rate of retail price inflation had also been dramatically reduced, again to about half the level of the preceding year.

Nevertheless, Britain's inflation rate continued to be appreciably higher than that of its major overseas competitors. In the spring and early summer of 1976 there were, therefore, further discussions between the Government and both sides of industry on a second round of voluntary wage restraint, to run for another year from 1st August 1976 and designed to bring Britain's inflation down to the level of its competitors by the end of 1977. Again details of the new pay limit were set out by the TUC in a report, *The Social Contract 1976-77*, published at the end of May 1976. The new limit, to run for 12 months from 1st August 1976, provides for a 5 per cent increase, subject to a minimum of £2.50 and a maximum of £4 a week, and is expected to represent an average increase of about 4.5 per cent. Following the TUC's acceptance of the pay limit, Parliament implemented a number of tax reliefs which had first been proposed conditionally in the April Budget. In June 1976 the Government published *The Attack on Inflation, The Second Year*, endorsing the proposed pay limit (see Bibliography, p. 463). A reaffirmation of continuing co-operation on economic policy and a statement of priorities for the next three years was endorsed by the TUC-Labour Party Liaison Committee (see p. 342), in July 1976.

Price Control

Since 1973 a strict system of price control has been operated by the Price Commission, an independent statutory agency set up under the Counter-Inflation Act 1973. The controls are set out in the Price Code, drawn up by the Government and amended from time to time as appropriate. Generally speaking the Price Code is designed to ensure that any price increases are fully justified on grounds of unavoidable rises in costs.

Money Supply

In controlling the money supply the Government is concerned to ensure that industry's financial requirements are safeguarded against other demands, notably those of the public sector, and that monetary growth is prevented from adding to inflationary pressures.

Despite an increase in the public sector borrowing requirement, the pace of monetary expansion experienced in 1972 and 1973 slackened substantially in 1974 and 1975 and the rate of growth remained modest to mid-1976. After declining in early 1975, interest rates rose sharply in the summer but fell again in late 1975 and early 1976, following United States rates. Rates became more stable after the rise in minimum lending rate in May 1976 but minimum lending rate was raised again in September 1976 to correct a tendency towards increased monetary growth.

Role of Public Enterprise

In Britain's mixed economy, direct state intervention in industry and commerce (as well as in social, cultural and other affairs) is often 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 most important are those which in the public interest operate major nationalised industries—including coal, electricity, gas, steel, railways, airports and air transport, commercial road transport and postal services. These industries and services are described in their relevant sections. Altogether about 8 per cent of all employees work for these bodies. (The public sector employs about a quarter of the working population.)

Recent developments have included the establishment of the British National Oil Corporation through which the Government exercises its participation rights in the exploitation of Britain's offshore oil resources and proposals for the nationalisation of the shipbuilding and aircraft industries and the bringing of privately owned commercial ports and cargo handling activities under public ownership and control.

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. Certain of the nationalised industries are self-supporting; others receive Exchequer grants to help them to carry out duties with which they have been charged.

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 formal directive.

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 with the different industries (or are under discussion) ranging from 15.5 per cent gross return on capital employed to 'breaking even' after interest and depreciation have been allowed for. In addition the industries are expected to apply a test discount rate of 10 per cent for new investment. 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 met from internal sources is provided mainly by interest-bearing loans from the Exchequer and in certain cases by borrowing from abroad.

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 generally done by the establishment of representative consumers' councils to consider complaints and suggestions made to them, 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. A House of Commons Select Committee on the Nationalised Industries examines their reports and accounts. (Its powers of investigation also include several other public corporations such as the Independent Broadcasting Authority, Cable and Wireless Limited and certain activities of the Bank of England.)

State participation and intervention in industry takes several other forms such as the majority share holdings in certain companies held by the National Enterprise Board (see p. 206) and these are described on pp. 206-12.

European Community Membership

The main economic adjustments consequent upon Britain's membership of the European Community are set out in Chapter 3 and in other relevant chapters.

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 over £1,000 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; imports were swollen by the rapid growth of domestic demand, and exports were affected by various factors including the slower growth of world trade. This deterioration, together with growing fears about inflation, led to a large outflow of short-term speculative capital in June 1972, and the Government decided to allow the pound to float and applied exchange control to transactions with the overseas sterling area countries (see p. 198). The lower sterling exchange rate made Britain highly competitive, and the volume of exports, which had not changed from 1971 to 1972, increased by 14 per cent in 1973 and by 7 per cent in 1974. Nevertheless, mainly as a result of rising prices of imports, including oil, and despite the positive invisible balance, there was a large deficit on the current account in both 1973 and 1974. There was a considerable improvement in 1975, largely because of lower import volumes and more favourable terms of trade (see p. 369). In future years increasing supplies of oil from the North Sea (see p. 259) can be expected to bring considerable advantage to the balance of payments. (For details of overseas trade and payments see Chapter 18.)

Exchange Rates

In December 1971, following a period of uncertainty in international exchange markets, particularly affecting the United States dollar, 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. At the end of August 1976 the effective depreciation of sterling (since the float in 1972) in relation to the Smithsonian parities structure was about 39 per cent, and the market rate was £1 = \$1.7764.

Five member countries of the European Community (Belgium, Denmark, the Federal Republic of Germany, Luxembourg and the Netherlands), as well as Sweden and Norway, maintain a scheme, usually called the 'snake', under which rates between any two of their currencies cannot diverge from their cross parities by more than $2\frac{1}{4}$ per cent. Britain, France and Italy were formerly members of the scheme.

International Monetary Agreements

The Committee of Twenty (representative of the major industrial and the developing countries), which had been set up within the International Monetary Fund (IMF) framework, concluded its work on the reform of the international monetary system in June 1974. The committee agreed on a method of valuation of the special drawing right (SDR—an international reserve asset) for an interim period, recommended guidelines for the management of floating exchange rates, and agreed on some principles of corrective action for countries with balance of payments disequilibria.

In January 1976, at a meeting in Kingston, Jamaica, agreement was reached by the IMF's Interim Committee, subject to ratification, on revised IMF Articles of Agreement, which incorporate many of the recommendations of the Committee of Twenty. Provision has been made for an eventual return to a par value system but meanwhile members may operate individual exchange arrangements, subject to firm surveillance by the IMF. The articles, as revised, facilitate the use of special drawing rights and substantially reduce the status of gold by providing for the abolition of the official gold price and of gold transactions between member countries and the IMF. The IMF's gold holdings are, moreover, being gradually reduced; one-sixth is to be returned to members, and a further sixth is being auctioned, the major proportion of the proceeds from the auctions being used to finance a trust fund which has been set up to provide medium-term balance of payments support to the poorest developing countries.

Discussions on reform have been accompanied by measures designed to help recycle oil funds and to assist the developing countries with the problems caused for them by the increases in oil prices and the depression of world trade. After the oil price increases, the IMF set up a borrowing agreement for 1974 (which was continued in 1975), known as the oil facility through which countries could draw on funds lent mainly by the oil-producers. Although the facility has not been continued in 1976, the ordinary credit tranches of the IMF have been temporarily widened by 45 per cent (permanent increases in quotas have been agreed upon but not yet ratified). Other measures include a liberalisation of the Compensatory Financing Facility to provide support for primary producing countries and a Financial Support Fund which has been set up within the Organisation for Economic Co-operation and Development (a group of 24 developed countries) as a safety net for its members.

Sterling

As a result of Britain's early lead in international trade and finance, sterling, in addition to being Britain's domestic currency, came to serve as a major international currency, particularly for the countries constituting the Sterling

Area, who chose to tie their currencies to sterling and to keep most of their exchange reserves in the form of balances with the Bank of England. The Sterling Area came to include all the Commonwealth countries and their dependencies, except Canada and Rhodesia, together with Bahrain, Iceland, the Irish Republic, Jordan, Kuwait, Maldives, Oman, Pakistan, Qatar, South Africa, Namibia (South West Africa), the United Arab Emirates and the People's Democratic Republic of Yemen.

As trade and payments arrangements have become more diversified in recent years, however, the international use of sterling has declined relatively, with only a few countries retaining the special links with sterling that characterised membership of the Sterling Area, although many, even outside the former Sterling Area, continue to hold sizeable portions of their reserves in sterling.

NATIONAL INCOME AND EXPENDITURE

The following sections sketch briefly the structure and disposal of Britain's national income in recent years.

Output

In 1975 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 £94,095 million. After allowing for price changes, the increase over the 10 years since 1965 was nearly 22.5 per cent.

About a third of total output can be attributed to manufacturing industry and this proportion has remained more or less constant for a number of years. The expanding industry groups in recent years (in relation to the economy as a whole) have been most of the services, particularly insurance, banking and finance, public administration and health and educational services. Agriculture, forestry and fishing have accounted for a small and slowly declining share, and mining for a small and more rapidly declining share. The relative contribution of the distributive trades has also declined. Table 8 summarises the contribution of each industry group.

Use of Resources

Table 9 shows the distribution of total supplies of goods and services in 1965, 1970 and 1975 at 1970 market prices, divided between personal consumption, public expenditure on goods and services, investment and exports.

The main trends since 1965 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 over £30,000 million in 1965 to £95,700 million in 1975. Consumer expenditure amounted to 66 per cent of total pre-tax income in 1975 compared with 76 per cent in 1965. The difference is accounted for by a higher incidence of direct taxation and national insurance contributions and increased personal savings.

Sources of Income

Income from employment in 1975 totalled £68,200 million and accounted for about 71 per cent of total personal income (a slightly higher percentage than in 1965). The three other main sources of personal income were self-employment (9 per cent), income from rent, dividends and interest (9 per cent), and grants from public authorities (11 per cent).

The combined effect of taxation and transfer payments and benefits in kind is to redistribute income on more egalitarian lines. According to studies by

TABLE 8: Gross Domestic Product by Industry^a (at current prices)

	1965		1970		1975	
	£m.	per cent	£m.	per cent	£m.	per cent
Agriculture, forestry and fishing	1,027	3.3	1,241	2.8	2,527	2.7
Mining and quarrying	708	2.3	731	1.7	1,645	1.8
Manufacturing	10,624	34.0	14,120	32.5	26,726	28.7
Construction	2,153	6.9	2,855	6.6	6,411	6.9
Gas, electricity and water	1,006	3.2	1,376	3.2	2,866	3.1
Transport	1,984	6.3	2,706	6.2	5,753	6.2
Communications	646	2.1	1,045	2.4	2,809	3.0
Distributive trades	3,605	11.5	4,467	10.3	9,159	9.8
Insurance, banking and finance	2,092	6.7	3,380	7.8	7,727	8.3
Ownership of dwellings	1,395	4.5	2,411	5.5	5,535	5.9
Public administration and defence	1,805	5.8	2,761	6.3	7,107	7.6
Public health and educational services	1,430	4.6	2,256	5.2	7,154	7.7
Other services	3,651	11.7	5,571	12.8	10,430	11.2
Adjustment for financial services	-905	-2.9	-1,340	-3.1	-3,623	-3.9
Residual error	—		-91	-0.2	920	1.0
<i>Gross domestic product at factor cost</i>	31,221	100.0	43,489	100.0	93,146	100.0
Net property income from abroad	435		556		949	
<i>Gross national product at factor cost</i>	31,656		44,045		94,095	

Source: *National Income and Expenditure 1965-75*.

^a Before provision for depreciation but after deducting stock appreciation.

Discrepancies between totals and their constituent parts are due to rounding.

TABLE 9: Distribution of Total Supplies of Goods and Services (at 1970 market prices)

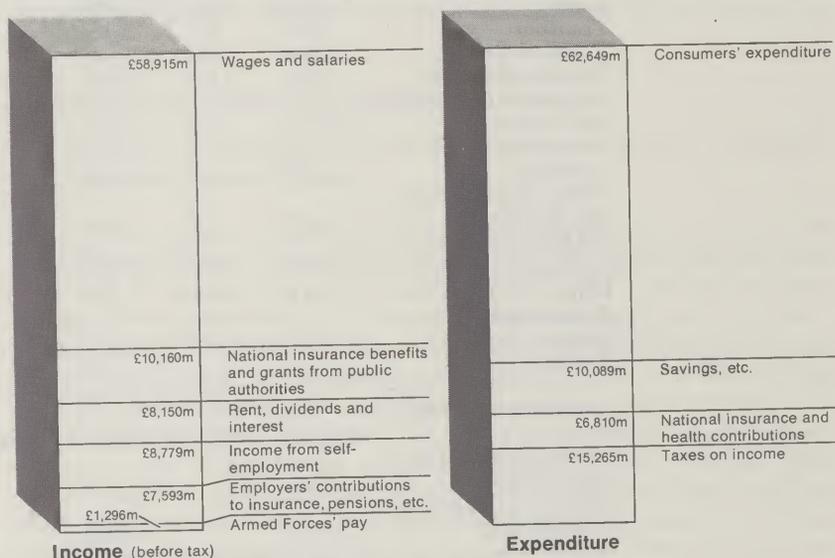
	1965		1970		1975	
	£m.	per cent	£m.	per cent	£m.	per cent
Consumers' expenditure	28,705	53.2	31,644	51.1	35,374	50.7
Public authorities' current expenditure on goods and services	8,357	15.5	9,095	14.7	10,807	15.5
Gross domestic capital formation ^a	8,516	15.8	9,895	16.0	9,268	13.3
Exports of goods and services	8,372	15.5	11,275	18.2	14,290	20.5
Total final expenditure	53,950	100.0	61,909	100.0	69,739	100.0

Source: *National Income and Expenditure 1965-75*.

^a Including value of physical change in stocks and work in progress (-£699 million in 1975).

the Central Statistical Office, the effect in 1974 was to raise the highest income among the poorest fifth of households (that is, the income at the lowest quintile) from 24 to 54 per cent of the median income of all households. Similar conclusions about income redistribution were reached by the standing Royal Commission on the Distribution of Income and Wealth (see p. 337), in its first report (see Bibliography, p. 463). Illustrating trends in income over a period the report also shows a continuing decline in the share of the top 5 per cent of income recipients after tax from 17.7 per cent in 1949 to 14.2 per cent in

Personal income and expenditure 1975 (at current prices)



Note: Figures are preliminary estimates (rounded to nearest £10 million) and exclude items under £125 million

1972-73. The second report, on income from companies, shows that rather more than one-third of dividends go indirectly to about 11 million members of occupational pension schemes, 2.25 million taxpayers receiving occupational pensions and 14 million taxpayers who save through life assurance; these groups include many people of moderate means.

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. The proportions of expenditure devoted to food, tobacco and clothing have been falling while the proportions spent on housing, alcoholic drink, and the running costs of motor vehicles have risen. These and other changes are shown in Table 10.

Public Authorities' Current Expenditure

Current expenditure on goods and services by the central Government and local authorities rose by about 29 per cent at 1970 market prices over the period 1965 to 1975 when it amounted to about 24.6 per cent of the gross domestic product (at current prices). The main cause of this increase was the continuing growth of the social services, especially education. Defence has recently accounted for a declining share of public expenditure on goods and services—22 per cent in 1975 compared with 34 per cent in 1965 and a peak of 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. 122 and 180). The Government also makes grants to local authorities to finance about 55 per cent of their current expenditure.

TABLE 10: Changes in Pattern of Consumers' Spending
(at current prices)

	1965		1975	
	£m.	per cent	£m.	per cent
Food (household expenditure)	5,059	22.1	12,092	19.1
Alcoholic drink	1,499	6.6	4,902	7.7
Tobacco	1,428	6.3	2,741	4.3
Housing (rent, rates, repairs, etc.)	2,592	11.4	9,201	14.5
Fuel and light	1,087	4.8	2,927	4.6
Clothing and footwear	2,099	9.2	5,320	8.4
Cars and motorcycles	707	3.1	1,932	3.1
Other durable goods	1,078	4.7	2,926	4.6
Running costs of motor vehicles	940	4.1	3,940	6.2
Other travel expenditure	741	3.2	1,989	3.1
Catering (meals and accommodation)	1,196	5.2	2,832	4.5
Other goods	2,132	9.3	6,290	9.9
Other services	2,096	9.2	6,432	10.2
Other items ^a	191	0.8	-151	-0.2
TOTAL	22,845	100.0	63,373	100.0

Source: *National Income and Expenditure 1965-75*.

^a Consumers' expenditure abroad, less expenditure by foreign tourists in Britain, plus income in kind not included elsewhere.

Discrepancies between totals and their constituent parts are due to rounding.

Investment

Gross domestic fixed capital formation represents about 22 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 47 per cent between 1965 and 1975 when their current replacement value, net of depreciation, was some £322,100 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 1975 (£9,967 million compared with £9,453 million in 1970 at constant prices) private sector investment accounted for 12.2 per cent of the gross domestic product at factor cost (12.3 per cent in 1970) and the public sector for 8.9 per cent (9.5 per cent). The approximate shares of industry groups in total fixed investment in 1975 were (1970 figures in brackets): manufacturing, 17 per cent (23 per cent), gas, electricity and water, 6 per cent (8 per cent), transport and communications, 12 per cent (13 per cent), distributive trades, 5 per cent (5 per cent), dwellings, 18 per cent (17 per cent), social and other public services, 14 per cent (15 per cent), and other industries, 24 per cent (16 per cent). There is a marked cyclical pattern in the flow of investment by manufacturing industry; it was at a low point in 1967 and 1972, rose in 1973 and 1974, but fell again in 1975. Among the trends over recent years have been increases in investment in agriculture, mining (other than coal mining), North Sea oil equipment, shipping and retail distribution.

Saving and Lending

Table 11 shows each sector's balance on capital account and its net acquisition of financial assets. That is to say it shows the extent to which each sector's saving is more than or less than sufficient to cover its capital spending.

TABLE 11: Net Acquisition of Financial Assets £million

	1973	1974	1975
Public sector:			
Saving ^a plus capital transfers (net receipts)	2,956	2,283	1,407
less Gross domestic capital formation ^b	-5,879	-7,576	-9,687
Net acquisition of financial assets	-2,923	-5,293	-8,280
All companies:			
Saving ^a plus capital transfers (net receipts)	9,459	10,140	10,381
less Gross domestic capital formation ^b	-9,513	-13,340	-10,970
Net acquisition of financial assets	-54	-3,200	-589
Personal sector:			
Saving ^a plus capital transfers (net receipts)	5,589	8,150	9,983
less Gross domestic capital formation ^b	-3,099	-2,952	-3,707
Net acquisition of financial assets	2,490	5,198	6,276
Overseas sector ^c	795	3,422	1,673
Residual error (in national income accounts)	-308	-127	920

Source: *National Income and Expenditure 1965-75*.

^a Before providing for depreciation, stock appreciation and additions to reserves.

^b Comprises gross domestic fixed capital formation and increase in value of stocks and work in progress.

^c Equals, apart from the change in sign, net investment abroad.

There was a marked improvement in the financial position of the company sector in 1975, following the substantial deficit in 1974, largely as the result of a rundown in stocks. The public sector's financial deficit increased substantially in 1975 to some £8,280 million, 56 per cent higher than in 1974; but more than half of the public sector borrowing requirement in 1975 was covered by sales of debt to the non-bank public. The personal sector's surplus continued to rise in 1975, mainly reflecting a continuing high personal savings ratio. A large part of personal savings took the form of building society deposits. The surplus of the overseas sector (which reflects the deficit on the current account of the balance of payments) was substantially smaller than in 1974.

12 Industry

Production industries (mining and quarrying, manufacturing, construction and gas, electricity and water) and distributive trades together account for more than half of Britain's gross domestic product, manufacturing for some 28.7 per cent and distributive trades 9.8 per cent. About 51 per cent of Britain's employed labour force is engaged in these sectors, while over 80 per cent of Britain's visible exports consists of manufactured or semi-manufactured products. The following sections discuss general industrial topics—such as investment, productivity, location and the Government's relations with industry—together with manufacturing industry, construction and distributive and service trades. For the energy industries (coal, gas, petroleum, electricity, non-fuel minerals and water supply) see Chapter 13 and for the agriculture, fisheries and forestry industries see Chapter 14.

Statistics

The main source of statistical information on industrial topics is the *Business Monitor* series produced by the Business Statistics Office of the Department of Industry (see p. 49), and compiled from returns made by firms in industry. Monthly and quarterly *Production Series Monitors* cover some 150 manufacturing industries and their products, with information on output and overseas trade concerning some 4,000 commodities. Annual *Census of Production Reports* give total industrial figures for production, capital expenditure, stocks, wages, salaries and employment. The *Overseas Trade Statistics of the United Kingdom* contain detailed information on overseas trade, the December issue carrying cumulative totals for the whole calendar year. The five-yearly *Census of Distribution* is published in special reports; and short-term statistics on service and distributive trades appear in a separate series of *Business Monitor*. The weekly publication *Trade and Industry* includes regular statistics and commentary on industrial output, investment, retail sales and overseas trade, and employment statistics are published in the monthly *Department of Employment Gazette*. Many of the figures are brought together in summary form in the *Monthly Digest of Statistics* and the *Annual Abstract of Statistics*. The interdependency between industries is shown in the input-output tables published annually as *Business Monitor* PA 1004.

ORGANISATION AND PRODUCTION

Structure

The pattern of ownership and organisation in industry is varied. Personal, corporate, co-operative and public enterprise all assume a number of different forms, and all are important in the economy. Industrial enterprises vary from such large-scale organisations as the General Electric Company (202,000 employees) and Imperial Chemical Industries (201,000), and the public corporations such as the National Coal Board with about 321,000 employees, to the many thousands of small firms. Most manufacturing is in the hands of private enterprise. Under the Aircraft and Shipbuilding Industries Bill of 1975, it is proposed to take into public ownership a large part of the aircraft and shipbuilding industries. The Petroleum and Submarine Pipe-lines Act 1975 provides for greater public control of offshore oil and gas resources (see p. 261). Most iron and steel production is already in public ownership. Other state-

controlled products 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, made by two statutory companies. In addition, among other shareholdings, the Government has major holdings in British Petroleum Ltd. and through the National Enterprise Board set up by the Industry Act 1975 (see p. 206) in British Leyland Ltd. and Rolls-Royce (1971) Ltd.

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 Census of Production 1971*. This shows that some 68 per cent (60,900) of the 89,700 or so establishments which submitted returns had fewer than 25 employees each and accounted for 7 per cent of total employment; 26,000 establishments had between 25 and 500 employees and accounted for some 38 per cent of the total labour force; 2,100 establishments, each with between 500 and 1,500 employees, were responsible for 22 per cent of employment, while one-third was in the hands of the 708 groups each with over 1,500 employees. A high proportion of the biggest establishments were in the heavy industries. An enterprise, as defined in the 1971 census, normally consists of either a single firm or a parent company together with its subsidiaries. Over 35 per cent of all employment in British manufacturing industries in 1971 was accounted for by the largest 100 private enterprises. A further indication of company size is the value of capital employed (net assets). For two companies, British Petroleum and Shell Transport and Trading, the figure exceeds £3,000 million; about 60 companies registered in Britain have over £200 million net assets. Of the top 20 industrial groups in Europe in terms of annual sales, five are British.

The trend towards mergers and regrouping has gathered momentum as competition in the economy has intensified and, in many branches of industry, profitable operation has become dependent on concentration and economies of scale. The peak in terms of value of assets acquired was reached in 1972, since when the trend has been considerably less marked. 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. For example, more than 40 of the largest public companies each have more than 100,000 shareholders.

Small Firms

Within the general arrangements for promoting industrial expansion and modernisation, smaller firms, which account for about one-fifth of manufacturing output and about one-third of employment, have recently received more government attention. In the Department of Industry there is a minister with special responsibility for the small firms sector and a separate division responsible for the development, inter-departmental co-ordination and implementation of policy towards small firms and for the administration of the official services provided for them. The most important of these is the network of ten small firms information centres in Great Britain, which work in co-operation with Chambers of Commerce, trade associations and other organisa-

tions and are provided with a comprehensive data bank in order to guide small firms towards appropriate sources of information and assistance.

In Northern Ireland, the Local Enterprise Development Unit, established by the Government in 1971, exists to help with the creation of small industries, usually employing fewer than 50 people initially. Financial assistance and marketing advice are among the many services offered. By mid-1976 the Local Enterprise Development Unit had promoted nearly 6,000 new jobs in Northern Ireland.

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 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.

There are some 150 national employers' associations concerned with negotiation of wages and conditions of work (see p. 340). The number of manufacturers' associations concerned with providing common services is not known precisely but is thought to total some 1,200 varying greatly in importance, structure and activities.

The central body representing British industry nationally is the Confederation of British Industry (CBI), recognised by the Government as a channel for consultation between government departments and representatives of private employers as a whole. 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, for example in the Council of European Industrial Federations. CBI representatives sit on the National Economic Development Council, the Manpower Services Commission, the Health and Safety Commission and other official advisory committees and voluntary bodies concerned with matters affecting industry.

The CBI membership consists of some 10,000 companies and about 200 employers' organisations and trade and commercial associations. Nationalised industries have joined as industrial associates. The CBI has a regional organisation in Britain and is widely represented abroad. 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 87 local chambers are affiliated, together with 16 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 Scottish Chamber of Commerce, and in Northern Ireland the Northern Ireland Chamber of Commerce and Industry, to which local chambers are affiliated.

The Government and Industry

The Government is giving priority to industrial development, in order to reverse the relative decline in this sector that has been continuous for many years. In view of the central importance to the economy of manufacturing industry, government policy is concerned with improving its structure and performance, while at the same time developing effective solutions to such major problems as regional imbalance and unemployment. The industrial strategy, launched at the National Economic Development Council in 1975, involves a programme of tripartite studies involving representatives of Government, management and trade unions of key sectors of manufacturing industry. These studies are aimed at recommending action to improve the prospects of the chosen industries and developing medium-term strategies for them. The Government influences industrial activity in a number of ways—through fiscal and monetary policy, through the level of public expenditure, by incentives for industrial investment and by the provision of services, information and advice. Legislative arrangements control aspects of employment, monopolies, mergers and restrictive trade practices and new industrial and office building and changes in land use.

National Enterprise Board

One of the main measures by which the Government is implementing its industrial policy is the Industry Act 1975. The Act established a statutory body, the National Enterprise Board (NEB), as a new source of public investment capital, with an initial borrowing limit of £700 million, which may be increased by order to £1,000 million. Its purposes are the development of or assistance to the national economy, the promotion of industrial efficiency and international competitiveness and the provision, maintenance and safeguarding of employment in Britain. Among other things the NEB provides finance for industrial investment and restructuring and assistance to companies in short-term difficulties. It has a holding company role for shareholdings previously held by the Government, together with its own investments. The NEB is expected to exercise a commercial judgement and to look for an adequate return on its investments. In Scotland and Wales, broadly similar functions are executed regionally by the Scottish and Welsh Development Agencies in relation to companies which are predominantly Scottish or Welsh. In Northern Ireland these functions are being carried out by the Northern Ireland Development Agency. Another provision of the Industry Act 1975 relates to a system of voluntary planning agreements between the Government and some leading firms.

The Department of Industry is responsible for industrial policy as a whole on both a national and regional level; 1975 marked the devolution of certain responsibilities towards industry in Scotland and Wales to the Scottish and Welsh Offices respectively. In Northern Ireland the Department of Commerce deals with industry and industrial development. Related responsibilities (for example, those of the Department of Employment for manpower affairs) are discussed in the appropriate chapters.

There is close association between industry and the Government through such channels as the National Economic Development Council, the main forum for consultation between the Government, management and the trade unions, and the Economic Development Committees (EDCs) which cover particular industrial sectors.

The EDCs bring together leading representatives of government, management and unions to study, and make recommendations on, the efficiency and prospects of individual industries.

Competition Policy

Competition policy has led to the development of machinery for scrutinising monopolies, mergers and restrictive trade practices and of powers to regulate any structural changes or uncompetitive practices which operate against the public interest. The relevant statute is the Fair Trading Act 1973 which contains all current legislation on monopolies and mergers; it also sets out recent changes and additions to the restrictive practices legislation. The Director General of Fair Trading has certain statutory responsibilities in respect of monopolies, mergers and restrictive practices, in addition to his work on consumer protection.

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; the Commission has limited powers to exempt agreements which, though restrictive of competition between member countries, benefit the Community in defined ways.

Monopolies and Mergers

Monopoly situations can be referred—by the Secretary of State for Prices and Consumer Protection or by the Director General of Fair Trading—for investigation by the Monopolies and Mergers Commission. The market share by reference to which monopoly is defined is one-quarter; local monopolies and monopolies in public sector industries can also be referred to the commission. If the commission finds that monopoly conditions operate against the public interest (for example, the commission must take into account the need to maintain and promote the balanced distribution of industry and employment in Britain) the Secretary of State for Prices and Consumer Protection has powers to make orders and otherwise to remedy or prevent the harm which the commission considers may result. These powers are, however, not available to implement reports by the commission on general references or references of restrictive labour practices. The Director General of Fair Trading also has the duty, when requested by ministers, of negotiating undertakings with the firms concerned following a commission report, of advising on the use of the order-making power and of supervising the observance of undertakings or orders.

A merger may be referred to the commission by the Secretary of State for Prices and Consumer Protection if it results in, or intensifies, a monopoly situation, or if the value of gross assets taken over exceeds £5 million. There are special provisions relating to newspaper and certain other mergers. The Director General of Fair Trading has the same task of advising on the action to be taken following a commission report on a merger reference that he has in relation to monopoly reports.

Restrictive Trade Practices

The Restrictive Trade Practices Acts 1956 and 1968, as amended by the Fair Trading Act 1973, require the entry in a public register of the particulars of a wide range of restrictive agreements (including those relating to common prices, approved lists of dealers and the limitation of production) which affect the supply of goods or commercial services for the British market. Such agreements must be notified to the Director General of Fair Trading who is responsible for bringing registered agreements before the Restrictive Practices Court. The court, which was set up under the 1956 Act, has powers to prohibit the operation of agreements which it decides are contrary to public interest. Registration and judicial examination has applied to agreements relating to goods since 1956 and

to services since March 1976. Not all restrictive agreements are taken before the court; there is a frequently used procedure by which those containing only insignificant restrictions may effectively be exempted. The Secretary of State for Prices and Consumer Protection may exempt proposed agreements of substantial importance to the national economy or agreements designed to keep prices down. Restrictive agreements relating exclusively to exports are not subject to registration but they must be notified to the Director General of Fair Trading (and to the Commission of the European Community if they fall within its rules of competition).

Encouragement of Investment

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 investment from overseas is also encouraged, and overseas firms are offered the same facilities and incentives as those applying to British-owned companies. Under the Industry Act 1972 other assistance may be provided throughout Britain where it is judged to be in the national interest. The Government has selected a number of key industries which have critical roles in the economy but also some impediment to their increased efficiency and is providing assistance in the form of grants, sometimes with the possibility of additional selective assistance to enable these key industries to overcome their problems.

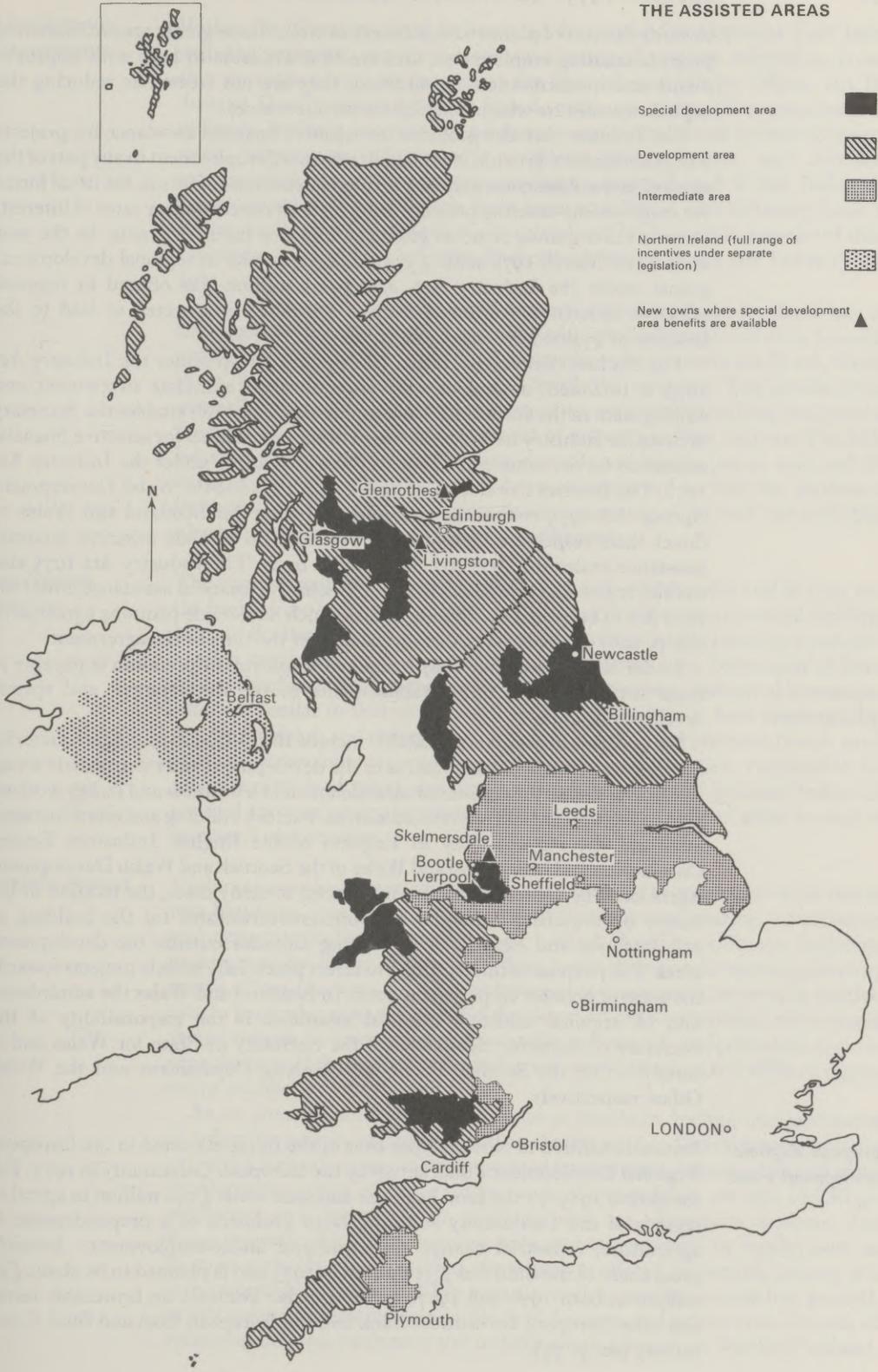
Industrial and Regional Policy

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

The map opposite shows those parts of the country where assistance is offered by the Government to encourage industrial development and the movement of office and other service employment. The assisted areas cover the whole of Scotland, Wales, Northern Ireland 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 are three different 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. Under the Industry Act 1972 regional development grants are available in the assisted areas to help meet the cost of buildings and works on premises used wholly or mainly for specified activities in manufacturing, construction and mining and, in the special development and development areas only,

THE ASSISTED AREAS



towards the cost of plant and machinery as well. 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 Industry 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 forms for employment-creating projects being loans at concessionary rates of interest, interest relief grants, removal grants and service industry grants. In the year ended 31st March 1976 some £325 million was paid in regional development grants under the Industry Act, and £75.5 million was offered in regional selective assistance. Regional selective assistance is expected to lead to the creation of 43,000 new direct jobs in the next five years.

The National Enterprise Board (see p. 206) set up under the Industry Act 1975 is intended, among its other functions, to stimulate investment and employment in the areas of high unemployment. The Act enables the Secretary of State for Industry to direct the board to act as a channel for selective financial assistance on the same conditions as those that apply under the Industry Act 1972. The Scottish Development Agency Act 1975 and the Welsh Development Agency Act 1975 enable the Secretaries of State for Scotland and Wales to direct their respective Development Agencies to provide selective financial assistance under the 1972 Act on a similar basis. The Industry Act 1975 also enables regional development grants and selective financial assistance under the 1972 Act to be given to corporate bodies which have made planning agreements (see p. 206) on the basis of the law existing at the time of the agreement.

Under the Finance Act 1967 a regional employment premium is payable to firms with manufacturing establishments in the development and special development areas.

Other forms of assistance available include the provision of modern factories for sale or rent on favourable terms in the development and intermediate areas, and grants to ease the transfer or establishment of a business and its key workers in the development and intermediate areas. Factory building and estate management are the responsibility in England of the English Industrial Estates Corporation and in Scotland and Wales of the Scottish and Welsh Development Agencies. The Government also influences, in many cases, the location of industry by requiring industrial development certificates for the building of new factories and extensions to existing factories outside the development areas. The purpose of this control is to direct potentially mobile projects towards the areas of greatest employment need. In Scotland and Wales the administration of regional selective financial assistance is the responsibility of the Secretary of State for Scotland and the Secretary of State for Wales and is carried on by the Scottish Economic Planning Department and the Welsh Office respectively.

European Regional Development Fund

Britain is entitled to nearly 28 per cent of the funds allocated to the European Regional Development Fund, set up by the European Community in 1975. For the period 1975-77 the fund has been allocated some £540 million to spend in regions of the Community suffering from problems of a preponderance of agriculture, industrial change and structural under-employment. Britain's gross share of the fund was £35 million in 1975 and is planned to be about £58 million in both 1976 and 1977. Loans are also available on favourable terms from the European Investment Bank and the European Coal and Steel Community (see p. 74).

Administrative Arrangements

Within the Department of Industry an Industrial Development Unit helps with the appraisal, negotiation and monitoring of projects referred to it and also provides advice on request to the Scottish and Welsh Offices. An Industrial Development Advisory Board, made up of members prominent in industry, banking, accounting and finance and international industrial investment, advises on industry-wide problems and priorities, and considers specific major cases for selective assistance. Scottish and Welsh Industrial Development Advisory Boards have been established on a statutory basis to advise the Secretaries of State for Scotland and Wales on the exercise of their functions of providing selective financial assistance under the Industry Act 1972.

The Department of Industry's regional organisation in England has an important degree of authority for dealing with applications for selective financial assistance. Regional industrial development boards operate in the North, North West, Yorkshire and Humberside and South West regions. The boards advise generally on regional industrial opportunities and on applications for selective financial assistance for the development of industry in their regions. The links between regional economic planning councils and boards (see p. 192) and the department's regional offices have been strengthened so that the process of industrial regeneration in a region and the planning of its land use and other physical resources can be properly co-ordinated.

Development Agencies

The Scottish and Welsh Development Agencies, set up at the end of 1975 and the beginning of 1976 respectively, are working to stimulate industrial development in Scotland and Wales and to provide environmental facilities conducive to such development. The agencies are responsible to the Secretaries of State for Scotland and Wales respectively and, in addition to an industrial investment function similar to that of the National Enterprise Board, have responsibility for the provision and management of industrial sites and premises (see p. 210). In their environmental role, the development agencies are responsible for rehabilitating land which has become derelict because of previous industrial use and for improving the environment with an emphasis on areas in need of economic regeneration.

Northern Ireland

Under separate legislation capital grants are available at 30 per cent of the cost of new buildings, machinery and equipment for the manufacturing, construction and extractive industries in Northern Ireland. Total expenditure, including grants, qualifies for tax allowances. There is also provision for assisting firms by means of loans to carry out major schemes of re-equipment, to move to another area in particular need of industrial development or to undertake a rehousing of their business in association with a major scheme of modernisation and re-organisation. Help under the capital grants legislation is given without regard to the number of jobs created.

As an alternative means of assistance in Northern Ireland comprehensive and flexible powers are offered under the Industries Development Acts for projects which offer a reasonable amount of employment. In such cases industrial development grants of up to 40 per cent of expenditure on new buildings, machinery and equipment are available, with tax allowances as above. For those projects which offer exceptionally attractive returns in employment or location within Northern Ireland, the assistance offered can include tenancy of a government-built factory at low rent (including possibly a rent-free period), grants towards operating costs in the initial stages, and grants towards costs of removing existing machinery and installing it in a factory in Northern Ireland.

Since 1945 over 190 new firms have been established in Northern Ireland and others expanded with government assistance, and the number of people now employed in grant-aided industry totals over 65,740.

Councils to Promote Industry

Certain regions and areas in England have industrial development associations concerned with promoting local industry and sponsored mainly by local authorities, trade associations and individual firms.

Several voluntary associations are concerned with Welsh industry, including the Development Corporation for Wales, founded in 1959, to support the efforts to attract new industry to Wales. In Scotland, the Highlands and Islands Development Board, a statutory body, works to stimulate the economic and social development of the Highlands and Islands of Scotland. It provides grants and loans to industrial, commercial and other enterprises; it may also acquire land, provide management and other advisory services and set up and carry on businesses. The Scottish Council (Development and Industry), a non-profit-making body, works to promote the general economic development of Scotland.

Tourism

Under the Development of Tourism Act 1969, the tourist boards in Great Britain may give financial assistance to selected tourist projects in special development and development areas. Britain's national tourist organisation consists of four independent government-financed statutory bodies (the British Tourist Authority, which is responsible for the overseas promotion of tourism in Britain and for certain general matters affecting the country as a whole, 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 Britain) and a separate statutory Northern Ireland Tourist Board which receives assistance for tourist projects under separate legislation.

The estimated total number of visitors to Britain in 1975, including visitors from the Irish Republic, was a record figure of 8.9 million, an increase of 12 per cent over the 1974 level. Their expenditure in Britain amounted to £1,114 million.

Rural Industries

Encouragement is also given to the development of rural industries. In England and Wales, much of this work is done under the aegis of the Development Commission set up under the Development and Road Improvement Funds Act 1909 to encourage rural development; this service is provided by the Council for Small Industries in Rural Areas (CoSIRA)¹ acting in consultation with the rural community councils through their small industries committees in the counties. The Development Commission has funds to build small factories for suitable industries to stop the depopulation of rural areas. Further assistance in England and Wales is provided by the Council for Smaller Industries. In Scotland this work is undertaken by the Scottish Development Agency and in Northern Ireland by the Local Enterprise Development Unit (LEDU). All these agencies provide advice and guidance to small businesses in rural areas and country towns and finance for small factories to stimulate rural industries. In addition CoSIRA and the Scottish Development Agency provide loans for assistance to tourism in the rural parts of development areas.

¹ The work of CoSIRA in Wales is to be taken over by the Welsh Development Agency and the Wales Tourist Board.

Location

The following is a broad summary of the locational distribution of British industry, grouped according to the eight standard regions of England, plus Wales, Scotland and Northern Ireland.

*Greater London
and the South-East
Region*

London is Britain's capital and main communication centre, and is one of the world's most important financial 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 clothing, food and drink, furniture, materials for the arts, precision instruments 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. 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, in the Medway towns and the Aldershot-Farnborough area.

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 manufactures. 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.

*South-West
England*

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, Christchurch, 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 has been made by the nine towns receiving 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. 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 new 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

The industrial cities and towns of the East Midlands include Leicester noted for hosiery and knitwear, shoes and a diversity of engineering products; Derby for general engineering, aero-engines, railway research and engineering and man-made fibres; Nottingham for hosiery, cycles and a variety of engineering products, lace, pharmaceutical products and tobacco; Northampton, footwear and engineering; and Chesterfield, engineering. Northampton was designated a new town in 1968 (see p. 167). Corby, a new town in Northamptonshire, has a large integrated steel works. There are important deposits of iron ores and limestone in the region and part of Britain's richest and most highly mechanised coalfield lies under the north-east of the area. Some of the towns on the coalfield, such as Mansfield, have important manufacturing industries, particularly textiles. Lincoln is noted as an engineering centre.

*North-West
England*

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, serving much of northern England and is also an important port. Manchester Airport is also the largest outside London and the south-east. 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, 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 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, 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 metal industries (such as wire-drawing), 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 imported foodstuffs and raw materials (flour milling, soap, 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. Employment in transportation and distribution has been superseded by newer service activities including the National Giro Centre at Bootle.

University research facilities in the region are closely linked with the region's industries. Industrial research units serve most industries and are of major importance in the region's development.

The region, although compact and second in industrial importance in Britain, is extensively rural with some of Britain's most fertile farmland. It has four new towns and tourist centres such as Chester as well as seaside resorts such as Blackpool and Morecambe.

The region has a major airport at Liverpool (Speke), 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 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, including the Yorkshire Moors National Parks and part of the Peak District.

The region's industrial structure is diverse. Important industries include a wide range of engineering products, mechanised handling equipment, plastic, packaging and printing machinery, vehicle components and electric motors, metals and metal goods, coalmining, food-processing, drink, clothing, carpets, chemicals and glass containers. 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. 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 alloy and special steels, tools and cutlery.

Yorkshire's coalfield is particularly important and production is to be extended to the Selby area, where major new reserves have been discovered. The main centres in the coalfield (Doncaster and Barnsley) are well positioned in relation to communications, particularly to motorways, which makes them natural growth points.

York, a leading tourist attraction, is also noted for chocolate and confectionery manufacture. It is an important railway centre and has substantial railway workshops. Humberside, with four ports, offers varied trading outlets to overseas markets, particularly to the rest of Europe. Kingston upon Hull, the other principal city in the region, has, in addition to port activity, industries engaged in engineering, vegetable oil-processing, chemicals, sawmilling and food-processing. The ports of Grimsby, Immingham, and Goole, the steel town of Scunthorpe, and a variety of industries, including oil-refining, on Humberside are of importance. The completion of the west-east motorway and the Humber Bridge should assist the economic growth of the region.

Northern England

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 hills, lakes and moorland and is relatively thinly populated. Most of the population is concentrated in the eastern coastal strip stretching from the coalfields north of the River Tyne southwards to the River Tees.

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 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. At the same time other types of industry have been successfully established in the region. It is one of the most important areas for the manufacture of electrical plant, and the many other industries include mining machinery, rolling mill plant, earth-moving equipment, machine tools, ropes, paint, glass, clothing and scientific instruments. An aluminium smelter is operating on the Northumberland coast. Atomic energy is important in Cumbria, with two nuclear power stations and other installations and 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.

Wales

Nearly two-thirds of the population (which totals 2·8 million) live in industrial south Wales. Coalmining remains a major industry; although the numbers employed in it have declined substantially, the area still produces virtually all Britain's anthracite and much of its steam and other specialised coals. Steel is the other traditional industry of south Wales, which already supplies all of Britain's output of tinsplate and much of its sheet steel. Many new industries, including mechanical and electrical engineering, motor vehicle components, plastics, chemicals and textiles have been established throughout the former coalmining valleys and on the coastal plain. Cardiff, Newport, and Swansea are the major urban centres and, with Barry and Port Talbot, are also the major ports of the region, the latter with one of Britain's largest steel-making plants and a deepwater harbour for importing iron ore. Inland the main concentrations of population are Rhondda and Merthyr Tydfil, the largest centres in the coalmining area.

The other main industrial area is north Wales. Here also coalmining has declined, but the sheet steel, chemical and man-made fibre industries are

important employers. In addition, and particularly in the Wrexham area, newer light industries, including domestic electrical appliances, have been introduced.

The remainder of Wales is still largely dependent on agriculture, forestry and tourism although light industry has been introduced in many areas. Milford Haven is one of the finest natural deepwater harbours in the world and has developed as Britain's major oil importing port. It has four major oil refineries and also an ocean terminal which links it with Wales' fifth refinery at Llandarcy near Swansea. These five refineries together account for more than one-quarter of Britain's total capacity. Offshore, in the Celtic Sea, there is increasing interest in exploration for oil and gas. There are two new towns in Wales at Cwmbran in Gwent and Newtown in Powys.

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 and cultural centre. 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; the world's largest oil production platform yard is situated at Ardyne Point in the Firth of Clyde. 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 and capacity expanded especially at Ravenscraig and Hunterston. The electronics equipment industry is represented in Glasgow, Airdrie, East Kilbride and other parts of Strathclyde, Fife and Dundee, as well as in Edinburgh, where this and other modern industries are expanding alongside the long-established engineering, printing 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 Uddington and Airdrie. The chemical industry is concentrated at Saltcoats and at Grangemouth, where a major oil refinery provides much of the basic raw material. The Firth of Clyde provides central Scotland with valuable deepwater facilities and a new ore terminal is now under construction at Hunterston and there is a major container terminal at Greenock. There are important coalmining works in the Strathclyde, Central, Lothian and Fife regions.

Outside the central belt there is considerable industrial concentration in and around Dundee and Aberdeen and numerous towns outside these areas have attracted light industry in recent years. Dundee's traditional manufacture, jute, has been supplemented by office machinery, clocks and watches, refrigerators and electronic products.

North-east Scotland is now the centre of the offshore oil industry and a wide variety of oil-related projects have been established alongside the older industries of whisky distilling, paper manufacture and food and fish processing.

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 and a new oil refinery is planned at Nigg. In the Borders and south-west of Scotland, the wool, cloth and knitwear

industries are important, together with food processing and chemicals manufacture. The whole of Scotland is important as a holiday and recreational centre.

Northern Ireland

Although the area of Northern Ireland is relatively small and lacking in minerals, there is substantial and growing industrialisation, particularly in and around Belfast, the capital city. 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, ropes, tobacco and clothing. Northern Ireland has also long been an important centre for textiles—it is particularly well known for linen. The textile industry is, however, extensively diversified and Northern Ireland is one of the most important areas in Europe for man-made fibre production. There has also been extensive development in vehicle components, oil-well equipment, electronic instruments, telecommunications equipment, carpets and synthetic rubber.

Production

Industrial production (mining and quarrying, manufacturing, construction, and gas, electricity and water) was in 1975 lower than in the last few years and only 1 per cent higher than in 1970. Manufacturing production, as measured by the index of industrial production, has fallen sharply in recent years, although it has increased by 112 per cent since 1948, the highest increases being in chemicals and allied industries, in coal and petroleum products and in engineering, with instrument engineering and electrical engineering the sectors that grew most rapidly.

TABLE 12: Index of Industrial Production 1948-75 (1970 = 100)

Industry Group	1948	1968	1970	1973	1974	1975	1948-75 change %
<i>All industries</i>	50.5	97.2		110.2	106.3	101.0	100
Mining/quarrying	129.1	111.4		92.6	79.1	86.3	-33
<i>Total manufacturing</i>	47.8	95.8		110.8	108.1	101.4	112
Food/drink/tobacco	58.4	96.5		109.3	109.9	108.5	85
Coal/petroleum products	21.4	84.0		110.0	106.0	92.0	330
Chemical/allied industries	25.5	89.8		121.2	127.7	115.8	353
Metal manufacture	61.8	97.5		100.0	91.7	78.6	27
Engineering industries	34.7	91.1		111.3	109.8	106.1	206
Shipbuilding	110.3	95.1		95.1	99.4	103.4	-6
Vehicles (inc. aircraft)	39.0	101.1		105.1	101.3	94.7	143
Other metal goods	64.1	98.3		103.1	103.5	94.5	45
Textiles/clothing	73.4	98.9		110.1	103.0	99.1	35
Bricks, pottery, etc.	54.4	102.2		127.1	116.6	107.9	100
Timber, furniture, etc.	45.4	106.5		132.6	112.5	110.2	144
Paper/printing/publishing	42.7	96.2		112.1	108.8	95.6	127
Other manufacturing	30.5	95.7		116.5	114.2	103.1	241
Construction	56.3	103.5		107.3	98.3	93.3	65
Gas/electricity/water	31.4	91.6		118.1	118.6	120.4	280

Source: *Economic Trends; Monthly Digest of Statistics*

Productivity

By international standards, the productivity of British industry as measured by output per head, has shown a relatively slow rate of growth, increasing by 10.8 per cent in manufacturing industries between 1970 and 1973. Since 1973, output has fallen as a result of the recession but the labour force has fallen less quickly, so that output per head has decreased. 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 unions and management in individual enterprises. It is also a prime objective of the Government's industrial strategy. The Department of Industry is responsible for co-ordinating measures to improve industrial productivity. It is represented on the EDCs (see p. 206) and the other working parties set up under the industrial strategy programme. The Department 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 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 Productivity Council 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 more than 50 local associations.

TABLE 13: Output per head (1970 = 100)

	Employed labour force	All production industries			Manufacturing industries		
		Output	Employment	Output per head	Output	Employment	Output per head
1966	102.6	90.6	105.6	85.6	89.2	102.6	86.9
1967	100.9	91.7	102.8	89.2	89.8	99.8	90.0
1968	100.5	97.2	101.4	95.9	96.0	99.0	97.0
1969	100.4	99.8	101.5	98.3	99.6	100.3	99.3
1970	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1971	98.2	100.4	96.9	103.6	99.6	96.8	102.9
1972	98.9	102.7	94.6	108.6	102.4	93.7	109.3
1973	101.0	110.2	95.8	115.0	110.8	94.2	117.6
1974	101.3	106.3	95.5	111.3	108.1	94.5	114.4
1975	100.4	101.0	92.3	109.4	101.4	90.8	111.7

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. Investment in manufacturing industry 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 1961 there have been three discernible cycles. Investment fell from a peak in 1961 to the beginning of 1963, then rose to a new peak in 1966. It then fell again in 1967, rose to a peak at the end of 1970, fell in 1971 and 1972 and achieved a new peak in 1974. Details of investment in the period 1966-75 are contained in Table 14.

Analysed by industry group, investment in the food, drink and tobacco group in 1975, at current prices, was £440 million, coal and petroleum products totalled £105 million, chemicals £608 million, metal manufacture £600 million; engineering, shipbuilding and metal goods £719 million, vehicles £253 million, textiles, leather and clothing £244 million, paper, printing and publishing £249 million and other manufacturing industries £375 million.

TABLE 14: Manufacturing Industry's Fixed Capital Expenditure 1966-75 (1970 prices, seasonally adjusted) £ million

	Total all manufacturing industries	New building work	Vehicles	Plant and machinery
1966	1,773.7	363.4	98.3	1,312.0
1967	1,737.7	319.6	99.5	1,318.6
1968	1,851.2 ^a	335.9	109.2	1,406.1 ^a
	(1,800.2)			(1,355.1)
1969	1,977.5 ^a	390.1	115.9	1,471.5 ^a
	(2,028.5)			(1,522.5)
1970	2,129.8	391.2	114.7	1,623.9
1971	1,990.7	357.1	113.4	1,520.2
1972	1,737.5	306.3	121.2	1,310.0
1973	1,864.4	322.0	133.8	1,408.6
1974	2,087.1	360.8	144.4	1,581.9
1975	1,809.1	306.7	108.6	1,393.8

Source: *Monthly Digest of Statistics*

^a After allowing for expenditure brought forward into 1968 from 1969 to secure the higher rate of investment grants, estimated at £51 million.

Part of the investment in plant and machinery is associated with the introduction of new techniques and equipment. The process of automation is giving rise to far-reaching changes in the pattern and organisation of industry and has already been responsible for 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, lubrication and corrosion protection, well developed in Britain, make possible large savings in costs.

Management

In Britain, as elsewhere, management is recognised as a subject requiring special skills and training. The British Institute of Management (BIM) which is independent, non-political and non-profit making, provides a wide range of information services and has a particular interest in management education and training, throughout industry, commerce and public administration. 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.

Management studies and education for management are expanding rapidly in Britain and have become a recognised feature of higher education (see p. 156). Training courses for higher management are held at several universities and colleges, including the Administrative Staff College, Henley-on-Thames, and Ashridge College of Management, Berkhamsted. There are graduate business schools in London and Manchester and in Scotland and both graduate

and undergraduate management courses offered in a number of universities. 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. The larger firms, especially those with wide responsibilities, often provide general management courses for senior executives, and systems of informal training within an organisation are numerous. 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 and the Institute of Marketing.

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.

The Design Council exists to improve the design of goods manufactured by British industry. It is a government-sponsored body and members of the council are appointed by the Secretary of State for Industry. A separate Scottish Committee directs the council's activities in Scotland. The council's industrial and field officers advise on design matters and on engineering design problems. The council also operates a Designer Selection Service, through which any organisation can obtain the services of qualified industrial designers.

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 9,000 current British products, chosen by independent committees for their high standards of design, safety and performance.

Other services provided by the council include 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. 400), 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 Crafts Council of Great Britain, the Crafts Centre of Great Britain and the Scottish Craft Centre are all grant-aided and work to improve craft design and to promote closer relations between craftsmen and industry.

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, lay down criteria for safety, performance, dimensions, testing methods and codes of practice for a vast 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 a council consisting of

representatives of the main organisations of employers and workers, professional institutions and the larger government departments.

CONSUMER PROTECTION

There is in Britain a comprehensive system of legislation and machinery to protect the consumer's economic and other interests. Although certain aspects had already been a function of several government departments, consumer protection's growing importance was recognised first by the appointment in 1972 of a Minister for Trade and Consumer Affairs, a post which was transformed into a Secretary of State for Prices and Consumer Protection in 1974 and secondly by the establishment under the Fair Trading Act 1973 of the office of the Director General of Fair Trading. The Director General of Fair Trading keeps consumer affairs continuously under review. He can initiate action to control certain types of unfair trading practice and act against individual traders who persistently contravene criminal law or are in breach of their civil obligations to consumers. He encourages trade associations to adopt and publish voluntary codes of practice and himself publishes material to inform consumers. The Director General of Fair Trading is also concerned with competition policy (see p. 207) and with administering the system established under the Consumer Credit Act 1974 of licensing businesses involved in credit and hire transactions. The Department of Prices and Consumer Protection is implementing the Act in stages to replace previous legislation on credit, including hire purchase and hire. The Supply of Goods (Implied Terms) Act 1973 guarantees the consumer's basic rights in transactions for the purchase of goods—that is, that the goods correspond to their description and are of merchantable quality and fit for their purpose. Other important legislation (which differs in some respects for Northern Ireland) includes the Weights and Measures Act 1963 which establishes a uniform system of weights and measures and provides protection against short weight and short measure in commodities; the Food and Drugs Act 1955 and the Food and Drugs (Scotland) Act 1956 which control the purity, hygiene and description of food; the Consumer Protection Acts 1961 and 1971 which empower the Government to make regulations to ensure the safety of any class of goods; and the Trade Descriptions Acts 1968 and 1972 which make it an offence to describe goods inaccurately or make certain kinds of false statements about services. The Prices Act 1974 makes it possible to require prices or unit prices to be marked on goods offered for sale. In the main, this type of legislation is enforced by the Trading Standards Departments and other branches of local government. Independent consumer councils for each of the nationalised industries investigate consumer complaints, while some trade associations in industry and commerce have established codes of practice designed to protect the consumer and look into complaints about member firms. The National Consumer Council, established in 1975, together with the Scottish and the Welsh Consumer Councils, ensures that the consumer's view is made known to those in Government and industry whose decisions affect consumers.

Where necessary, consumers can seek legal redress through the simplified procedure introduced in 1973 in the county courts in England and Wales (see p. 98) and the sheriff courts in Scotland. Information and advice are made available to consumers throughout the country by the Citizens' Advice Bureaux (see p. 119) or by consumer advice centres run by local authorities.

In addition a number of private organisations work to further consumer interests. The largest is the Consumers' Association, funded by the subscriptions of its membership of over 700,000. 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 bulletin *Which?* or its satellite publications. The association also provides an advice service on subscription. Consultancy work in European legislation is undertaken by the association on behalf of the Department of Prices and Consumer Protection. Local consumer groups, whose representative body is the National Federation of Consumer Groups, also promote consumers' interests and provide information and advice.

MANUFACTURING INDUSTRIES

An outline of the broad sectors of manufacturing industry is given below. (For coal and petroleum products see Chapter 13.) Production figures in Table 15 show the relative size of the sectors. Expansion has been particularly marked in those industries using advanced technologies such as electronics, the newer branches of mechanical engineering, instrument engineering, most sectors of the chemical industry and man-made fibres. In other long-established industries (for example, shipbuilding and marine engineering and electrical engineering) extensive reorganisation, re-equipment and modernisation have become essential to meet changing economic conditions.

A major stimulus has been provided by the various needs of the offshore oil and gas industries.

TABLE 15: Manufacturing Industry: Net Output 1972-74

<i>Industry Group</i>	£ million			Per- centage of total 1974	per head £		
	1972	1973	1974		1972	1973	1974
Food, drink and tobacco	2,903	3,491	4,025	12.4	3,734	4,441	5,100
Coal and petroleum products	273	282	752	2.3	7,275	7,779	20,324
Chemicals and allied industries	1,992	2,411	3,235	10	5,323	6,034	7,915
Metal manufacture	1,394	1,821	2,559	7.9	2,769	3,603	5,171
Mechanical engineering	2,537	3,074	3,666	11.3	2,759	3,325	3,914
Instrument engineering	376	469	575	1.8	2,321	2,719	3,350
Electrical engineering	2,038	2,408	2,923	9	2,780	3,139	3,730
Shipbuilding and marine engineering	406	438	511	1.6	2,259	2,518	2,965
Vehicles	2,171	2,547	2,759	8.5	2,803	3,205	3,501
Metal goods not elsewhere specified	1,350	1,637	1,989	6.1	2,505	2,996	3,567
Textiles	1,294	1,689	1,838	5.7	2,238	2,879	3,170
Leather, leather goods and fur	104	116	131	0.4	2,359	2,672	3,085
Clothing and footwear	702	827	925	2.9	1,573	1,853	2,127
Bricks, pottery, glass, cement, etc.	938	1,179	1,289	4	3,231	4,117	4,540
Timber, furniture, etc.	764	1,056	1,119	3.5	2,895	3,814	4,125
Paper, printing and publishing	1,791	2,227	2,745	8.5	3,137	3,855	4,697
Other manufacturing industries	909	1,130	1,351	4.1	2,771	3,327	3,889
All manufacturing industries	21,942	26,800	32,391	100	2,909	3,497	4,218

Source: *Census of Production Reports: 1972, 1973, 1974* (1974 provisional results).
Discrepancies between totals and their constituent parts are due to rounding.

In the following sections, relating to individual branches of industry in 1975, employment statistics refer to numbers in Great Britain at June 1975, sales and output figures are taken from the latest available *Business Monitor* and export figures from the *Overseas Trade Statistics*. Unless otherwise stated, export and manufacturers' sales figures include parts.

Some sales figures are given in metric terms, where statistics for an industry are normally published in this form. Conversion tables can be found on p. 450.

METAL MANUFACTURE

	Employment '000s	Production million tonnes	Exports £ million
<i>Metal manufacture</i>	500.8	54.5	864.2
iron and steel products	299.9	50.6	691.0
iron castings	84.0	3.0	6.2
non-ferrous base metals (excluding alloys)	116.9	1.0	167.0

Iron and Steel

Most of the early developments in iron and steel production originated in Britain, today the world's seventh 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 85 per cent of Britain's crude steel. It employs some 220,000 people, of which 180,500 are involved in iron and steel manufacturing and 39,500 in other activities, such as foundries, construction and chemicals. The remaining private sector companies are represented by the British Independent Steel Producers' Association. The private sector, which employs some 115,500 people, accounts for over one-third of the value of the industry's turnover and 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 (32 per cent of crude steel output in 1975), Wales (27 per cent), the Northern region (17 per cent), Scotland (10 per cent) and the West Midlands (8 per cent).

BSC is currently implementing a ten-year development strategy, adopted in 1973, which is designed to modernise and expand the corporation's production capacity. A major feature of the strategy is the replacement of open-hearth steelmaking by basic oxygen steelmaking (for bulk production) and the electric arc process (for more specialised tasks). Over the period to 1982-83, BSC plans to concentrate its bulk steelmaking at five main sites which have good access to deep water for iron ore imports. Since 1974 the Government, BSC and the trade unions have been engaged in a joint review of the plant closures implied in this strategy; decisions on most of the plants concerned have now been announced. Schemes for new investment to a value of over £500 million have been confirmed in the course of this review of closures. Steel production in Britain is closely linked with international developments and world demand and is very responsive to changes in the economic situation. About four-fifths of production is used by home industry and the remainder for direct export. The major export markets for steel are the rest of the European Community, the United States and Sweden. A large part of the steel used by industry in Britain is also subsequently exported as part of other finished products.

Iron Castings

In the production of iron castings, a few large firms are responsible for more than a quarter of total output while fewer, more highly developed units are replacing the numerous small foundries. The main users of iron castings 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. The Government is providing financial assistance for the modernisation of the industry.

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 zinc. 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. 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 over half of Britain's requirements for primary aluminium. Firms are engaged in smelting, casting and fabrication by rolling, extrusion and drawing: advanced techniques of powder metallurgy and pressure diecasting are also employed. Scientific and technological research for the industry is conducted 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 silver, platinum and other metals of the platinum group totalled over £160 million in 1975. The major export markets for the whole industry are the United States and the Federal Republic of Germany.

MECHANICAL ENGINEERING

	<i>Employment</i> '000s	<i>Manufacturers' Sales</i> £ million	<i>Exports</i> £ million
<i>Mechanical Engineering</i>	948.8	6,924.4	3,174.0
machine tools	66.6	323.9 (1974)	220.2
industrial plant and steelwork	165.0	1,267.0	301.6
industrial engines	26.6	331.2	188.6
pumps, valves and compressors	85.0	680.7	284.4
textile machinery	31.6	261.4	223.5
construction and earth-moving equipment	40.0	579.0	470.8
mechanical handling equipment	61.7	667.4	233.5
agricultural machinery	29.5	156.6	85.3
office machinery	25.4	158.7	111.8
ball, roller and other bearings	^a	213.9	^a
other machinery	221.3	1,673.6	792.4
general mechanical engineering	175.8	611.0	261.9

^a Included in general mechanical engineering.

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. A number of sectors are increasing their export surpluses, despite British industry's need

for a wide range of machinery at present supplied by imports, and there has been a substantial increase in the volume of orders received from the oil-producing countries.

Machine Tools

Britain was the birthplace of the modern machine tool industry and many advanced types of metal cutting machine tools are produced in Britain. Rationalisation of the industry is causing the bulk of manufacturing capacity to be concentrated in the hands of fewer companies: the ten largest manufacturers account for some 50 per cent of total production. Government assistance is being given to promote the development of new products, to rationalise existing ranges and to improve production facilities and machinery. Dependent as it is on the growth of manufacturing industries and their investment plans, demand for the industry's products is highly cyclical.

About one-quarter of all metal cutting tools are lathes: other important groups are metal forming machines and grinding, honing and lapping machines. Manual control for many tools is being replaced by automatic control and Britain is a major producer of numerically controlled machine tools, including drilling machines, lathes and machining centres. The two largest export markets for the industry in 1975 were the United States and South Africa. 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 13). 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: there has been a rapid expansion in the number of plants completed for the chemical, petrochemical, oil refining and gas industries and British firms are carrying out major plant projects in many overseas countries. Substantial new business has been generated by North Sea oil and gas operations. Gas turbine engines for industry, in particular for power generation in the fuel industries, are another thriving section of the industry. 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. Although there have been valuable developments elsewhere, British inventions have remained the foundation of many textile processes in use internationally and progress has been made in developing automation in the industry. 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 distributing 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 of 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. Electronic control and completely automated handling systems are among the techniques developed in recent years.

Agricultural Machinery

Britain has an important export trade in agricultural machinery and implements (for tractors, see p. 230) and continues to develop 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. Mechanisation is being used increasingly in the arable farming, livestock 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.

Office Machinery

Sales by this industry have been expanding rapidly. Some of the new technology has been developed by multinational companies and the British subsidiaries or associates of overseas firms are prominent in various sectors. The industry includes non-electronic data processing and handling equipment, duplicators, typewriters, accounting machines and cash registers, and electronic calculators (for electronic computers and data processing equipment, see p. 229).

Other Machinery

The other major products of the 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 whose main functions are to supply parts and components and to undertake general sub-contracting, fabricating and repair work. Particularly important is the production of ball, roller, needle and other bearings, about one-quarter of which is for the motor vehicle industry, and of other components, such as precision chains.

**INSTRUMENT
ENGINEERING**

	Employment '000s	Manufacturers' Sales £ million	Exports £ million
<i>Instrument Engineering</i>	153.9	883.9	523.6
scientific and industrial instruments	98.3	574.2	280.0
photographic equipment	12.4	109.8	131.7
watches and clocks	14.8	58.4	34.0
surgical instruments and appliances	28.4	141.5	77.9

Instrument engineering is a particularly important sector of the engineering industry. Electronic techniques are becoming widely used, particularly in the industrial instrument sector, which comprises industrial and process measuring and control instruments and equipment, optical instruments and appliances, electrical measuring and testing instruments, analytical instruments and a diverse group of others. About half the market for analytical instruments is in the medical field. 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 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	Manufacturers' Sales £ million	Exports £ million
<i>Electrical and Electronic Engineering</i>	768.0	5,412.4	1,768.4
electrical machinery	140.2	1,015.0	325.9
insulated wires and cables	46.6	517.0	127.4
electrical goods and domestic appliances	178.4	517.4	107.4
electronic equipment:			
telecommunications	87.0	503.0	75.3
components	128.4	630.9	284.2
consumer goods	54.9	394.7	77.9
computers	43.3	484.8	331.4
capital goods	89.3	623.5	239.2

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 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. Scientific and technological research is carried out by the Electrical Research Association.

Electrical Engineering

British scientists and engineers were responsible for many of the basic advances in the generation and transmission of electric power and British firms have continued to be important suppliers of machinery and equipment. Mergers have led to the creation of one of the leading electrical and electronic engineering groups in Europe for producing equipment used in generating, transmitting and distributing electric power. 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. 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 Europe and British scientists and companies have made important contributions to electronics technology. Because of the diversity of the range of products, an exact definition must be arbitrary, but the sectors included are telecommunication equipment, components, consumer goods, computers and communication and other capital equipment, as well as electronic process control and industrial instrumentation (see p. 228).

The dependence of the telecommunications industry on electronic techniques is increasing as new switching systems are introduced. The main products are telephone exchange equipment, switching equipment for telegraph and telex, data transmission equipment, subscribers' apparatus and long-distance communication equipment. The Post Office accounts for some two-thirds of the home market, which is largely supplied by three companies and carries out research and development work in co-operation with companies.

The components sector manufactures the whole range of active and passive electronics components, including integrated circuits (in which many circuits are accommodated on a tiny chip of semiconductor raw material), mainly for the electronics equipment industry. The market is dominated by the United States manufacturers and their subsidiaries.

The major consumer goods produced are radio and television sets, radiograms, high-fidelity audio equipment and tape recorders. Demand for the goods is particularly affected by credit controls and Government fiscal policy. In the audio field, British manufacturers have a reputation for high-quality goods but are less strong in the mass market.

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, are produced. Essential to the sector is the 'software' industry, 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. British equipment is used extensively overseas, for defence, civil aviation, shipping, health, educational and other purposes.

VEHICLES, AIRCRAFT AND SHIPS

	<i>Employment</i> '000s	<i>Manufacturers' Sales</i> £ million	<i>Exports</i> £ million
<i>Vehicles, Aircraft and Ships</i>	921.8	3,435.2	3,473.4
motor vehicles:			
cars and commercial vehicles	455.2	^a	2,054.0
wheeled tractors	32.9	584.8	310.7
motor cycles and cycles	13.0	83.8	56.3
railway vehicles	41.9	235.2	16.4
aerospace	204.4	1,397.4	744.0 ^b
shipbuilding and marine engineering	174.3	949.7	215.4

^a Sales figures not available; 1,648,401 vehicles were produced.

^b Excluding guided missiles and weapons.

The industries which manufacture transport equipment are a particularly important source of overseas earnings, accounting for some 17 per cent of total visible exports in 1975.

Motor Vehicles

In its widest context the motor industry comprises the manufacture of cars and commercial vehicles, wheeled tractors, caravans and trailers, and motor cycles and also of separate parts and components. Output is dominated by four large groups (British Leyland, Ford, Chrysler United Kingdom and Vauxhall) which account for over 98 per cent of car production and some 93 per cent of commercial vehicle output; the remainder is in the hands of smaller, specialist producers of heavy commercial vehicles, buses, coaches, limousines and sports cars. The principal trade association is the Society of Motor Manufacturers and Traders, which holds an annual motor show and a commercial vehicle exhibition every two years. The Motor Industry Research Association carries out collective research on vehicles and components. In the three categories of exports (cars, commercial vehicles and parts and accessories) there is a positive balance of trade although the proportion of the market held by imported cars has increased. Large numbers of cars are exported in a form suitable for assembly overseas. The principal individual overseas market for British cars is the United States. Britain is one of the world's largest exporters of commercial vehicles, including goods vehicles, buses and coaches, the main market being South Africa.

Agricultural tractors account for the bulk of wheeled tractors produced. Production is dominated by two large firms, with three others responsible for most of the remainder. Britain supplies about one-quarter of total world exports of tractors.

In recent years the motor cycle industry has contracted and the domestic market is largely supplied by imports.

Railway Vehicles

The British Railways Board and a small number of firms in the private sector build locomotives, carriages and freight wagons for British Rail, for industrial users and for export.



Chemical Industry

Imperial Chemical Industry's North Tees aromatics plant.

Chemical Industry

British Petroleum
Chemicals Ltd's
Grangemouth
complex and
(below) cell room
at chlorine plant,
Baglan Bay.





Albright and Wilson Ltd's phosphoric acid concentrator, Whitehaven, and (below) benzyl cyanide plant, Widnes.

Chemical Industry

Plant for producing 'Toprina', a high protein yeast grown on normal paraffins.



The finished product, used as an animal feed component.



Aerospace

Britain's aerospace industry is one of the largest and most comprehensive in the world, producing civil and military aircraft, helicopters, guided weapons, hovercraft, space vehicles and a comprehensive range of aircraft and airfield equipment and systems. The construction of aircraft has hitherto been dominated by two large airframe manufacturers and one helicopter concern; outside these groups are a few important smaller companies and a large number of components and systems suppliers. The Government is carrying out plans to take four companies—British Aircraft Corporation, Hawker Siddeley Aviation, Hawker Siddeley Dynamics and Scottish Aviation—into public ownership under a new corporation, British Aerospace. Almost all aero-engine manufacture is in the hands of Rolls-Royce (1971) Ltd., a publicly owned company within the National Enterprise Board. Besides extensive research and development work by the industry itself, research on a substantial scale (covering airframes, aero-engines, equipment and space systems) is carried out by government research establishments. The industry is represented by the Society of British Aerospace Companies, which organises a major international air show and exhibition at Farnborough, Hampshire, every two years. Production and exports in the industry are fairly evenly divided between aircraft and parts and engines and parts. Another substantial sector is guided weapons and parts. The leading markets for exports are the United States, France and the Federal Republic of Germany.

Current production includes such civil aircraft as the Hawker Siddeley HS 748, *Trident* and HS 125 executive jet, the BAC *One-Eleven*, the Britten-Norman *Islander/Trislander* light transports and the Shorts *Skyvan*. The test programme for the Shorts *SD3-30* commuter airliner, which is in production, was completed early in 1976. The Anglo-French *Concorde* supersonic transport started service in January 1976. Military developments include the unique Hawker Siddeley *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 *Multi-Role Combat Aircraft*, now designated the *Tornado*, a collaborative development by Britain, the Federal Republic of Germany and Italy. The *Puma*, *Gazelle* and *Lynx* helicopters are collaborative developments by Britain and France, together with a number of guided-missile projects. The industry is also extensively involved in the manufacture of space systems, including satellites for communications and scientific research in other European collaborative programmes (see p. 405). Britain is the world's leading producer of hovercraft, the *Winchester* (SRN 6) and *Mountbatten* (SRN 4) classes having been sold extensively overseas. British aero-engines are also in world-wide use; recent types include the *Pegasus* vectored-thrust engine for the *Harrier* and similar aircraft, the advanced technology *RB 211* ultra-quiet engine, and its more powerful derivative, the *RB 211-524*, an engine developed for aircraft of longer-range.

Shipbuilding and Marine Engineering

Britain has a long-established tradition of shipbuilding; its industry is the fifth largest in the world. Employment in the industry has contracted in recent years and there have been programmes of reorganisation in some major shipyards. It is proposed that 19 of the larger shipbuilding companies, 12 ship-repairing companies, five companies manufacturing slow-speed diesel marine engines and three training companies and their subsidiaries should be taken into public ownership under a new public corporation, known as British Shipbuilders. In addition, a number of yards in the private sector build smaller vessels, including patrol boats, fishing and harbour craft, pleasure craft, supply vessels, drilling

ships and oil rigs. About 30 per cent of the output of British yards is for export. Some of the larger shipbuilding firms, in addition to the specialist ship repair firms, carry out repair work. Various types of marine diesel engines, steam turbines and gas turbines are constructed and fitted by specialist firms. The industry is represented by the Shipbuilders and Repairers National Association and co-operative research into shipbuilding and marine engineering is undertaken by the British Ship Research Association.

METAL PRODUCTS

	<i>Employment</i> '000s	<i>Manufacturers' Sales</i> £ million	<i>Exports</i> £ million
<i>Metal Products</i>	542.3	3,540.6	506.0
engineers' small tools and gauges	63.8	267.5	77.6
cutlery	13.7	81.6	36.5
hollow-ware	n.a.	132.1	26.4
hand tools and implements	20.1	101.2	56.8
jewellery, gold and silver ware	21.5	156.0	25.4

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); this industry's reputation has been built on the skill of its craftsmen, although today, except for the highest quality wares, mass-production methods are generally used. Although small firms predominate, 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 nearly three-fifths 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 dropforgings.

CHEMICALS

	<i>Employment</i> '000s	<i>Manufacturers' Sales</i> £ million	<i>Exports</i> £ million
<i>Chemicals</i>	428.1	6,611.1	2,171.0
general chemicals	133.4	2,585.1	917.8
pharmaceuticals	76.1	870.8	345.7
plastics and synthetics	49.7	884.0	312.6
fertilisers	12.0	343.7	53.3
dye-stuffs and pigments	22.8	230.9	129.5
paint	26.9	398.5	59.8
toilet preparations, soap and detergents	40.3	746.3	127.7

The chemicals industry is one of the fastest growing sectors of British industry and an important contributor to overseas earnings. In 1975 it accounted for 11 per cent of total British exports. The industry is undertaking a substantial investment programme. One major British chemical group, the fourth largest in the world, accounts for about 20 per cent of chemical sales in Britain. A further 30 per cent is in the hands of 24 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 one-fifth 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 such products as fertilisers, detergents, paint, glass and metals.

Sulphuric acid is produced in larger quantities than any other chemical. The remaining output of this sector consists of a very wide range of chemicals. Over four-fifths 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 outlets for organic chemicals are plastics materials, solvents, synthetic rubber, man-made fibres and detergents. Radioisotopes are produced by the Radiochemical Centre Ltd.: over half the centre's production is for export.

Pharmaceuticals

The whole range of drugs is produced in Britain, where many of the basic products were discovered and developed. These include antibiotics, sulphonamides, anti-malarial drugs, anti-histamine products, anaesthetics, vaccine sera and naturally occurring drugs.

Plastics and Synthetics

Many of the basic discoveries in plastics, including polyethylene, were made in Britain. Plastics manufacture is one of the fastest growing sections of industry. 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) and polystyrene (a material used for toys, light mouldings and many consumer goods). One of the newer thermoplastic materials is polypropylene, which can be fabricated as mouldings, films and fibres. A new family 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 half the weight of steel. 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 two firms, together 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 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

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. Britain is one of the largest exporters of paint in the world.

Toilet preparations, Soap and Detergents

The industry includes soap and detergents and toilet preparations, cosmetics and perfumes. Three large companies are predominant: many of the firms in the industry are owned or financed by United States companies but there are a number of long-established British perfume and soap makers.

Other Chemical Products

Other products of the industry include formulated adhesives, printing ink, colours and dyestuffs, photographic chemical materials and floor and furniture polishes.

TEXTILES AND CLOTHING

	Employment '000s	Manufacturers' Sales £ million	Exports £ million
<i>Textiles</i>	493.9	3,001.0	881.6
man-made fibres	34.0	450.2	214.0
cotton	96.5	822.7	157.0
linen			
wool	88.0	685.0	228.0
hosiery and knitwear	115.0	638.9	135.2
carpets	37.4	437.0	74.6
jute	8.1	56.4	4.0
other textile industries	114.8	434.0	91.0
<i>Clothing</i>	307.5	1,374.5	137.1

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 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 Wool Industries Research Association, the Hosiery and Allied Trades Research Association and the International Wool Secretariat.

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 terylene, made wholly by chemical processes. *Terylene*, a polyester fibre developed in Britain during the second world war, is especially suited to blending with wool. 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 re-organisation, 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 Irish Republic and Denmark are the most important markets.

Linen

The linen industry is centred in Northern Ireland, where the lighter types of fabrics for apparel, furnishings and household textiles are produced. The heavyweight canvas for sailcloth, tents, awnings and tarpaulins is mainly produced in Scotland.

Wool

The wool textile industry, of importance to Britain since mediaeval times, is one of the largest in the world. There are two main sectors, 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, but declining, quantities of raw wool are scoured and cleaned in Britain for the production of wool for spinning. The largest markets for woollen and worsted fabrics are Japan and the rest of the European Community.

**Hosiery and
Knitwear**

The hosiery and knitwear industry includes four or five large producers and a wide variety of smaller ones. The products of the industry range from knitted or crocheted outerwear and fabrics to socks, stockings, panti-hose and accessories.

Carpets

Some two-thirds 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 man-made 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 volume of tufted carpets exported is now almost twice as large as that for woven ones, but the high quality and variety of design of the latter make Britain the leading producer of woven carpets.

Jute

Jute products are manufactured on a large scale in the Dundee area. Jute yarn and the man-made polypropylene yarn are used in the manufacture 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, have also been developed.

**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 has shown considerable flexibility in adapting to the needs of new fabrics, to changing patterns of demand and different markets and to the impact of international fashion. The industry operates in the context of the world market and many subsidiary companies have been established overseas. Although production has been mechanised to a large extent, the industry remains labour intensive, skilled, individual work being required at various stages of garment manufacture. The Clothing Export Council, which represents a major part of the industry, co-ordinates the promotional activities of the industry.

LEATHER AND FOOTWEAR

	<i>Employment</i> '000s	<i>Manufacturers' Sales</i> £ million	<i>Exports</i> £ million
leather and leather goods	36.7	259.9	81.5
footwear	75.3	437.3	52.7

Leather

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 one of the largest in the world. Some areas of Britain concentrate on production of particular types of footwear, for example, the Rossendale valley region of Lancashire on slippers, and Leicester and Norwich on women's and girls' shoes.

FOOD, DRINK AND TOBACCO

	<i>Employment</i> '000s	<i>Manufacturers' Sales</i> £ million	<i>Exports</i> £ million
<i>Food, Drink and Tobacco</i>	701.3	3,230.6	1,207.5
bread, bakery products,			
biscuits, flour confectionery	147.9	1,161.2	42.9
chocolate and sugar confectionery	66.7	711.1	42.6
bacon curing	103.6	1,325.9	197.9
meat products			
fish products			
beverages	128.2	2,888.0	417.3
tobacco	34.0	2,305.2	104.9
fruit and vegetable products	60.5	849.2	54.1

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. Three 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.

**Fruit, Vegetable
and Other
Products**

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, which accounts for almost all whisky production in Britain, was first distilled in the fifteenth century; most well-known brands are blends of anything between 15 to 40 different single whiskies, some distilled from malted barley and some from other grains. Scotch whisky is required by law to be kept in wooden casks for at least three years, but is usually matured for an average of five years. About four-fifths of annual sales are to overseas buyers; the United States imports nearly half of the distilled alcoholic beverages exported from Britain. Japan is the second largest market. 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 a number of smaller enterprises who mainly supply locally. 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. Malt is made almost entirely from home-grown barley. Some brewers make their own malt, others buy it from independent maltsters, who also supply distillers, vinegar brewers and malt extract manufacturers. British malt is used by brewers throughout the world.

Three major groups account for much of the cider and perry produced in Britain. The industry is based in Devon, Somerset and Herefordshire. A small viticultural industry produces wine from grapes grown in vineyards in England. Imported grape and fruit juices are used in the production of most of the limited quantity of made wine.

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 tobacco industry manufactures almost all the cigarettes and tobacco goods sold in Britain. Two big manufacturing groups account for over 90 per cent of total output. Exports, mainly of cigarettes, are shipped to a large number of overseas markets, including Saudi Arabia, the Netherlands and Belgium.

Tobacco is imported in large amounts from the United States, Canada and India.

**BRICKS, CEMENT,
POTTERY AND
GLASS**

	<i>Employment</i> '000s	<i>Manufacturers'</i> <i>Sales</i> £ million	<i>Exports</i> £ million
brickmaking and refractory goods	40.7	330.4	27.5
cement	13.9	267.0	12.7
pottery	58.8	265.6	95.8
glass	69.0	480.0	95.2

**Brickmaking 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. Building bricks are made mainly in the Bedford and Peterborough areas. 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. The capacity of the industry 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 almost all the coal-fired kilns, and new decorating techniques and automatic and semi-automatic machinery have been introduced. Domestic pottery, including china, earthenware, stoneware, jet and Rockingham, accounts for about half 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; famous makes include *Wedgwood*, *Spode*, *Royal Worcester*, *Royal Doulton*, *Minton*, *Coalport* and *Royal Crown Derby*.

Glass

Britain's glass industry is one of the largest in the world. The section of the industry devoted to the manufacture of flat glass in its various forms is organised for quantity production, much of it in the form of '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**

	<i>Employment</i> '000s	<i>Manufacturers'</i>	
		<i>Sales</i> £ million	<i>Exports</i> £ million
<i>Paper, Printing and Publishing</i>	559.0	3,263.1	334.7
paper and board	67.3	881.3	127.8
printing and publishing:			
newspapers and periodicals	135.7	1,243.2	28.5
other, including books	205.7	1,138.6	178.5

**Paper and
Board**

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 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 some 54 per cent of the industry's needs. New techniques for recycling waste paper are being developed and a scheme of Government assistance aimed at directly encouraging the increased use of indigenous raw materials was introduced in 1976. 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 industry produces 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 the latest developments in high-speed printing equipment, including electronic engraving and advanced processes of photographic reproduction and several provincial newspapers use computer typesetting techniques. The Book Development Council of the Publishers' Association promotes the export and use of British books overseas. The most important overseas markets for printed matter are the United States and Australia.

**OTHER
MANUFACTUR-
ING**

	<i>Employment</i> '000s	<i>Manufacturers'</i>	
		<i>Sales</i> £ million	<i>Exports</i> £ million
rubber and rubber manufactures	112.8	987.5	269.4
furniture (wooden), bedding etc.	107.7	833.6	61.2
brushes	9.4	50.7	7.1
timber	87.9	653.2	23.5
plastics products, floorcoverings etc.	127.4	997.3	n.a.
toys, games, sports equipment	42.7	268.1	157.9

**Rubber
Manufactures**

Tyres and tubes represent nearly half the output of the industry, but firms make a variety of other goods, the most important being rubber footwear, gloves and clothing, conveyor belting, cables, hose, latex foam products and

other vehicle components and accessories. One recent major development has been the introduction of tyre systems which enable the vehicle to continue safely after puncturing. The largest tyre group in Europe came into being in 1971, following the merger 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. New designs and materials are incorporated into modern furniture; traditional designs are reproduced by skilled craftsmen. 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 Development Council and 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.

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, linoleum, vinyl and other floorcoverings and leathercloth.

Toys, Games and Sports Equipment

The industry manufactures toys, games, sports equipment and children's carriages. The greatest expansion has been in the field of craft and hobby kits. British diecast toys are well known overseas; about half of the output of toys and games is for export. The Federal Republic of Germany and the United States are the major markets.

CONSTRUCTION

The construction industry, which accounts for about 7 per cent of the total domestic income, includes firms engaged on the 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, open-cast coal prospecting and mining, and structural work connected with thermal and hydroelectric power stations and telecommunications. About 1.8 million people are engaged on construction, including the self-employed, and they represent some 6.8 per cent of the total labour force. About 20 per cent are employed by public authorities. Some 30 per cent of output consists of maintenance work, and about 49 per cent of all new work is commissioned by public authorities.

Structure

Construction work is carried out both by private contractors and by public authorities which employ their own labour. In 1974 about 90 per cent of the work was done by private firms. Although there were 64,000 firms employing two or more people nearly 91 per cent of them employed fewer than 25 people.

Public authorities as a whole employed about 226,000 operatives but a very large proportion of these were engaged on repair and maintenance work for local authorities.

Nearly 41 per cent of operatives were occupied on building maintenance, valued at about £2,600 million annually. The total labour force included about 700,000 skilled craftsmen (of which about 90,000 were apprentices), most of whom had been trained under the industry's apprenticeship schemes. The apprenticeship period is four 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, which is an integral part of the Department of the Environment (see p. 48) is responsible for the construction programmes undertaken directly by the Government, including work for the armed services, both in Britain and overseas. The Department of the Environment is responsible for co-ordinating research and development throughout the government service and seeks to influence methods and techniques in the building industry as a whole. A Construction Industry Liaison Group was set up by the Government in 1975 to improve consultative arrangements between the Government and the construction industry.

Output

The value of work done in 1975 amounted to £11,566 million, of which £1,285 million represented work carried out by the labour employed directly by public authorities. Private contractors carried out the remaining £10,281 million (£7,929 million on new work and £2,352 million on repair work).

Housing

Some 322,300 houses and flats were started in 1975 and 311,780 were completed, of which 149,580 were for private owners. Of the £2,935 million of new housing carried out by private contractors, £1,528 million, or over half, was for private owners and the remainder for public authorities. 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

Britain was the first country to develop civil engineering as a large-scale modern industry and the first to provide techniques, finance and equipment to carry out major civil engineering projects throughout the world.

Among important construction projects in hand in Britain in 1976 were conventional and nuclear power stations (see p. 267), offshore production platforms and onshore terminals for North Sea oil, hospitals, large-scale housing developments, a scheme to extend the London underground railway system to

Heathrow Airport, London, and the first stage of the new Fleet underground line in London, and roads, tunnels and bridges.

Overseas Constructional Work

Among important new construction projects being undertaken by British building and civil engineering contractors in overseas countries are: a US \$200 million contract for the first stage of an irrigation scheme in Peru; a £46 million contract for a highway in Iran; a £20 million contract for the first phase of a new airport in Saudi Arabia; a £34 million contract for several buildings and a highway in Muscat and Oman; an £18 million contract for a hospital in Qatar and two contracts worth £13 million for road building and a water supply scheme in Nigeria.

British building and civil engineering firms are active in over 100 countries. In 1974-75 the value of new overseas contracts totalled about £1,125 million.

A substantial and growing amount of overseas business is also being done by British architects and surveyors, as well as by other types of consultant. At the beginning of 1976 British members of the Association of Consulting Engineers were engaged on projects worth nearly £15,000 million which will bring in some £130 million net in invisible earnings.

Increased opportunities for construction exports led to the setting up in 1975 of the Construction Exports Advisory Board to provide a focus for government support. The board advises the Secretary of State for the Environment and the Secretary of State for Trade on the selection of companies to pursue particular construction projects overseas; and generally, on ways of harnessing additional resources in the construction industry and professions to meet export opportunities.

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 construction problems. An Agrément Board, tests and certifies building products and methods.

The construction industry is served by several of the industrial research associations. The Construction Industry Research and Information Association is concerned with structural design, civil engineering construction, building design and construction, earthworks and foundations, hydraulic and public health engineering, and underwater engineering. The Building Services Research and Information Association deals with heating, air conditioning, electrical, plumbing and other services in dwellings and commercial buildings. The application of materials is the main concern of the Timber Research and Development Association and the Cement and Concrete Association. Other research associations deal with bricks, paint, plastics in building, welding and civil engineering hydraulics. 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. Most of the producers of primary building materials have trade associations which maintain research institutions chiefly devoted to seeking new and more efficient use for their materials.

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, involving the network of distributive trades by

which home-produced or imported goods reach the consumer. (For the pattern of consumers' expenditure, see p. 200.)

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.

There have been several major official statistical inquiries into the distributive trades. For wholesale trades, a large-scale inquiry was carried out in respect of 1965, and more recently for 1974, while for service trades there was a large-scale inquiry into the catering trades for 1969 and into motor trades for 1972. The 1971 Census of Distribution covered the retail and certain service trades. Sample monthly, quarterly and annual inquiries are also undertaken.

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 1975 was about £3,600 million; fixed capital expenditure by wholesale distributors amounted to about £130 million in 1975 (valued at 1970 prices).

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 is regulated by statutory marketing boards.

London's wholesale markets play a leading part in the distribution of food-stuffs. Every year the new Covent Garden market handles up to 1 million tons of fruit and vegetables, and about 170,000 tons of carcass meat and 49,000 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 sales of the Co-operative Wholesale Society (CWS), whose membership is restricted to incorporated organisations, amounted to £1,100 million in 1975.

The number of Cash and Carry wholesale warehouses has increased in recent years. By bulk purchasing and limiting their expenditure on premises and credit and delivery facilities they can offer large price discounts to their customers. There are about 500 warehouses of this type with total sales of over £1,000 million a year. Cash and Carry wholesalers account for about 40 per cent of all grocery warehousing by turnover.

RETAIL TRADE

Organisation and Turnover

Retail businesses in Britain may be classified under four main headings: (1) multiple traders with ten or more branches; (2) retail co-operative societies; (3) independent retail businesses, including for this purpose the small multiple stores (that is, chains of stores with nine or fewer branches); and (4) department stores. Other retail outlets include gas and electricity showrooms and mail order businesses (see p. 246). Multiple traders have tended to bypass the wholesaler by having their own buying and distribution organisations. In response many

wholesalers have joined with independent retailers to form voluntary organisations. This has helped to preserve the existence of retail outlets for the wholesaler and has given to smaller retailers the advantages of bulk-buying and co-ordinated distribution without significant loss of independence. About 28,000 grocers' shops, nearly a third of all independent grocers, are members of voluntary groups.

The 1971 Census of Distribution covering retail and certain service trades in Great Britain, recorded some 473,000 retail establishments (Table 16). Out of this total, grocery and other food retailing groups numbered nearly 198,000 and the clothing and footwear group over 81,000.

TABLE 16: Retail Trades by Type of Business

Type of Trade	Establishments		Turnover	
	Number 1971	Percentage change 1966-71	£ million 1971	Percentage change 1966-71
Grocers and provision dealers	105,283	-14.7	4,156	+42.9
Other food retailers	92,524	-11.3	2,615	+25.6
Confectioners, tobacconists and newsagents	52,064	-17.8	1,306	+24.9
Clothing and footwear shops	81,279	- 2.2	2,372	+37.9
Household goods shops	70,342	+ 6.8	2,007	+55.3
Other non-food retailers	66,724	+ 8.7	1,569	+53.9
General stores	4,775	+58.7	1,586	+48.8
Total	472,991	- 6.2	15,611	+40.2
Electricity and gas showrooms	2,359	-21.7	283	+52.5
Mail order businesses ^a	772	+55.9	633	+47.6
Automatic vending machine operators ^a	65	+16.0	12	+ 9.2
Market stalls and mobile shops	31,790	n.a.	147	n.a.

Source: *Final Results 1971 Census of Distribution*

^a Number of organisations.

n.a. not available.

Though the total value of retail trade in Great Britain (inclusive of electricity and gas showrooms and mail order business) rose by about 40 per cent between 1966 and 1971, after allowing for price changes, the increase in volume of sales was about 8 per cent. Rates of growth (measured in turnover) varied appreciably between different types of trade. The slowest growth was in confectionery, tobacconist, newsagent, clothing and 'other food' sectors. The fastest growth was in department stores, mail order business, combined gas and electricity showroom sales, household goods, groceries and provisions, and 'other non-foods'. However, the growth of sales on a commodity basis has been affected by increased diversification. The results of the 1971 Census of Distribution indicate a continuation of the trend for a larger volume of trade to be handled by rather fewer shops, particularly in the food sector, along with the continuing expansion of large multiple firms relative to other types of shop. Independent shops accounted for about half of the value of Britain's retail trade, although they made up more than four-fifths of the number of shops.

According to the Department of Industry's monthly retail sales inquiry, the value of all retail sales in Great Britain in 1975 was estimated at £28,000 million

an increase of about 75 per cent on 1971. However, after allowing for increases in retail prices, the increase in the volume of sales was about 8 per cent.

A very wide range is covered in the size of retailing establishments. Seven shops had a turnover in 1971 exceeding £10 million. At the other extreme there were some 6,500 shops with a turnover of less than £1,000 a year. In addition there were market and street traders, whose volume of business may be very small. About 2.5 million people were employed in retail shops in 1971.

Fixed capital expenditure by retail distributors in 1975 amounted to about £370 million (at 1970 prices).

In Northern Ireland the value of all retail sales increased by 64 per cent between 1971 and 1975 to reach an estimated figure of £760 million.

Multiples and Large Establishments

According to the 1971 Census of Distribution there were over 66,700 shops owned by multiples (including multiple department stores) in 1971 with a total turnover of over £6,000 million; their share of total turnover was about 38.6 per cent.

Retail Co-operative Societies

Total sales of the retail co-operative societies in 1975 were over £2,000 million, being about 7 per cent of all retail trade. Their share of food shops turnover was some 11 per cent.

The 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. Share investment by individual members is limited to £5,000 (less in some societies) and only a low rate of interest is normally paid on the shares. One large society has introduced a scheme of bonus shares carrying a higher rate of interest than the ordinary shares.

Traditionally the trading surplus was paid out to members in the form of a dividend in proportion to their purchases. A large number of societies, accounting for over four-fifths of total co-operative sales, have introduced dividend stamps redeemable for cash, other goods, or credit to a share account, at different redemption rates.

At the end of 1975 there were 227 retail co-operative societies. Amalgamations are rapidly diminishing the number of societies (the total in 1958 was 1,015). The largest single society in Britain is Co-operative Retail Services Limited which in 1975 had 27 branches and a turnover of £287 million.

Independent Shops

Independent shops have been giving ground gradually in the face of increased competition from the larger undertakings, but the decline has been partly reduced by the existence of voluntary buying groups (see p. 243) and between 1966 and 1971 the number of independent shops fell by only 3 per cent. The 1971 Census of Distribution also observed that the independent shops' share of trade continued to fall (to 54.3 per cent); however, they still play an important role, often in terms of convenience, service, and range of goods stocked. The proprietors of some smaller shops have other means of livelihood.

Department Stores

Department stores were defined for the purposes of the census as having 25 or more persons engaged in selling a wide range of commodities, notably clothing and household goods. There were 818 department stores in Britain, according to the 1971 Census of Distribution, with a turnover of £950 million: 242 were owned by multiples; 343 by independents; and 233, with a turnover of nearly £160 million, by co-operative societies. Between 1966 and 1971 sales by department stores rose by some 45.5 per cent.

Other Methods of Retailing

The development of self-service trading has been a feature of the last two decades. In 1971 there were over 28,000 stores operating wholly or partly on self-service lines, compared with about 9,500 towards the end of 1961 and fewer than 500 in 1950. This development has been accompanied by a trend to larger shops in terms of both floor space and staff, though the number of staff per square foot of floor space has tended to decrease.

Supermarkets

Supermarkets are defined as 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 5,900 supermarkets in 1975 with sales of £3,500 million. Their share of total retail grocery sales amounted to some 45 per cent.

Superstores

The number of very large stores, generally known as 'hypermarkets' and 'superstores', is increasing. They generally operate a selling area of between 20,000 and 100,000 square feet (1,860 and 9,290 square metres respectively); hypermarkets having a minimum selling area of 50,000 square feet (4,645 square metres). These stores operate on supermarket lines but with a much wider range of goods including food and non-food items. They are generally associated with exclusive car-parking facilities and situated away from established central shopping areas.

Mail Order Sales

Mail order trading, through a mail order business or direct from retailer, wholesaler or manufacturer was one of the most rapidly growing forms of selling in Britain between 1961 and 1966. Its growth rate slowed between 1966 and 1971, but has since increased again. The 1971 Census of Distribution showed that turnover was £633 million (excluding wholesalers and manufacturers mail order sales), accounting for nearly 4 per cent of total retail sales.

Mobile Shops

Some 31,790 mobile shops and market stalls were reported in the Census of Distribution for 1971, with sales amounting to £147 million. Co-operative societies accounted for 39 per cent of sales through mobile food shops, against 12 per cent in ordinary food shops. Mobile shops were mainly concerned with food sales; about two-fifths were travelling grocers, and greengrocers and butchers each accounted for over one-fifth. Only a small proportion were shops not selling food, and these specialised mainly in paraffin supplies and hardware.

Automatic Vending Machines

There are about 500,000 automatic vending machines in use in Britain, many of them installed in offices and factories. It has been estimated that sales from vending machines in 1971 totalled some £155 million while sales from the 62,500 machines in use in the retail trade totalled some £12 million. The main items sold in them are cigarettes, drinks, confectionery, prepared foodstuffs and other commodities such as postage stamps.

Promotional Offers

Forms of consumer sales promotion include reduced price offers, competitions, gift schemes, and stamp trading. Trading stamps are normally exchanged for goods but, by law, have to be marked with a cash value and, where their aggregate value is £0.25 or more, redeemed for cash on request.

Direct Selling

Sales by the 26 manufacturing and importing companies which are members of the Direct Sales and Service Association Limited and which sell all their products directly to consumers amounted to about £400 million in 1975.

Instalment Credit

The rapid growth of sales of household and durable consumer goods, such as cars, furniture, washing machines, television sets, refrigerators and cookers, has been greatly helped by instalment credit facilities including hire purchase. Total new credit extended by finance houses and retailers in Great Britain in 1975 amounted to £2,987 million, 19 per cent more than in 1974; about 60 per cent was advanced by retailers and the rest by finance companies.

Hire-purchase in Northern Ireland directly financed by the major finance houses operating in Northern Ireland amounted in 1975 to £49.7 million.

Credit Cards

The credit card is widely used in Britain. The cards 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.

SERVICE TRADES

About 2.2 million people in Great Britain were employed in trades offering a service directly to the public in 1975.

Catering

There were over 130,000 establishments concerned with catering (defined to include public houses, canteens and fish and chip shops, as well as licensed hotels and restaurants) in Britain in 1969. There were 203 catering contractor organisations and over 18,000 industrial and office canteens.

The value of total turnover of all caterers in 1975 was £5,100 million, just over double the 1969 figure. Turnover of licensed hotels and holidays camps increased by 116 per cent to £880 million and that of public houses by 111 per cent to £2,800 million.

Laundries and Dry Cleaning

In 1971 there were over 8,400 laundry, launderette, dry cleaning and towel, linen and overalls hiring organisations. Turnover in 1971 amounted to some £212 million.

Motor Trades

There were 46,000 businesses in the motor trades in Britain in 1972 with 55,000 establishments and a total turnover of £8,100 million. These trades include motor repairers, distributors, garages and petrol stations. Between 1967 and 1975 the motor trades' total turnover increased rapidly by about 41 per cent. Sales of new vehicles accounted for some 32 per cent of the 1975 total, and sales of second-hand vehicles for 15 per cent. Sales of accessories, receipts from sales and servicing and sales of petrol and oil accounted for the remaining 53 per cent.

Hairdressing

The 1971 census recorded some 47,200 hairdressing establishments with a total turnover of £166 million. About two-thirds of the number are ladies' hairdressers.

Shoe Repairs

In 1971 there were some 5,500 boot and shoe repair establishments, the number having fallen by over a quarter since 1966; takings in 1971 were £22.4 million, slightly below the 1966 level.

Presentation of Goods

In Britain the expansion of self-service shops, the spread of branded and standardised products, and developments in partly prepared foods, for example, 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 (turnover of some

£1,115 million a year), one of the fastest growing sectors being paper sacks (£78 million in 1975). Other important materials are tinplate, plastics and glass. New uses are being found for tinplate, especially in sales of soft drinks and beer. The use of plastics continues to develop; annual sales of polyethylene film and film products amount to 91,992 tonnes and 120,290 tonnes respectively, while the annual sales of low-density polyethylene bottles has risen to about 617 million, providing further competition for the traditional glass bottle.

Advertising

About £967 million is estimated to have been spent on all forms of advertising in 1975; as a proportion of the gross national product (1.04 per cent) and of consumer expenditure (1.5 per cent), it is the lowest since 1956. About £649 million was spent on display advertising and £318 million on classified, financial and industrial advertising. Most of the advertising is carried out 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, has some 3,000 members in commerce, industry, the professions, national associations, and central and local government.

13 Energy and Natural Resources

Over half of Britain's energy requirement is supplied from domestic fuel minerals (defined, for the purposes of this handbook, as coal, oil and natural gas), and minerals in general make an important contribution to the economy. The approximate value of minerals produced in 1975 was £2,890 million, of which coal contributed 71 per cent and natural gas 7 per cent. The discovery of commercial oilfields on the British Continental Shelf is increasing the importance of domestically produced fuel minerals to the economy very considerably. Over the past ten years the production of non-fuel minerals has been increasing, particularly in terms of value.

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

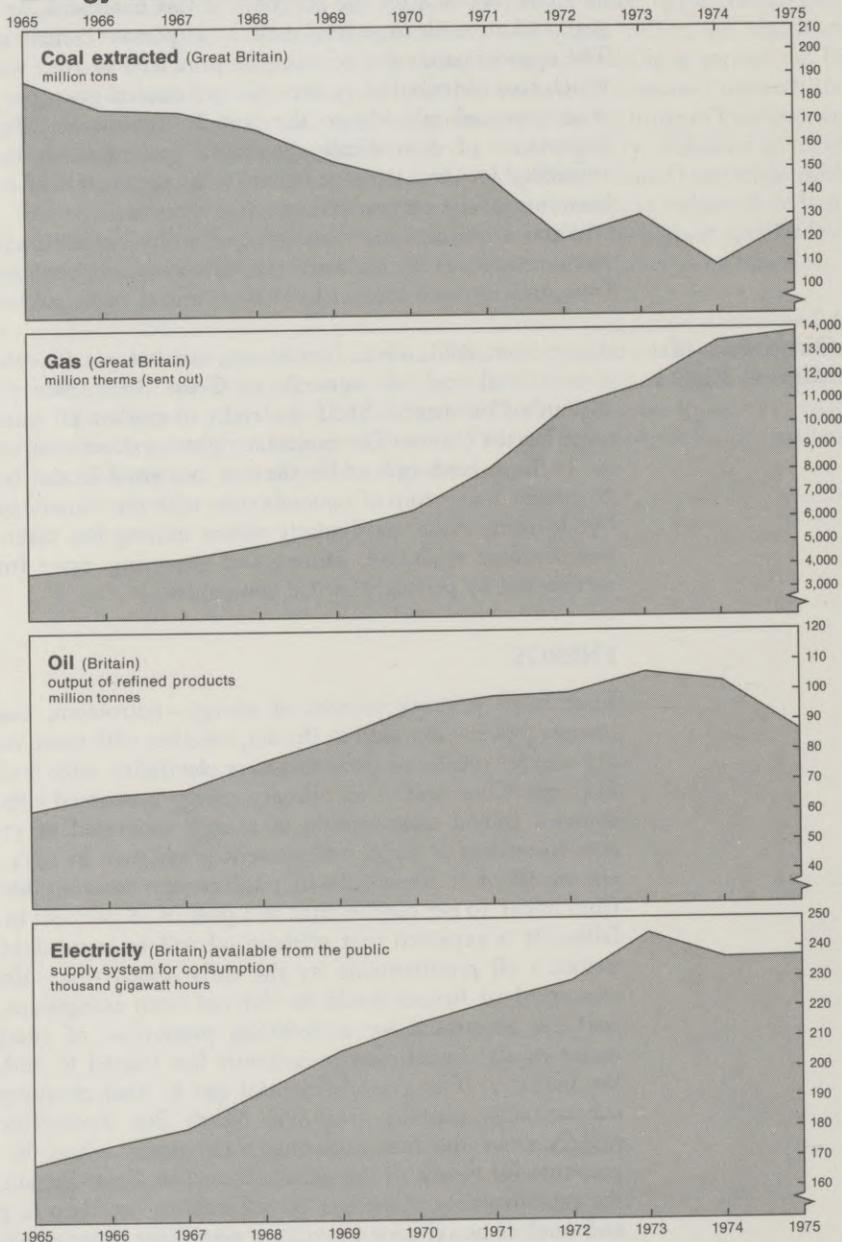
Apart from gold, silver, petroleum, natural gas (which are owned by the Crown) and coal, all minerals in Great Britain are privately owned. On Britain's Continental Shelf the right to exploit all minerals except coal is vested in the Crown. The exclusive right to extract coal, or license others to do so, both on land and under the sea, is vested in the 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 small quantities of town gas. Over half of all primary energy consumed comes from indigenous sources. Inland consumption of energy amounted to 319.7 million tons of coal equivalent in 1975, 3.8 per cent lower than in 1974. The share of oil—almost all of it imported—in total energy consumption expanded rapidly from under 10 per cent in 1950 to a peak of 48 per cent in 1972, but has since fallen. It is expected that offshore oil will be equivalent to or even exceed Britain's oil requirements by the early 1980s when almost all the energy consumed in Britain could be derived from indigenous sources. Although coal has accounted for a declining proportion of energy consumption, a major capital investment programme has started to end the contraction of the industry. The share of natural gas in total consumption has increased substantially, supplies from the North Sea discoveries having expanded rapidly since the first quantities were piped ashore in 1967. Natural gas accounts for nearly all the gas consumed in Great Britain. A programme for the establishment of nuclear power stations has been in progress since 1955 and nuclear power now provides a significant share of electricity supplies.

The fuel and power industries, with the exception of most of the petroleum industry and part of that concerned with the extraction of natural gas, are under public ownership. The publicly owned fuel and power industries in Britain employ in total some 600,000 people, 2.3 per cent of the working population, and their annual turnover is about £7,500 million and capital investment about £1,400 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. The appropriate Secretary of State appoints members of the boards and approves

Energy trends 1965-75



their capital investment programmes. Investment is financed from internal resources and by borrowing from the Government's National Loans Fund and from other sources. In each of the publicly owned fuel industries there are statutory bodies set up to protect the interests of consumers.

The Government's energy policy is to ensure the best use of indigenous resources and so reduce the dependence on imports, particularly of oil. Britain, which has the richest energy resources of any member State of the European Community, is co-operating fully in the development of the Community's energy policy, the basic objective of which is to reduce dependence on imported energy supplies to 50 per cent of requirements by 1985. Britain is one of the 18 members of the International Energy Agency, an organisation within the Organisation for Economic Co-operation and Development, which is engaged on a programme of international co-operation to deal with world energy problems. The European Community is involved in wider international discussions on energy as part of the Conference on International Economic Co-operation.

ENERGY CONSUMPTION

Trends in primary energy consumption are shown in Table 17 and in the diagram on p. 250. In 1975 petroleum accounted for 42 per cent of primary consumption, coal 36.9 per cent, natural gas 17.1 per cent, nuclear power 3.4 per cent and hydro-electric power 0.6 per cent. In 1975 consumption of natural gas increased by 4.6 per cent, and coal by 1.8 per cent; consumption of petroleum fell by 10.5 per cent, hydro-electric power by 9.5 per cent and nuclear electricity by 9.2 per cent.

Energy consumption by final users in 1975 amounted to 55,874 million therms¹ on a 'heat supplied' basis. Industrial users consumed about 40 per cent of the total, domestic users 26 per cent, transport 22 per cent, public services about 6 per cent and agriculture 1 per cent. Energy consumption figures for the main industrial groups are given in Table 18.

TABLE 17: Inland Energy Consumption (in terms of primary sources)

	<i>million tons coal equivalent</i>				
	1965	1970	1973	1974	1975
Oil	104.5	147.6	161.6	150.1	134.4
Coal	184.5	154.5	130.8	116.0	118.1
Natural gas	1.3	17.6	43.6	52.1	54.5
Nuclear energy	6.0	9.3	9.9	11.9	10.8
Hydro-electric power	2.2	2.4	2.0	2.1	1.9
Total	298.5	331.4	347.9	332.2	319.7

Source: *Department of Energy*

Energy Conservation

In 1974 the Government announced a comprehensive programme of measures designed to conserve energy. Measures introduced have included the doubling of the standards of thermal insulation required in new dwellings; the installation of improved control equipment, draught-proofing and additional insulation in government buildings; compulsory limits on heating levels in commercial and industrial buildings and restrictions on the use of electricity for external display and advertising during daylight hours; lower speed limits (see p. 302); the encouragement of energy-saving investment in industry by the provision of financial assistance in the form of government

¹ 1 therm = 100,000 British thermal units = 25,200 kilocalories = 105,506 kilojoules.

TABLE 18: Energy Consumption by Industrial Groups^a (Heat Supplied Basis) *million therms*

Industry Group	1965	1970	1973	1974	1975
Food, drink and tobacco	1,819	1,951	2,099	2,102	1,955
Iron and steel	7,497	7,193	6,575	5,542	4,890
Engineering and other metal trades	3,485	3,857	4,211	4,072	3,953
Chemicals and allied trades	2,640	3,016	4,237	4,156	3,934
Textiles, leather and clothing	1,616	1,540	1,417	1,297	1,190
Paper, printing and stationery	1,397	1,521	1,462	1,365	1,236
Bricks and other building materials	966	797	669	579	513
China, earthenware and glass	670	695	700	712	626
Cement	1,127	1,124	1,273	1,176	1,084
Other trades	2,078	2,995	3,147	2,795	2,570
Total	23,295	24,689	25,790	23,796	21,951

Source: *Department of Energy*

^a Excluding the fuel industries.

loans; government discussions with local authorities and other public bodies on the scope for, and methods of achieving, energy saving; and a major government publicity campaign to promote the efficient use of energy. Conservation measures, including the publicity campaign and increased energy prices (part of the Government's policy to eliminate subsidies to the nationalised fuel and power industries), have produced energy savings of at least 2 per cent of primary energy consumption.

The Secretary of State for Energy is assisted by proposals on the promotion of energy efficiency from the Advisory Council on Energy Conservation. In addition, efficiency in the use of fuel, among both industrial and domestic users, is promoted by bodies representing producers and consumers and by the technical advisory services of the fuel and power industries.

The main research organisations of the fuel and power industries conduct research into methods of using energy efficiently. Research is also proceeding on alternative sources of energy, of which the most promising is considered to be sea waves. The Energy Technology Support Unit advises the Secretary of State for Energy on the need for further research into non-nuclear forms of energy.

COAL

Coal has been worked in Britain for over 700 years and an organised coal-mining industry has been in existence for over 300 years, some 200 years longer than in any other country. British coal exports dominated the world market until about 1910. In 1913—the peak production year—the industry produced 287 million tons of coal, exported 94 million tons and employed over a million workers.

In 1947 the coal mines passed into public ownership by means of the Coal Industry Nationalisation Act 1946, which set up the National Coal Board as a statutory corporation to manage the industry.

The National Coal Board

The National Coal Board (NCB) consists of a chairman and between eight and fourteen members. The NCB has, with minor exceptions, exclusive

rights over the extraction of coal in Great Britain, but is empowered to license private operators to work small mines and opencast sites. It has no monopoly in 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) Limited's responsibilities include certain retail fuel distribution operations, computer services and engineering services. NCB (Coal Products) Limited is responsible for solid smokeless fuel manufacture and chemical and by-products plants.

At the end of March 1976 there were 241 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. 254.

Consumption

Coal accounted for 90 per cent of primary energy consumption in 1950, but growing competition from oil and gas and the elimination of steam trains on the railways contributed to the fall in demand from the mid-1950s. In 1975-76 internal consumption of coal was 120.3 million tons, of which 62 per cent went to power stations, 15 per cent to coke ovens and 9 per cent to domestic users.

Exports of coal and coal briquettes in 1975-76 were 1.4 million tons, almost all of which went to Western European countries. In 1975-76 imports amounted to 4.7 million tons.

Production and Productivity

In 1975-76 output of 123.8 million tons comprised 112.6 million tons from the NCB's deep mines, 10.2 million tons from opencast mines and 1 million tons from licensed mines and other sources. The fall in demand during the 1950s and 1960s was accompanied by increases in productivity in the industry and resulted in a rundown of the labour force at NCB mines from some 700,000 in 1947 to 244,000 in March 1976. Productivity as a whole has risen by about one-quarter since 1965-66 to 2.2 tons per manshift in 1975-76; at the coal face it has more than doubled over the last 20 years to 7.8 tons per manshift in 1975-76.

Higher productivity has been achieved by concentrating on the more productive collieries and coalfaces and by using advanced machinery and techniques, including machines which cut and automatically load coal on to conveyors, self-advancing powered roof supports and improved underground transport and communications. Mechanisation has been extended to nearly all coalfaces. Table 19 shows the main trends in the industry since 1965.

Financial Structure

In 1975-76 the NCB's income was £2,194 million including sales of coal of £1,671 million and grants under the Coal Industry Acts of £32.4 million. The operating profit was £52.2 million; after interest payments and other items there was a net surplus of £5.3 million. Government assistance to the industry took the form of grants towards the social costs of mine closures and contributions towards the mineworkers' pension scheme. The NCB's borrowing limit was raised from £700 million to £1,100 million under the National Coal Board (Finance) Act 1976 and may be increased up to £1,400 million subject to the approval of the House of Commons.

Capital Investment

Capital expenditure on collieries amounted to £211 million in 1975-76. In 1974 the Government, the NCB and the coalmining trade unions carried out a tripartite study of the policy towards the coal industry. As a result the Government accepted the board's Plan for Coal as a general strategy for the follow-

COAL

Coalfields 

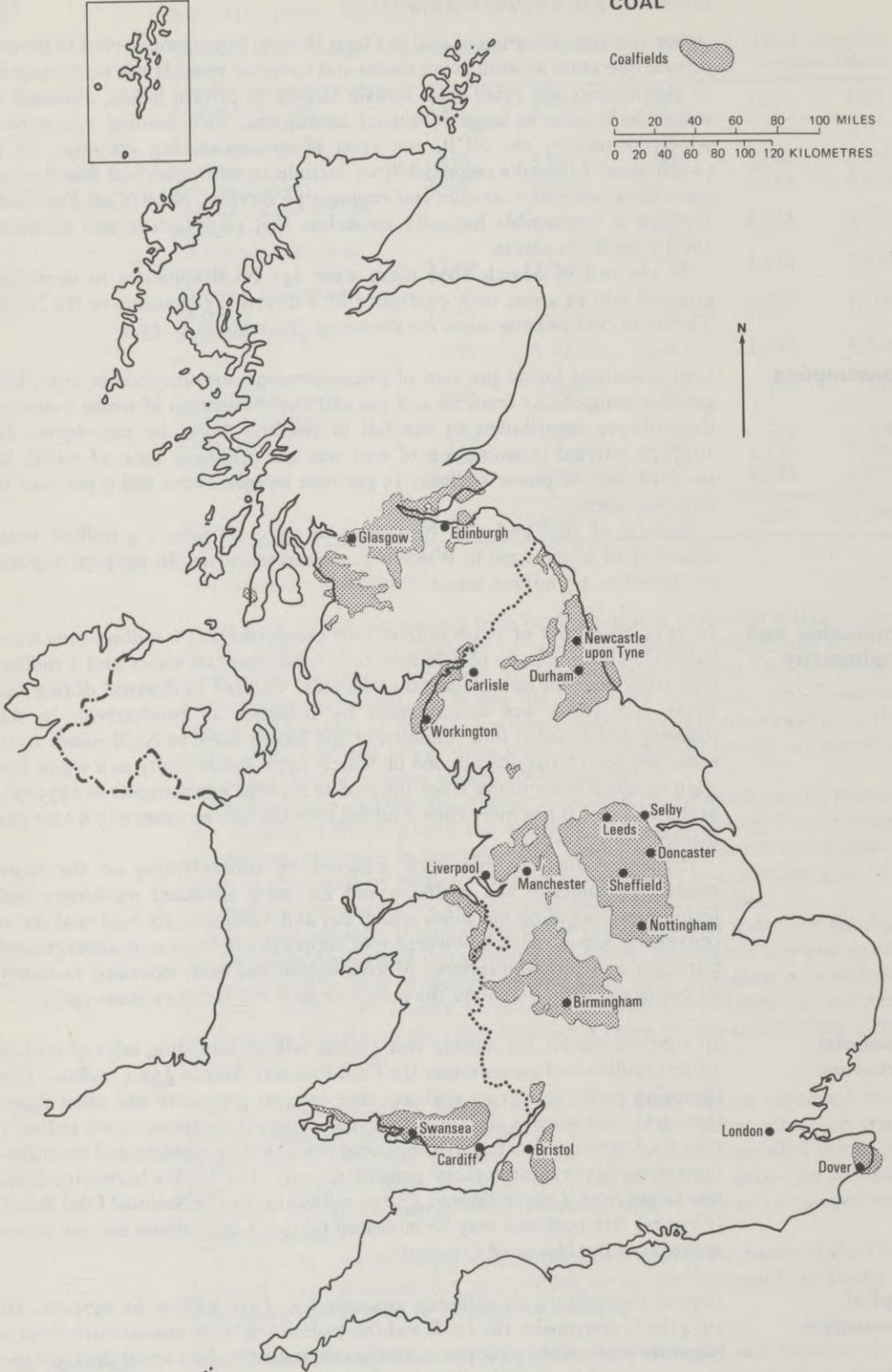
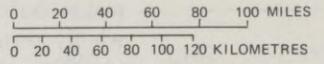


TABLE 19: Coal Statistics 1965-76

	Unit	1965-69 (average)	1973-74 ^b	1974-75	1975-76
	million				
Output	tons	176.0	107.1	125.2	123.8
of which, opencast	„	7.0	8.9	9.1	10.2
Consumption	„	177.1	121.5	127.3	121.7
of which, export	„	3.3	2.1	2.1	1.4
Average labour force ^a	'000	418.9	252.0	246.0	247.1
Output per man-shift ^a :					
at coal face	tons	5.7	7.2	7.8	7.8
overall	„	1.9	2.1	2.3	2.2
Collieries in operation ^a	number	430	259	246	241

Source: *National Coal Board*

^a NCB mines only.

^b Affected by an industrial dispute.

ing ten years, involving maintenance of deep-mined capacity at the annual level of around 120 million tons and an increase in opencast production to 15 million tons a year. Plan for Coal involves new capital investment of some £1,000 million on major projects over the period to 1985 in order to provide capacity of 42 million tons a year, including 20 million tons a year from new mines, to replace that lost by exhaustion of old collieries. Authorisation has already been given for 68 major capital investment projects, costing a total of over £230 million, which will secure 89,000 jobs. In addition, the NCB has a project costing about £400 million for a mining complex at Selby (North Yorkshire) which would produce 10 million tons of coal a year. About £40 million was invested in the two years to the end of March 1976 in schemes to exploit reserves off the north-east coast of England.

Although many good seams of coal have now been worked out due to the early development of the industry, there are still some 45,000 million tons of known coal deposits judged to be workable, of which about 5,000 million tons are known to be economically viable. The NCB's national exploration programme is proving fresh reserves of economically workable coal at the rate of 500 million tons a year, four times the annual consumption of coal. By March 1976 there were 23 land exploration rigs in operation.

Research

In 1975-76 the NCB spent £18.7 million on research. It has two research organisations: the Coal Research Establishment, at Stoke Orchard, Gloucestershire, concerned with the combustion and utilisation of coal; and the Mining Research and Development Establishment at Stanhope Bretby, Staffordshire, for research on mining methods and equipment, including underground transport and coal preparation. There are also scientific control staff in the coalfields and a large operational research organisation. Much of the work of other bodies, such as the Safety in Mines Research Establishment (SMRE) (see p. 347), is closely related to the board's problems; the range of work at the SMRE includes explosions, fires, dust hazards, gas detection, engineering and metallurgy.

Agreements to exchange technical information have been signed by the NCB with several countries. Britain is taking the lead in formulating a coal

research and development programme on behalf of the International Energy Agency; a programme of five coal research projects, including a £13 million project to study fluidised bed combustion (a method of steam-raising for power generation which uses low-quality coal and leads to lower pollution), is being based in Britain. NCB (IEA Services) Limited has been set up to manage these projects.

OFFSHORE GAS AND OIL

Seismic prospecting for natural gas and oil in the British sector of the Continental Shelf, mainly in the North Sea, has been going on since the early 1960s and full-scale exploration activities since 1964, following the enactment of the Continental Shelf Act 1964 and the subsequent award of a first round of licences. Further licences were issued in 1965, 1970 and 1971-72, and the Government is holding a new round of licensing in 1976. The total area now under licence is some 35,800 square miles (92,700 square kilometres) out of a total area, over which Britain has exercised its rights to explore and exploit the seabed and subsoil, of about 237,000 square miles (614,000 square kilometres).

Work on the development and production of natural gas and oil discovered in the British sector of the Continental Shelf is proceeding rapidly. By the end of 1975, 557 exploration or appraisal wells and 239 production wells had been drilled or begun; of these 115 and 21 respectively were drilled in 1975.

GAS

Public supply of gas in Britain dates from 1807, when Pall Mall, London, was first lighted with gas. In 1812 the London and Westminster Gas Light and Coke Company received a Royal Charter to supply gaslight in London. In the early years of the industry gas was used almost exclusively for lighting, but between the two world wars it was displaced from this function by electricity. It is now used for domestic cooking and heating and for many industrial and commercial purposes, supplying 13.9 million customers.

Structure

The Gas Act of 1948 brought the industry in Great Britain, in which about 100,000 people are employed, under public ownership and control in 1949. The industry's structure was adapted under the Gas Act 1972 to take account of the change from manufactured to natural gas necessitating more centralised control of production and transmission. The British Gas Corporation came into operation in 1973 taking the place of the Gas Council, the former central co-ordinating body in the industry, and assuming the responsibilities of the 12 area gas boards formerly carrying out the local manufacture and the distribution of gas to consumers. 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, it has powers: to search for and extract natural gas and any petroleum 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.

Natural gas is not available in Northern Ireland and the industry, which is controlled by 13 municipal undertakings and private sector companies, uses town gas produced from oil.

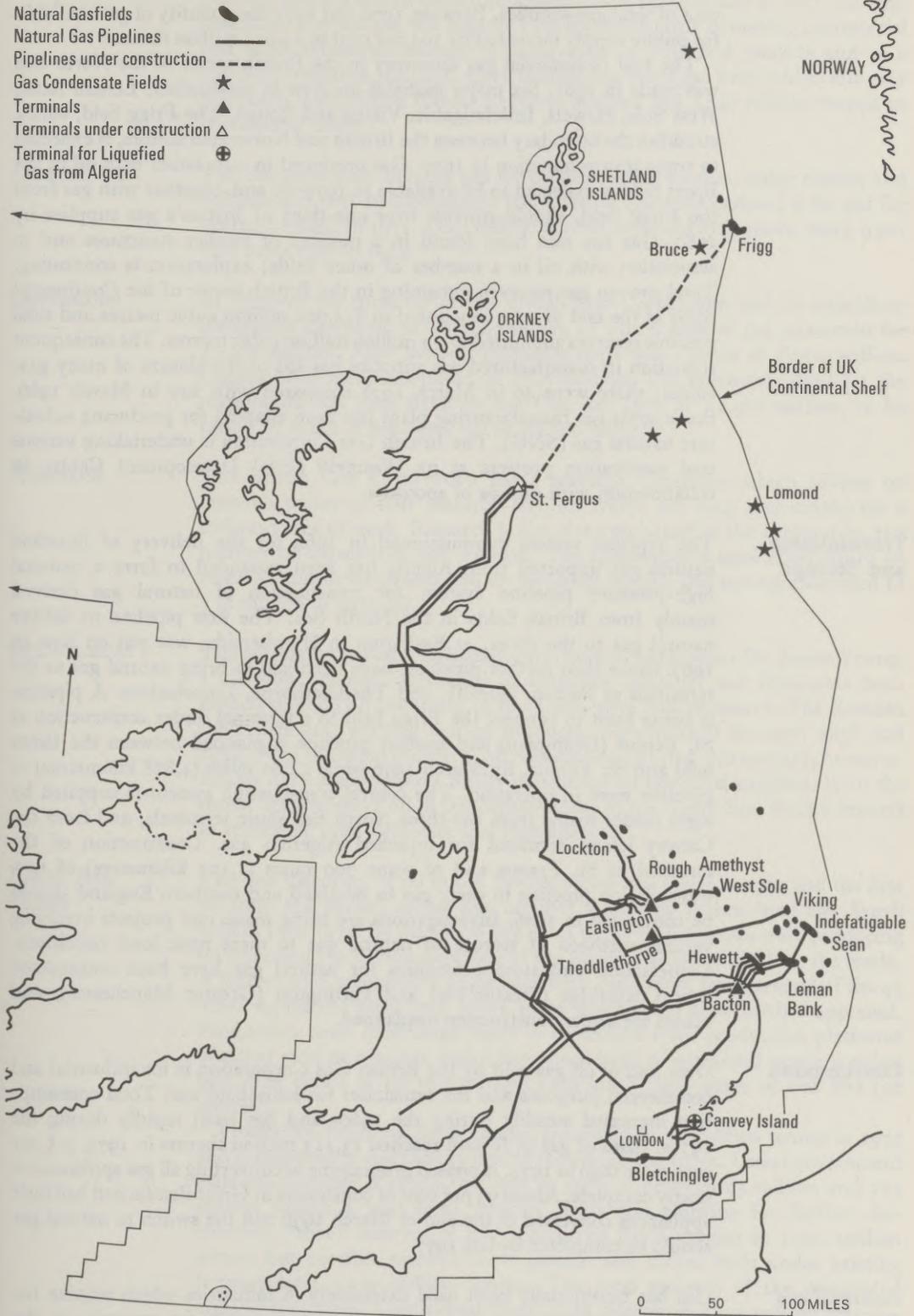
Production

The main single source of gas in Britain is natural gas, supplied either directly or as feedstock for town gas manufacture, and accounting for 98 per

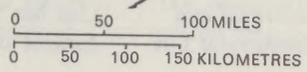
GAS

- Natural Gasfields 
- Natural Gas Pipelines 
- Pipelines under construction 
- Gas Condensate Fields 
- Terminals 
- Terminals under construction 
- Terminal for Liquefied Gas from Algeria 

NORWAY
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N



cent of total gas supplies. Between 1970 and 1975 the quantity of gas available for public supply increased by 104 per cent to 14,005 million therms.

The first commercial gas discovery in the British sector of the North Sea was made in 1965. Six major gasfields are now in production: Leman Bank, West Sole, Hewett, Indefatigable, Viking and Rough. The Frigg field, which straddles the boundary between the British and Norwegian sectors, is expected to come into production in 1977. Gas produced in association with oil in the Brent field is expected to be available in 1979-80 and, together with gas from the Frigg field, should provide over one-third of Britain's gas supplies by 1980. Gas has also been found in a number of smaller structures and in association with oil in a number of other fields; exploration is continuing. Total proven gas reserves remaining in the British sector of the Continental Shelf at the end of 1975 amounted to 815,000 million cubic metres and total possible reserves amounted to 1.4 million million cubic metres. The consequent reduction in manufactured gas supplies has led to the closure of many gasworks; there were 40 in March 1976 compared with 227 in March 1966. Some town gas manufacturing plant has been adapted for producing substitute natural gas (SNG). The British Gas Corporation is undertaking various coal gasification projects at its Westfield (Fife) Development Centre in collaboration with groups of sponsors.

Transmission and Storage

The pipeline system commissioned in 1964 for the delivery of liquefied natural gas imported from Algeria has been expanded to form a national high-pressure pipeline system for transmission of natural gas derived mainly from British fields in the North Sea. The first pipeline to deliver natural gas to the shore, at Easington in Humberside, was put on flow in 1967. Since then further pipelines have been laid to bring natural gas to the terminals at Bacton, Norfolk, and Theddlethorpe, Lincolnshire. A pipeline is being built to connect the Frigg field to a terminal under construction at St. Fergus (Grampian) and another pipeline is planned between the Brent field and St. Fergus. By March 1976 some 3,000 miles (4,828 kilometres) of pipeline were in operation. The central transmission system is supplied by eight feeder mains from the three North Sea shore terminals, and from the Canvey Island terminal for liquefied Algerian gas. Construction of the terminal at St. Fergus and of some 700 miles (1,127 kilometres) of new transmission pipeline to carry gas to Scotland and northern England should be completed in 1976. Investigations are being made into projects involving various methods of storage of natural gas to meet peak load conditions. Liquefaction and storage facilities for natural gas have been constructed near Coatbridge (Strathclyde) and Partington (Greater Manchester), and others are under construction or planned.

Consumption

Over half of all gas sold by the British Gas Corporation is for industrial and commercial purposes and the remainder for household use. Total consumption increased steadily during the 1960s and has risen rapidly during the 1970s. Sales of gas in Britain reached 13,112 million therms in 1975, 3.5 per cent more than in 1974. A phased programme of converting all gas appliances is nearly complete. About 93 per cent of consumers in Great Britain had had their appliances converted at the end of March 1976 and the switch to natural gas should be completed by late 1977.

Industrial and Commercial Use

Gas has traditionally been used extensively in industries which require the control of temperatures to a fine degree of accuracy, for example, in the

pottery industry and in certain processes in the manufacture of iron and steel products. Natural gas not required by the fixed tariff domestic, commercial and small industrial markets is being used in bulk fuel markets and as a chemical feedstock. In 1975, 5,016 million therms of gas were sold to industry in Britain, 858 million therms to power-stations and 1,347 million therms to commercial users.

Domestic Use

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 1975, 5,891 million therms were sold to domestic users, 9 per cent more than in 1974.

Operations

In 1975-76 the turnover of the British Gas Corporation and its subsidiary companies amounted to £1,566 million, of which sales of gas accounted for £1,340 million. After interest payments there was a profit of £25.1 million. Capital investment amounted to £347 million. The borrowing limit for the corporation has been fixed by the Gas Act 1972 at £2,500 million, to be raised by order if necessary up to £2,700 million.

Research

The British Gas Corporation has a research committee which advises on research policy at four research stations which are each responsible for a different area of work. 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 £16 million in 1975-76.

PETROLEUM

The petroleum industry in Britain dates back to 1850, when Dr. James Young, a Glasgow chemist, succeeded in obtaining lamp oil and lubricants from natural mineral oil occurring in the Derbyshire coal measures. The Scottish shale deposits, yielding similar products, were worked between 1858 and 1962. With the rapid growth of oil consumption during this century, however, Britain has become almost totally dependent on imported supplies. With the recent discoveries of oil in the British sector of the North Sea, Britain expects to reduce or even eliminate this dependence.

North Sea Fields

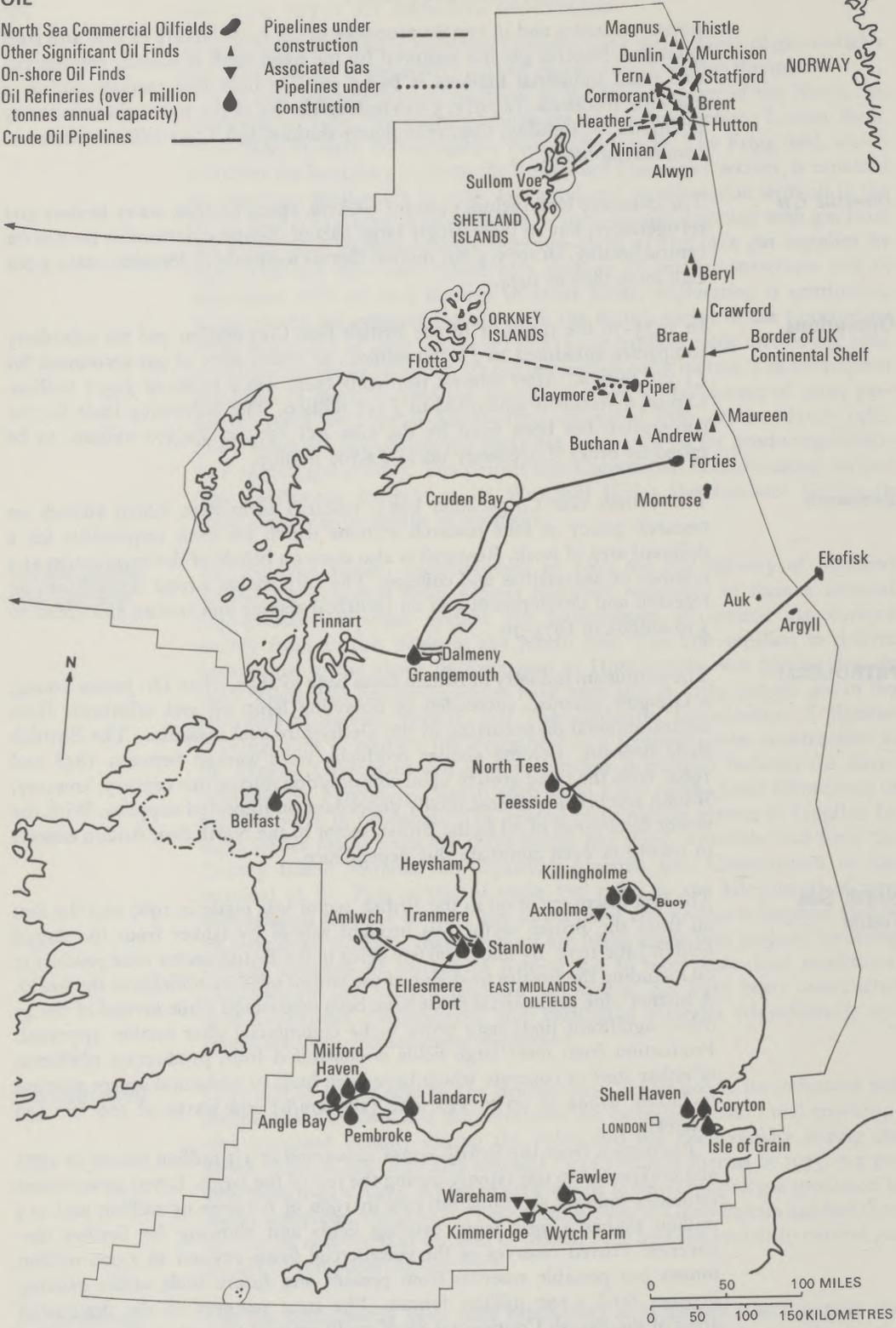
The first discovery of oil in the British sector was made in 1969 and the first oil from the British sector was brought ashore by tanker from the Argyll field in June 1975. By mid-1976 five fields in the British sector were producing oil including the Forties field, one of the largest offshore oilfields in the world. A further nine commercial fields have been discovered while several of the 43 other significant finds 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 winds of up to 130 mph (209 km/h) and waves of 100 feet (30 metres).

Production from the British sector amounted to 1.1 million tonnes in 1975 and is expected to rise rapidly during the rest of the 1970s. Latest government estimates indicate a production rate in 1980 of between 95 million and 115 million tonnes a year from existing fields and allowing for further discoveries. Proven reserves of the commercial fields amount to 1,000 million tonnes but possible reserves from present and future finds under existing licences total 3,190 million tonnes. The total reserves of the designated areas of the British Continental Shelf could amount to 4,500 million tonnes.

OIL

- North Sea Commercial Oilfields 
- Other Significant Oil Finds 
- On-shore Oil Finds 
- Oil Refineries (over 1 million tonnes annual capacity) 
- Crude Oil Pipelines 

- Pipelines under construction 
- Associated Gas Pipelines under construction 



Government Policy

The Petroleum and Submarine Pipe-lines Act 1975 provided for the establishment of the British National Oil Corporation (BNOC); tighter controls over exploration, development, installation of pipelines and refining capacity; and control over the rate of depletion to ensure that offshore oil is used at a rate which secures the greatest long-term benefit for Britain. The Government considers that majority State participation in licences for commercial oilfields provides the best means for the nation to share fully in the benefits of offshore oil. Future licences will provide for majority State participation in fields discovered. Discussions are in progress with the licensees of the present commercial fields on the terms for majority State participation in these fields; the first participation agreement was signed in February 1976. Government revenue from petroleum operations on the British Continental Shelf will be derived from a new petroleum revenue tax (see p. 356), corporation tax, royalties and revenues accruing to the BNOC from participation.

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 nearly £1,200 million in 1975, from between 25 and 30 per cent in 1973 to 52 per cent in 1975. The industry thus developed can undertake construction work in the world's offshore market as investment in the British market levels off.

British National Oil Corporation

The British National Oil Corporation was set up as a public corporation on 1st January 1976. It took over the offshore interests of the National Coal Board and will hold the Government's participation interest in production licences. It has powers to explore for, produce, transport and refine petroleum; store, distribute and buy and sell petroleum; and provide advisory services and carry out research and training. Other activities, which can be undertaken only with the Government's consent, include overseas exploration and production. Its borrowing limit is £600 million, which may be increased to £900 million subject to approval by the House of Commons. The BNOC's board consists of between eight and 20 members including two civil servants appointed as official members.

Land-based Fields

Production of crude oil from land-based oilfields in Britain amounted to some 107,000 tonnes in 1975. Prospecting for crude petroleum has so far led to the establishment of several small oilfields, notably in Nottinghamshire (Beckingham, Bothamsall and Egmanton), in Lincolnshire (Gainsborough) and in Dorset (Kimmeridge and Wareham).

International Trade

British and British-Dutch oil companies have been responsible for developing the oil resources of many countries to mutual advantage, especially in the Middle East, Far East, Africa and Caribbean areas. Production by these companies amounts to about 7 per cent of world production and they operate a tanker fleet (partly owned by them and partly on charter) amounting to over one-tenth of the world's tanker tonnage.

In 1975 Britain's imports of crude oil were 85.8 million tons valued at £3,371 million, the largest single item among imported goods. Saudi Arabia supplied approximately 25 per cent by value, Iran 20 per cent, Kuwait 12 per cent and Nigeria 7 per cent. Exports of crude oil from the British sector of the Continental Shelf began in April 1976.

Consumption

Deliveries of petroleum products for inland consumption (excluding refinery consumption) in 1975 totalled 81.7 million tonnes, 12 per cent lower than in 1974. Deliveries included 30.5 million tonnes of fuel oil, 18.5 million tonnes of gas and diesel oil (including derv fuel used in road vehicles), 16.1 million tonnes of motor spirit, 6.5 million tonnes of kerosene and 2.1 million tonnes of bitumen.

Electricity generation accounted for 42 per cent of fuel oil consumption in 1975. The largest industrial users of fuel oil are the steel, chemicals and paper-making industries.

Refineries

In 1976 gross refinery capacity in Britain amounted to 147 million tonnes a year. Of the 22 refineries in operation, five have a capacity of under 1 million tonnes. The 15 largest are situated at Fawley, near Southampton (18.9 million tonnes); Stanlow, in Cheshire (18.3 million tonnes); Isle of Grain (10.6 million tonnes), Shell Haven (10.2 million tonnes) and Coryton (8.6 million tonnes), all three on the Thames Estuary; Teesport (5.8 million tonnes) and North Tees (5 million tonnes), both in Cleveland; Grangemouth, Central Scotland (8.5 million tonnes); three at Milford Haven (15.4 million tonnes, 5.2 million tonnes and 5 million tonnes) and one at Pembroke in Dyfed (9.4 million tonnes); Llandarcy near Swansea (8.1 million tonnes); and two at Killingholme near Grimsby (8.8 million tonnes and 4.4 million tonnes). The other two refineries are at Belfast (1.5 million tonnes) and Ellesmere Port, Cheshire (1.4 million tonnes). Proposals for further refineries are under consideration at Cliffe (Kent), Canvey Island (Essex) and Nigg Bay (Highland). Projects for the construction of refineries of over one million tons or the extension of existing refineries by more than 500,000 tons require an authorisation from the Secretary of State for Energy under the Petroleum and Submarine Pipe-lines Act 1975.

Output of refined products (excluding refineries' own consumption) fell by 16 per cent in 1975 to 86.6 million tonnes. During 1975 refineries throughout western Europe were refining below full capacity. There is a substantial external trade in refined products which tends to follow trading and seasonal requirements and the commercial arrangements of the major oil companies. Exports from Britain, mainly in the form of heavier products to other European countries, were valued at £683 million in 1975 and imports amounted to £719 million.

Oil Pipelines

Four main crude oil pipelines are in operation in Britain from harbours capable of berthing very large tankers to refineries: in central Scotland, from Finnart to Grangemouth; in south Wales, from Angle Bay, Milford Haven, to Llandarcy; in north-west England, from Tranmere to Stanlow and Heysham; and in the Humber area from a single buoy mooring in the Humber estuary to Killingholme. A pipeline system connecting an offshore mooring off Amlwch, Gwynedd, to Stanlow is to be commissioned in the second half of 1976. Submarine pipelines have been built to bring ashore oil from the North Sea. Pipelines connect the Forties field to Cruden Bay (Grampian) and the refinery at Grangemouth, the Piper field to a terminal at Flotta (Orkney) and the Norwegian Ekofisk field to Teesside. Construction of two submarine pipelines is in progress to link fields off the north-east coast of Shetland to a terminal at Sullom Voe (see map, p. 260).

Pipelines also carry refined products to major marketing areas; for example, from the Humber to the Manchester area, from Fawley to Staines, Surrey, and Heathrow Airport, London, from Fawley to Avonmouth, and

from the Isle of Grain to Walton-on-Thames and Heathrow Airport. A 245-mile (394-kilometre) pipeline feeds refined products to north London and the Midlands from refineries and installations on the Thames and Mersey; a similar line 300 miles (480 kilometres) long from Milford Haven to the Midlands and Manchester is in operation. Pipelines carrying petrochemical feedstocks run from Stanlow to Carrington, near Manchester, and from Teesside to Fleetwood, Lancashire, and Runcorn, Cheshire. The Pipelines Act 1962 is designed to secure the orderly development of privately owned industrial pipelines.

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), Chester, 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.

ELECTRICITY

A public supply of electricity was first provided in Britain in 1881, at Godalming, Surrey. From its earliest days a measure of public control has been a feature of the industry. In 1919 the Electricity Commissioners were created as a supervisory body and to promote reorganisation on a national scale through voluntary agreement. In 1926 the Central Electricity Board was set up to construct and operate a national grid inter-connecting individual power stations, thus co-ordinating generation and transmission. In 1943 the North of Scotland Hydro-Electric Board (NSHEB) was established as a public corporation to develop the water-power resources of the Highlands. In 1948 all municipal and private undertakings (other than those in Northern Ireland) 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 NSHEB. Two subsequent Acts (1954 and 1957) effected a measure of decentralisation and gave the industry its present structure. Electricity supply employs about 193,000 people, including 6,900 in Northern Ireland.

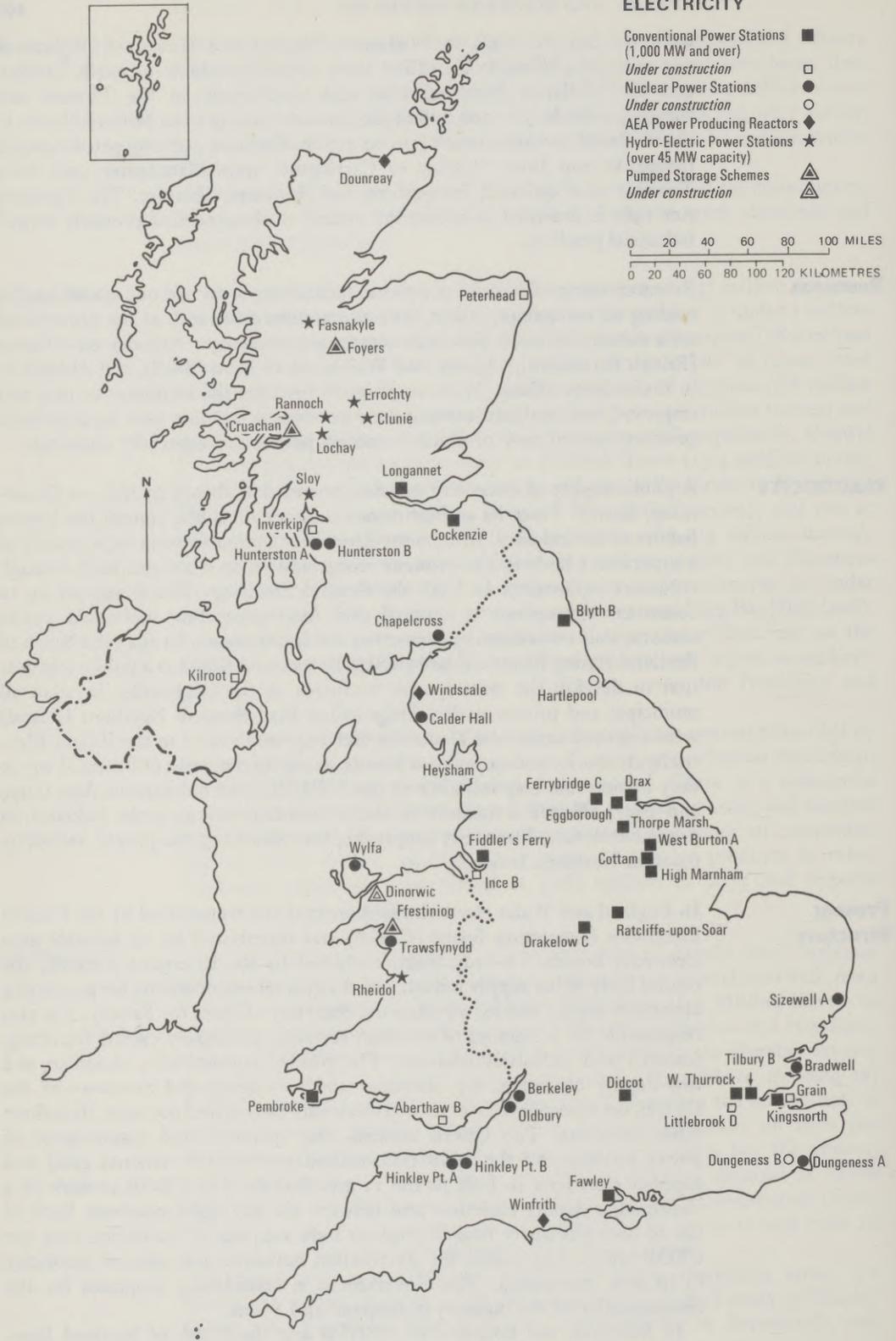
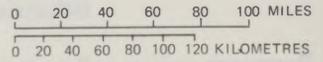
Present Structure

In England and Wales electricity is generated and transmitted by the Central Electricity Generating Board (CEGB) and 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 12 area electricity boards and not more than three other members. The CEGB controls the operation and maintenance of power stations and the main transmission system (the national grid) and supplies electricity in bulk to the 12 area boards. The CEGB consists of a chairman, a deputy chairman and between six and eight members. Each of the 12 area electricity boards acquires bulk supplies of electricity from the CEGB and is responsible for distribution networks and sales of electricity to its area consumers. The Government is considering proposals for the reorganisation of the industry in England and Wales.

In Scotland, two boards—the NSHEB and the South of Scotland Elec-

ELECTRICITY

- Conventional Power Stations (1,000 MW and over) ■
- Under construction* □
- Nuclear Power Stations ●
- Under construction* ○
- AEA Power Producing Reactors ◆
- Hydro-Electric Power Stations (over 45 MW capacity) ★
- Pumped Storage Schemes ▲
- Under construction* △



tricity 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. Each board comprises 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 Northern Ireland Electricity Service which came into operation in 1973 as the result of the amalgamation of four former electricity undertakings. Power stations are located in Belfast, Ballylumford and Coolkeeragh.

Operations

In 1975-76 the income of the electricity supply industry in England and Wales was £3,496 million and its profit after interest payments was £8.5 million. In Scotland the income of the SSEB and the NSHEB was £291 million and £106 million respectively and their profits were £2.7 million and £0.1 million. In 1974-75 the Northern Ireland Electricity Service's income totalled £69 million and it made a net loss of £28.7 million. Annual capital investment amounts to £640 million in England and Wales, £140 million in Scotland and £68 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 £1,200 million; the Government proposes to raise the limit in Scotland to £1,500 million, with provision for a further increase up to £1,950 million.

Generation

Generation for the public supply in Britain reached 251,300 gigawatt hours¹ (GWh) in 1975; conventional steam power stations provided 88 per cent of the total and nuclear and hydro-electric stations about 10 per cent and 2 per cent respectively. A high rate of expansion of output was a feature of the industry in its earliest years, but the rate has slackened recently and the total of electricity generated in 1975 was about the same as in 1974. Consequently a number of old power stations, mainly small coal-fired plant no longer required to generate electricity, have been, or are due to be, closed; the CEB is to close 48 small power stations or parts of stations between October 1976 and March 1977. Forecasts of future demand for electricity have been reduced and as a result the CEB will not need to order conventional stations before 1978. Public supply power stations in Britain consumed 109 million tons of coal equivalent in 1975, of which coal accounted for 67 per cent and oil 19 per cent.

The output capacity of the generating stations of the electricity boards in Britain at the end of 1975 totalled 68,555 megawatts (MW). Between 1970 and 1975 over 17,400 MW of output capacity was commissioned in England and Wales, including 681 MW in 1975, bringing total output capacity to 59,011 MW. The SSEB's total output capacity is over 6,000 MW and the NSHEB's total installed capacity is about 2,150 MW. In Northern Ireland total generating capacity was 1,905 MW in 1975 of which some 1,425 MW was installed in oil-fired stations and the remainder in coal-fired stations.

Generation of electricity outside the public supply system is relatively small—20,878 GWh in 1975. The major sources outside the fuel industries are the chemical, engineering, paper, and iron and steel industries and the nuclear power plants controlled by Atomic Energy Authority or by British Nuclear Fuels Ltd.

An analysis of electricity generation by the public supply system in Great Britain is given in Table 20.

¹ One gigawatt hour = 1,000 megawatt hours = one million kilowatt hours.

*Conventional
Power*

Average thermal efficiency (that is, 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 31.26 per cent in 1975-76 as new plant was brought into use. The 20 most efficient stations, containing much of the newest plant, had an average thermal efficiency of 33.72 per cent in 1975-76.

TABLE 20: Electricity Generation by the Public Supply System in Great Britain 1975

	Output capacity (end year)	Electricity supplied (net)
	MW	GWh
<i>Electricity Authorities :</i>		
Central Electricity Generating Board	59,011	203,931
South of Scotland Electricity Board	5,623	20,923
North of Scotland Hydro-Electric Board	2,131	3,518
<i>Method of Generation :</i>		
Steam and oil engines	60,659	202,295
Hydro plant	1,284	3,186
Pumped storage	1,060	-290
Nuclear plant	3,762	23,181
<i>Total</i>	66,765	228,372

Source: *Department of Energy*

Oil-fired stations of 2,000 MW have been commissioned at Fawley, on Southampton Water (one of the most fully automated stations in Europe), and at Pembroke, Dyfed. Oil-fired stations under construction are at Grain, Kent (3,300 MW), Inverkip, Strathclyde (1,980 MW), Littlebrook D, Kent (1,980 MW), Kilroot, near Carrickfergus (1,200 MW) and Ince B, Cheshire (1,000 MW).

Europe's largest dual-fired station designed to burn either coal or oil is at Kingsnorth, Kent (2,000 MW). The station at Peterhead, Grampian (1,320 MW), due to be commissioned in 1978, will be able to burn natural gas and liquids as well as oil. Two stations involving some 1,600 MW of plant have been converted to dual natural gas/coal-firing.

Striking advances have been made in the design of steam-generating plant. The installation of 49 single-shaft units of 500 MW in 14 stations has been substantially completed. Station capacities are also increasing: a 2,400 MW station at Longannet, Fife, with four 600 MW cross-compound units, was commissioned in 1970; and ten stations each with capacities of 2,000 MW, with four 500 MW single-shaft generating units, are now in service. Three 660 MW single-shaft generating units have been commissioned at Drax, North Yorkshire, and 660 MW units have been connected to the national grid at two nuclear power stations (see p. 267). A further 19 660 MW units are being installed: five at Grain, three each at Littlebrook and Inverkip, two at Peterhead and two each at three nuclear power stations under construction (for locations see map, p. 264).

Large gas turbine units of 55 to 70 MW, based on aero jet engines, have been introduced since 1965 for peak load operation. The CEGB and SSEB

have installed 916 MW of such units. Many 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 58 MW prototype units at Leicester are powered by industrial gas turbines.

Nuclear Power

In 1975 nuclear power stations provided some 30,000 GWh of electricity for the public supply system, mostly from stations owned and operated by the electricity authorities. Britain has so far produced some 25 per cent of total world generation (excluding the Soviet Union) from nuclear sources. Nuclear capacity forms about 9 per cent of total output capacity of the public supply system. Commercial nuclear power stations have lower operating costs than conventional stations.

There are 11 nuclear power stations in operation controlled by the electricity authorities, while a further five stations are controlled by the Atomic Energy Authority (AEA) or British Nuclear Fuels Ltd. (BNFL). The original prototype magnox stations (graphite-moderated, carbon-dioxide cooled, using natural uranium metal fuel elements canned in magnesium alloy), built by the AEA at Calder Hall, Cumbria (198 MW)—the first in the world to generate electricity on a commercial scale—and at Chapelcross, Dumfries and Galloway (198 MW), are owned and operated by BNFL, which was set up in 1971 and took over from the AEA the manufacture and processing of nuclear fuels for Britain and other countries. The AEA 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 (SGHWR) at Winfrith, Dorset (100 MW); and the Prototype Fast Reactor (PFR) (250 MW) at Dounreay, Highland.

Under the first commercial programme, nine magnox stations with a total design capacity of 4,800 MW were built: Berkeley in Gloucestershire (276 MW design capacity) and Bradwell in Essex (300 MW) were both commissioned in 1962; Hunterston A in Strathclyde (300 MW) in 1964; Hinkley Point A in Somerset, Trawsfynydd in Gwynedd (both 500 MW) and Dungeness A in Kent (550 MW) in 1965; Sizewell A in Suffolk (580 MW) in 1966; Oldbury in Avon (600 MW) in 1968; and Wylfa in Gwynedd (1,180 MW) in 1971.

Under a second programme a further five stations are expected to be commissioned by 1979 and will provide nearly 6,500 MW of further capacity. The reactor design chosen for the programme is based on the AGR at Windscale, a logical development of the magnox system, which uses slightly enriched uranium dioxide fuel canned in stainless steel. The first two AGR stations at Hinkley Point B and Hunterston B (both 1,320 MW) began supplying power to the national grid in February 1976. Other AGR stations under construction are Dungeness B (1,200 MW); and Hartlepool (Cleveland) and Heysham (Lancashire) (both 1,320 MW).

A third programme using the SGHWR, which runs on uranium dioxide fuel in zirconium alloy cans, was announced in 1974. In the initial phase a further 4,000 MW of nuclear capacity, based on reactor units of 660 MW, is planned. This will comprise two SGHWR stations—Sizewell B with four reactor units and Torness (Lothian) with two. It is intended to build up orders for further nuclear plant, depending on the progress achieved with the initial stations. The SGHWR commercial power stations are to be designed and constructed for the boards by the Nuclear Power Company Limited, the operating subsidiary of the National Nuclear Corporation, set up in 1973 with government encouragement to design and construct steam supply

systems for nuclear power stations. Commissioning of the AEA's large PFR (see p. 267) took place during 1975 at Dounreay (where in 1962 the experimental fast reactor became the first of its type to produce electricity for public use and to operate at a high power level). The fast breeder reactor, which uses as fuel a mixture of plutonium and uranium dioxides in stainless steel cans, is capable of releasing some 60 times as much energy from uranium as present nuclear power stations.

Hydro-electric Generation

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. The setting up of the NSHEB in 1943 marked the beginning of an era of intensive water-power development in the Highlands.

In 1975-76, 2,730 GWh were sent out by the NSHEB from water-power, compared with 322 GWh in 1949. At the end of March 1976 there were 54 main hydro-electric conventional stations in operation in the north of Scotland with a total installed capacity of 1,046 MW; the largest station, Loch Sloy, has a capacity of 130 MW. Capacity of hydro-electric stations in the south of Scotland totals 123 MW and in Wales 470 MW, including the 360 MW pumped-storage station at Ffestiniog, Gwynedd. (In pumped-storage schemes electricity generated in off-peak periods is used to pump water to higher levels from which it descends to operate turbo-generators at peak periods, or to meet sudden increases in demand.) Other important pumped-storage schemes are at Cruachan, Strathclyde (400 MW), and Foyers, Loch Ness (300 MW). Work has started on a 1,500 MW pumped-storage station at Dinorwic, Gwynedd, which will be able to reach its full load very rapidly and consequently will result in a reduction in part-loading of thermal plant. The contract for the main underground works and the lower lake is one of the largest civil engineering contracts awarded in Britain.

Transmission and Distribution

Main electricity transmission lines—the national grid—supply most of the country. By 31st March 1976 those of the CEGB totalled 13,820 circuit kilometres (8,587 miles), of which 10,682 circuit kilometres (6,637 miles) 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 8,385 circuit kilometres (5,210 miles) of main transmission lines at the end of March 1976, of which 200 kilometres (124 miles) operated at 400,000 volts, 3,144 circuit kilometres (1,954 miles) at 275,000 volts and the remainder at 132,000 volts. Primary distribution in Scotland is at 33,000 volts. Energy movements on the grid in England and Wales are controlled through the seven grid control areas, set up for that purpose and distinct from the regions in which the generating side of the industry is organised; each area has a separate control, and the operations are co-ordinated by a National Control in London. The grid in Scotland is operated from the control centres at Pitlochry (NSHEB) and at Kirkintilloch (SSEB).

The development of the grid system has made the British system the largest fully interconnected power network under unified control in the world. Twin cross-Channel cables laid between Dungeness and Boulogne, capable of transmitting up to 160 MW at 200,000 volts (direct current), have been in operation since 1961; by this means advantage is taken of the differences between France and Britain in the timing of peak loads.

Consumption

Total sales of electricity in 1975 amounted to 217,800 GWh. Domestic users took 41 per cent of the total, industry 38 per cent and commercial and other users about 21 per cent. About one-third 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 about 22 million consumers of whom 19.5 million are in England and Wales; of the remainder 1.5 million are supplied by the SSEB, 498,000 by the NSHEB and 500,000 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 electricity boards supported by co-operative research with selected industrial research associations and by research contracts placed with universities and other organisations. The council is also empowered to conduct research and is advised by the Electricity Supply Research Council. Collaboration on research between the supply industry and the plant manufacturers is co-ordinated by the Power Engineering Research Steering Committee.

The main research establishments of the industry are run by the CEBG and comprise the Central Electricity Research Laboratories at Leatherhead, Surrey, the Berkeley Laboratories in Gloucestershire, concerned with nuclear problems, and the Engineering Laboratories at Marchwood, 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. They undertake a wide range of research and development work, both independently and in conjunction with the universities and manufacturers and are associated with the activities of the Electricity Council and CEBG.

NON-FUEL MINERALS

Although Britain's requirements of industrial raw materials are met mostly by imports, non-fuel minerals produced in Britain make a useful contribution to the economy. Output of non-fuel minerals in 1975 totalled 327 million tonnes, valued at £580 million, about the same tonnage as in 1970 but twice the value. The total number of employees in the industry was 44,400 in 1975. The geographical locations of some of the more important minerals produced in Britain are shown on the maps on p. 271.

Exploration

Under the Mineral Exploration and Investment Grants Act 1972 the Secretary of State for Industry can encourage exploration for mineral resources by providing financial assistance of up to 35 per cent of the cost of searching for mineral deposits in Great Britain and on Britain's Continental Shelf, 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 1976, 39 companies had sought assistance totalling £1.5 million in respect of 118 exploration projects, mainly for non-ferrous metals. Work on 77 projects has been completed.

The Institute of Geological Sciences, a component body of the Natural

Environment Research Council, is carrying out on behalf of the Department of Industry a five-year programme costing £3.9 million, aimed at providing basic geological information on five identified areas which may yield economic deposits of minerals and has an annual £800,000 programme for the Department of the Environment to assess resources of sand and gravel, and limestone.

Metallic Ores

Production of non-ferrous ores in 1975 totalled 28,700 tonnes, valued at £21 million. Tin was first worked in Cornwall over 2,000 years ago. 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. Changing world markets have brought some recovery in production; output of tin has more than trebled since 1970 to reach 4,100 tonnes of tin-in-ore in 1975, supplying 30 per cent of Britain's tin requirements. Some copper, zinc, tungsten and silver are produced in association with the tin. Production of lead ore has remained fairly constant over the past few years in the range of 5,000 to 10,000 tonnes of dressed ore a year. Production of iron ore (4.5 million tonnes in 1975) has fallen substantially in recent years.

Industrial Minerals

Britain is a major world producer of several important industrial minerals including china clay, ball clay, fuller's earth, salt, fluorspar, gypsum, anhydrite and celestite, 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 ball clay is exported. Fuller's earth is used in refining, as a bonding agent in foundry moulding sands, for oil-well drilling muds and in various civil engineering applications. Fireclay is used for ceramic ware and refractory products.

Britain is virtually self-sufficient in salt, output in 1975 being 7.6 million tonnes valued at £25 million. In 1975 production of fluorspar for the chemical and metallurgical industries was 231,000 tonnes valued at £8 million and of gypsum and anhydrite for the chemicals and construction industries was 3.5 million tonnes worth £9 million. Output of potash from the new mine at Boulby, Cleveland, is expected to rise in 1976 to its initial annual capacity of 1 million tonnes, exceeding domestic consumption, about 95 per cent of which is accounted for by fertiliser manufacturers.

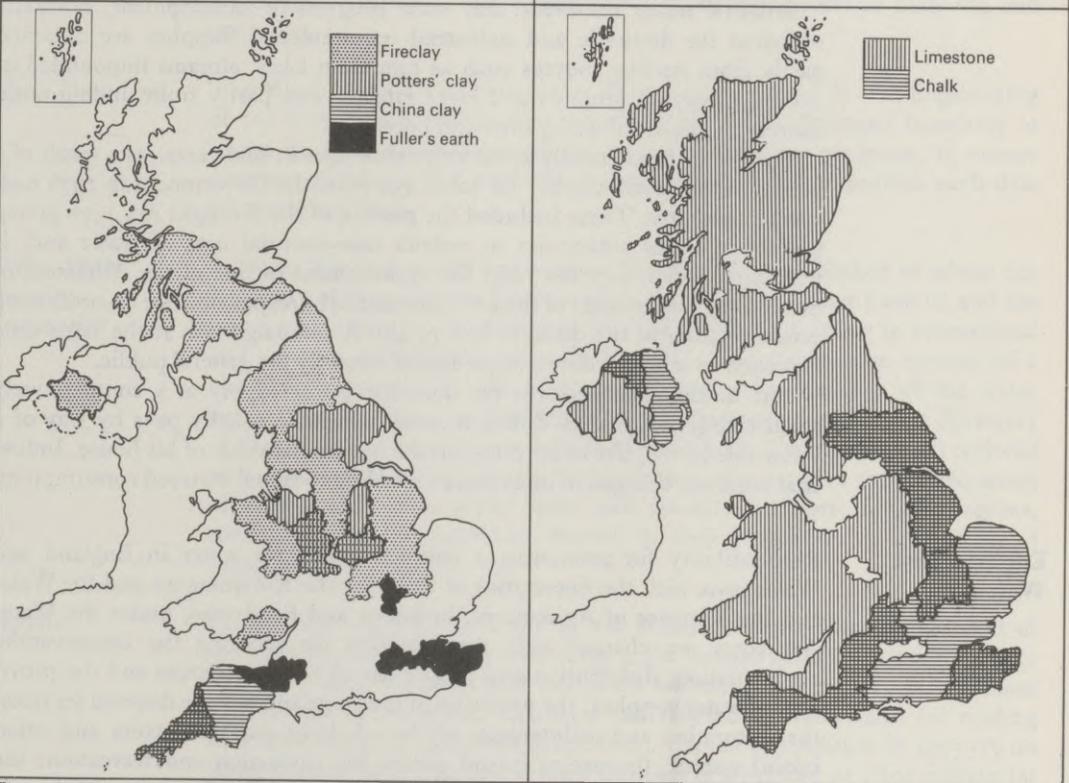
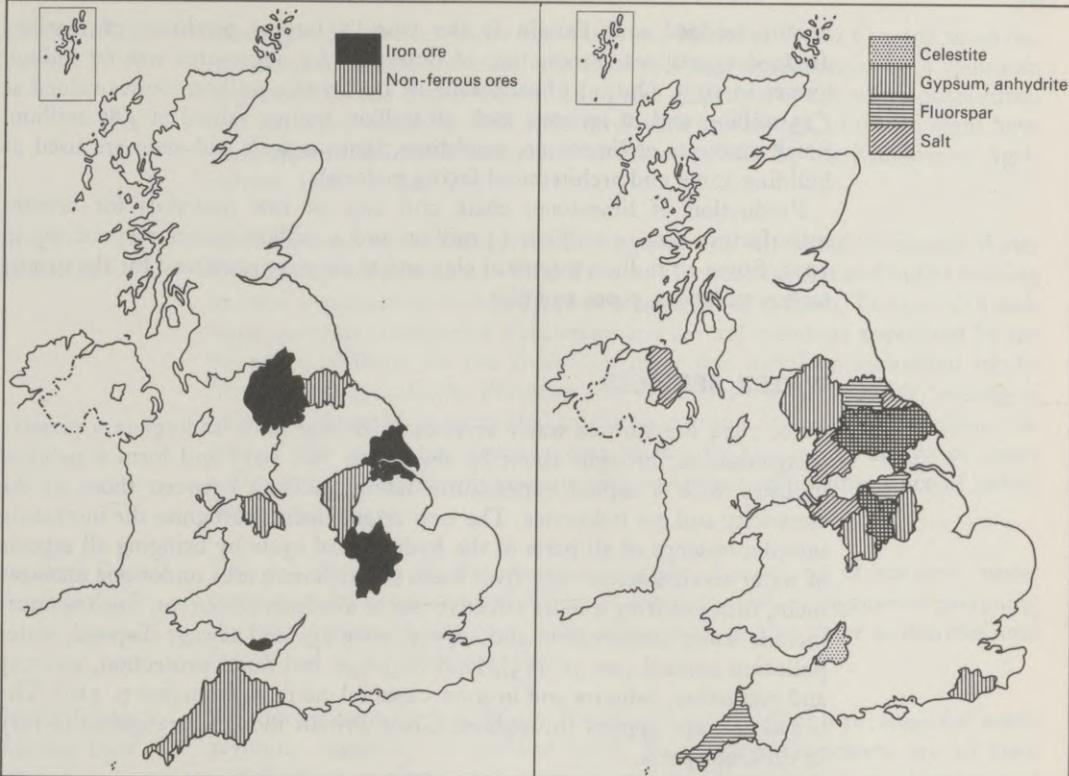
In 1975 production of limestone and dolomite totalled 93 million tonnes, valued at £147 million, of which about 25 per cent was used in industry, particularly in the iron and steel, chemicals and glassmaking industries. Chalk production in 1975 amounted to 17 million tonnes worth £13 million, of which some 16 million tonnes were used in industry or agriculture, mostly for cement manufacture. Industrial sands are used primarily in the glassmaking and foundry industries; output in 1975 was 6 million tonnes.

Britain also produces small amounts of barytes, talc, diatomite and mineral pigments.

Construction Materials

Production of sand, gravel and crushed rock as aggregates for use in construction constituted over half of Britain's output of minerals in 1975. Sand and gravel, used for concrete, is the most important of these minerals and the largest user of land. Of the total output of 119 million tonnes of common sand and gravel in 1975, worth £150 million, 14.5 million tonnes were

SOME MINERALS PRODUCED IN BRITAIN



The maps above are based on county or regional boundaries and not those for geological outcrops.

marine-dredged and Britain is the world's largest producer of marine-dredged aggregates. Production of limestone for aggregates was 67 million tonnes in 1975. Output of sandstone in 1975 was 9 million tonnes valued at £23 million and of igneous rock 36 million tonnes valued at £87 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, 14 million and 4 million tonnes respectively in 1975. Some 17 million tonnes of clay and shale were produced for the manufacture of bricks, pipes and tiles.

WATER SERVICES

Since 1974 the various water services in Britain have undergone a massive reorganisation, brought about by the Water Act 1973 and form a national industry with a capital expenditure falling halfway between those of the electricity and gas industries. The new arrangements recognise the increasing interdependence of all parts of the hydrological cycle by bringing all aspects of water services within any river basin or catchment area under one management, thus ensuring a more effective use of available resources. Such services include water conservation and supply, sewerage and sewage disposal, water pollution control (see p. 175), land drainage and flood protection, amenity and recreation, fisheries and in some cases inland navigation (see p. 310). The broad concept applies throughout Great Britain though arrangements vary in different parts.

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, and partly from underground sources by means of wells, adits and boreholes.

To deal with potentially acute water shortages in some areas as a result of a period of the driest weather for some 250 years the Government in 1976 took special measures. These included the passing of the Drought Act 1976 giving powers, to water authorities to restrict non-essential uses of water and, if necessary, ration supplies; and the appointment of one of the Ministers of State at the Department of the Environment to be responsible for co-ordinating action relating to the drought (see p. 48). A campaign was at the same time launched to achieve voluntary savings of water by the general public.

The householder receives his domestic water supply at a comparatively small charge, varying in different areas, which he usually pays by way of a water rate levied, like other rates, on the net annual value of his house. Industrial users are charged in most cases 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* Among bodies set up under the Act is the National Water Council to advise and assist ministers and water authorities. The council 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 have been 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 National Water Development Authority in Wales were set up under the Act and duties relating to water management in their areas were transferred to them. The board of each water authority consists of a chairman and several members appointed by the Secretary of State for the Environment, 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 Act provides for the continued supply of water by 28 statutory water companies for the water authorities. It makes special arrangements governing the relationship of statutory water companies to the water authorities and for control of the latter over them.
- Central Water Planning Unit* An independent Central Water Planning Unit provides a professional water planning capability at national level. Its principal functions are to keep under review national and strategic aspects of water services planning and operation.
- Water Data Unit* The Water Data Unit, part of the Directorate General Water Engineering of the Department of the Environment, has as its principal functions 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.
- Water Space Amenity Commission* A Water Space Amenity commission has also been established to advise the Secretary of State for the Environment, the National Water Council and the water authorities on the discharge of their functions relating to recreational and amenity use of water space in England. The commission consists of a chairman appointed by the Secretary of State, the chairmen of the water authorities and not more than ten other members appointed by the Secretary of State—one in consultation with the Countryside Commission. All regional water authorities are pursuing active policies for the support and development of fishing and other water sport and amenity interests in their regions, particularly on the reservoirs already in their possession or in process of being built.
- Supplies* Public water supplies in England and Wales—reaching over 99 per cent of the total population—now total some 3,300 million gallons (15 million cubic metres) a day, out of a total estimated abstraction of nearly 5,300 million gallons (24 million cubic metres) a day (excluding water used for cooling in connection with electricity generation). Capital expenditure in 1975-76 on water supply, sewerage and sewage disposal is estimated at £502 million (at 1975 prices).

The provision of piped supplies for rural districts has been assisted by grants under the Rural Water Supplies and Sewerage Acts 1944 to 1971. By March 1976 schemes costing over £125 million had been completed or were in progress with the aid of grants under these Acts, totalling £36 million.

New Proposals

The Government published a consultative document in March 1976 proposing a strong National Water Authority which would amalgamate the National Water Council, the Water Research Centre and the Central Water Planning Unit and bring about the eventual integration of the statutory water companies with the regional water authority; it is also intended that responsibility for water services in Wales be devolved to the Welsh Assembly.

Scotland

In Scotland, as part of the reorganisation of local government under the Local Government (Scotland) Act 1973, nine regional and three island councils took over in May 1975 from the former thirteen regional water boards responsibility for public water supply under the Water (Scotland) Act 1946.

Except in the island areas, separate river purification boards are responsible for the regulation of the discharges of effluent to rivers and certain tidal waters. The Central Scotland Water Development Board, established under the Water (Scotland) Act 1967, is primarily responsible for developing large water resources and supplying water in bulk to regional councils in Central Scotland from which the Board draws its membership.

The water problem in Scotland is broadly similar to that in England and Wales except that there is not the same need to allocate water between competing interests and requirements are met almost entirely from surface sources. The Secretary of State for Scotland is responsible for general oversight and co-ordination and has a general duty to promote the conservation of water resources in Scotland; and to require regional and island councils to provide supplies of wholesome water everywhere in their regions or areas where this can be done at reasonable cost; at present, they supply over 98 per cent of the total population. A survey of currently available supplies and likely demands to the end of the present century and of potential services to be developed was carried out by the Scottish Development Department in consultation with the water boards (see Bibliography, p. 465). The Scottish Water Advisory Committee advises the Secretary of State on general questions relating to resources and supplies and the organisation of the water service.

Northern Ireland

Northern Ireland has abundant potential supplies of water for both domestic and industrial consumption. Over 90 per cent of the population has a piped supply. Between 1945 and end-September 1973 over £100 million was expended on water and sewerage services—about £50 million by way of government grants. The Government, responsible for water conservation and pollution control under the Water Act (NI) 1972, took over from local authorities, on 1st October 1973, responsibility for water supply and sewerage services. The Water and Sewerage Services (NI) Order 1973 requires the Department of the Environment (NI) to provide these services. Capital expenditure during 1975 amounted to around £17.5 million.

The largest source for water supply is Lough Neagh and in order to conserve the potential and to co-ordinate the various interests and demands on this water resource system a comprehensive water management programme has been prepared.

Barrages

Barrage projects involve dams across or within tidal estuaries to form a lake of fresh water, and studies have been carried out for several estuaries in Britain. A report on a study for Morecambe Bay, Lancashire, published early in 1972, put forward several suggested schemes, including a barrage and storage reservoirs. Reports have also been prepared for plans for the Wash and the estuary of the Dee. A feasibility study for the River Parrett, Somerset, barrage scheme, completed in January 1975, adds land drainage, flood prevention, recreational amenity and road linkage to the water storage objective.

Research

A Water Research Centre which started operating in April 1974 co-ordinates water research in the whole of Britain (see p. 394). The Water Research Centre's station at Medmenham and the Hydraulics Research Station of the Department of the Environment at Wallingford carry out research into problems of the design and calibration of gauging weirs and flumes for the measurement of surface water, and into other hydraulic problems.

The Water Research Centre's Laboratory at Stevenage investigates problems connected with the treatment of polluted water, the treatment and disposal of sewage and industrial waste water, and the effects and prevention of pollution of surface water and underground water.

The Institute of Hydrology of the Natural Environment Research Council at Wallingford studies the whole hydrological cycle and the Meteorological Office (see p. 398) is concerned with rain fall.

14 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 657,000 people or 2.7 per cent of the total civilian working population, provides about 2.7 per cent of the gross domestic product, and uses 19 million of the 24 million hectares (47 million of the 60 million acres) of land.

THE LAND AND ITS USES

The soils of the country are varied (see p. 5). 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.

In Britain there are 12.1 million hectares (30 million acres) under crops and grass. Cultivated land, rough grazing, woodland (ancillary to farming) and other land on agricultural holdings together represent 79 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 output from what remains.¹ The ratio of rough grazing—used for livestock, mainly sheep—to better-quality agricultural land varies considerably throughout Britain. In the southern half of England, for example, rough grazing constitutes only about one-sixth of the total area, increasing to one-fifth in Northern Ireland, about a third in the hill regions of England and Wales and nearly three-quarters in Scotland.

Size of Farms

There are about 272,000 statistically significant farming units in Britain. Some 42 per cent are very small units, mostly farmed part-time, and accounting for less than 4 per cent of the industry's total output. Of the 170,000 full-time farm businesses some 39,500 are classified (by standard man-days) as large farm businesses (capable of employing four or more men full-time): these, accounting for some 15 per cent of the number of holdings, produce more than half of the industry's total output. There are about 53,000 medium-sized (two-three men) and some 64,500 small 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 105 hectares (259 acres) of crops and grass (including rough grazings).

¹ The year 1975-76 was an exception; it is estimated that net product at constant prices fell, owing to particularly unfavourable weather which had its biggest effect on arable production. Full effects of the 1976 drought on the 1976-77 output are not known yet.

Some 34,000 of the total of significant farming units are in Northern Ireland: over half of these provide a full-time occupation for the owner and produce over four-fifths of the total output. The average farm size is 23 hectares (57 acres). Other holdings, of which there are about 16,000, are either extremely small or let in conacre (seasonal lettings for crops or grazing).

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. In England the farms devoted primarily to arable crops are in the eastern part of the country—in East Anglia, Kent, Lincolnshire and Humberside. In Scotland the rich lowlands of the east coast are also primarily arable. Potatoes and vegetables are grown mainly in the Fens (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 Dyfed and the south-west. 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 on better grassland areas and partly in yards on arable farms.

In Northern Ireland dairying is the main occupation on 40 per cent of the full-time farms, while a further 35 per cent concentrate on beef and sheep production. The remainder are either specialised cropping and horticultural holdings, intensive pig and poultry units or mixed farms with no predominant single enterprise. Oats and barley are widely grown, mainly for livestock feeding, and the only important cash crop is potatoes.

AGRICULTURAL PRODUCTION: CROPS AND LIVESTOCK

The increase in production which has occurred over the past decades is a result of the effort of individual farmers, of farmers' organisations, of research workers and advisers and of government action. The role of the Government is described on pp. 285-87.

Production

The steady expansion in production and in yield per hectare of arable land which has taken place since 1936 despite falling manpower is summarised in Table 21, which also shows the effect of the exceptionally unfavourable weather during 1975. Apart from slight falls between 1961 and 1964, in 1968 and 1975, total cattle stocks have risen each year since 1957, to reach a record of 15.2 million in 1974. Over the past decade the beef herd has grown considerably, but expansion in the milk-producing herd has been less marked. Numbers of sheep and lambs reached their highest level in 1966; although they later declined, they expanded steadily from 1972 to 1974; there was a slight drop in 1975. Numbers of pigs and poultry increased considerably during the decade to 1974 but fell in 1975. Arable production has shown a greater diversification since the second world war. Total cereals production has increased greatly since 1960, reaching over 16 million tonnes in 1974-75; it fell to under 14 million tonnes in 1975-76. Potato production is susceptible to weather conditions but, on average, adequate supplies are maintained from a steadily-declining area. Between 1963 and 1973-74 output of pigmeat increased by one-quarter and eggs by one-tenth; these increases, together

TABLE 21: Manpower, Land Use, Produce and Livestock.

Item and Unit	Years commencing 1st June				
	Averages		1974 ^b	1975	1975 imperial unit equivalents
	1936-38	1964-66			
<i>Manpower in Agriculture</i> ('000)	^a	^a	678	657	
<i>Land Use</i> ('000 hectares)					
Total crops and fallow	3,605	4,809	4,838	4,819	11,907 ^d
Temporary grass	1,692	2,663	2,316	2,138	5,284 ^d
Permanent grass	7,588	4,943	4,920	5,074	12,538 ^d
Rough grazings	6,668	7,214	6,564	6,555	16,198 ^d
Woodland on agricultural holdings	^c	^c	212	225	556 ^d
Other land on agricultural holdings	^c	^c	161	171	423 ^d
TOTAL	19,552	19,628	19,010	18,984	46,911 ^d
<i>Main crops</i>					
Cereals: area ('000 hectares)	2,145	3,623	3,747	3,654	9,029 ^d
harvest ('000 tonnes)	4,513	13,307	16,382	13,823 ^e	13,605 ^j
of which—					
Wheat: area ('000 hectares)	751	941	1,233	1,035	2,557 ^d
harvest ('000 tonnes)	1,677	3,813	6,130	4,438 ^e	4,368 ^j
yield (tonnes per hectare)	2.23	4.05	4.97	4.29 ^e	1.71 ^f
Barley: area ('000 hectares)	376	2,234	2,214	2,345	5,794 ^d
harvest ('000 tonnes)	777	8,146	9,133	8,433 ^e	8,309 ^j
yield (tonnes per hectare)	2.08	3.65	4.12	3.60 ^e	1.43 ^f
Oats: area ('000 hectares)	972	411	253	233	574 ^d
harvest ('000 tonnes)	1,971	1,232	955	802 ^e	798 ^j
yield (tonnes per hectare)	2.03	3.00	3.77	3.44 ^e	1.37 ^f
Potatoes: area ('000 hectares)	293	295	214	204	504 ^d
harvest ('000 tonnes)	4,951	7,074	6,791	4,516 ^e	4,444 ^j
yield (tonnes per hectare)	16.82	24.00	31.60	22.14 ^e	8.82 ^f
Sugar beet: area ('000 hectares)	136	181	195	193	488 ^d
harvest ^g ('000 tonnes)	422	888	568	635 ^e	625 ^j
yield (tonnes per hectare) ^h	3.11	5.9	3.6	4.3 ^e	1.7 ^f
<i>Livestock</i> ('000 head)					
Cattle and calves	8,675	11,425	15,203	14,717	
Sheep and lambs	25,786	29,842	28,498	28,270	
Pigs	4,466	7,564	8,544	7,532	
Poultry	76,236	118,486	139,672	136,572	
<i>Livestock Products</i>					
Milk (million litres)	7,069	11,307	13,280	12,999	2,859 ⁱ
Eggs (million dozen)	558	1,088	1,081	1,093	
Beef and veal ('000 tonnes)	587	892	1,194	1,155	1,137 ^j
Mutton and lamb ('000 tonnes)	198	164	260	257	253 ^j
Pigmeat ('000 tonnes)	442	875	928	811	788 ^j
Poultry meat ('000 tonnes)	90	412	646	657	647 ^j

Source: *Agricultural Departments*^a Complete figures were first available in 1971 when the number was 716,000.^b From 1974 UK figures relate, with some exceptions, to holdings with 40 standard man-days or more.^c Figures not collected before 1972. ^d '000 acres. ^e Provisional. ^f Tons per acre.^g Sugar production 1936-38: raw equivalent basis; 1964-75: refined basis.^h Sugar-in-beet per crop hectare.ⁱ Million gallons. ^j '000 tons.

Discrepancies between totals and their constituent parts are due to rounding.

with those in beef and milk, resulted in higher consumption of feedingstuffs, mostly from home resources. (Output of both pigmeat and eggs fell in 1974-75 and 1975-76.) Between four million and five million tonnes of concentrated feeds are imported each year, depending on the size of the home crop of cereals.

The index of agricultural net product (all holdings) at constant prices rose steadily until 1974-75. By 1953-54 it was some 56 per cent above the immediate pre-war average; it rose a further 36 per cent between 1954-57 and 1964-67. With the average of 1968-72 as a base, the index for all commercially significant holdings reached 119 in 1974-75. A fall to 102 is forecast for the exceptionally unfavourable year 1975-76.

Grassland

The British climate suits grassland farming. Grassland forms an important section of the economy of most farms, whether as permanent grass, mostly occupying land less suitable for cultivation, or as sown grassland (*leys*), often part of the arable rotation. A wide range of herbage species and varieties are used, over half of the total supply of herbage seed being produced in Britain.

Grassland production has been enhanced over recent years by the development and application of new techniques, notably the increased use of fertilisers (especially nitrogenous), new methods of grazing control, improved herbage conservation for winter feed and irrigation. Rough grazings remain as semi-natural grassland used for extensively grazed flocks and herds, producing young animals for fattening elsewhere.

Crops

Wheat is grown mainly in the eastern half of England. About 4.4 million tonnes were harvested in 1975 with average yields estimated at 4.29 tonnes per hectare (1.71 tons per acre). About one-half of the wheat crop is used for flour milling, the remainder going mainly for animal feed.

Cereals

Since 1960 the area under barley has increased by over 58 per cent and in general production has risen faster because yields have also increased. The malting and distilling market currently absorbs about one-fifth of the crop; most of the remainder is retained by farms or sold for animal feed.

The widespread 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 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.

Sugar Beet

Beet is grown mainly in East Anglia and Lincolnshire under contract to the British Sugar Corporation Ltd. (the sole British processor) which also provides technical advice and assistance. The corporation contracts annually for the area from which it will buy beet; the contracted area has risen over the last few years to 206,000 hectares (510,000 acres) in 1976. At normal yields this should produce about one million tonnes of sugar—about two-fifths of total British consumption. (The balance is largely supplied, under the Lomé Convention (see p. 375) by developing countries which export raw cane sugar.)

Potatoes

Potatoes are grown in most parts of Britain. First supplies of early potatoes normally come at the end of May, and the lifting of maincrop varieties usually starts in September. Seed potato production for Britain and for export is chiefly centred in Scotland and Northern Ireland.

Britain is normally self-sufficient in maincrop potatoes. As yields are increasing, requirements, including the demand for processed potatoes, can usually be met from a declining acreage.

The total area planted with potatoes in 1975 was 204,000 hectares (504,000 acres) and the average yield per hectare was 22.1 tonnes, about 9.5 tonnes less than in 1974, owing to the adverse weather conditions. This resulted in total supply (including imports) being well below normal. Although potato production is becoming increasingly mechanised, much hand labour is still needed.

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 is 2.75 litres (about 4.75 pints) a week.

Average yields per dairy cow have increased during the last decade by about 13 per cent and now average some 4,100 litres (900 gallons) a year. Freedom from tuberculosis has reduced herd wastage, and a campaign to eradicate brucellosis is well advanced. The Friesian breed is dominant in the dairy herds of England, Wales and Northern Ireland, and the Ayrshire breed in Scotland. Average herd size is 40 cows. Milk production has been stimulated by advances in grassland management, intensive grazing techniques and new methods of making high quality hay and silage. Most dairy farmers practise some degree of intensive grass management, but hay or silage of the traditional type supplemented with purchased concentrates remain the basic winter feeds.

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 seeking to replenish and improve their herds and flocks.

British breeds have recently been joined by a number of continental breeds.

Artificial insemination plays an important part in cattle breeding, about two-thirds of the dairy herd in England, Scotland and Wales being bred in this way, through centres operated by the Milk Marketing Boards and other organisations.

Beef Cattle

In the hill regions hardy herds of beef cattle are kept, especially of the Galloway and Welsh Black breeds and their crosses; in marginal land and lower areas the sires used are predominantly of the Aberdeen Angus and Hereford breeds. About two-thirds of home-fed beef production derives from the dairy herds, some females being mated to beef sires. There is a large and complex trade in store cattle (increased by animals imported from the Irish Republic), a typical movement being from the upland west to grazing areas in the Midlands. The demand for lean tender beef at an economic price has stimulated the development of intensive and semi-intensive systems of production.

Sheep

Britain has a long tradition of sheep production. More than 40 breeds and innumerable crosses are to be found in Britain, each breed having originated within a particular area. Research has provided vaccine and sera protection against nearly all the epidemic diseases.

In the hills, and especially in the Highlands, winter conditions are usually severe. Draft ewes and lambs are brought from the hill areas every autumn to swell the lowland flocks, usually in two stages; first, to farms at intermediate altitudes, where they are mated 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. Fat lamb production provides the main source of income for sheep farmers but wool is also of considerable importance, especially to farmers in hill areas.

Pigs Pig production is carried on in most parts of Britain but is particularly important in the eastern and southern counties of England and in Northern Ireland. There is an increasing concentration into specialist units and larger herds. The most frequently used breeds are the Large White and the Landrace though a large number of cross-bred sows are also used in commercial pig-meat production. Artificial insemination is available nationally.

About 25 per cent of the pigmeat is used for bacon and 75 per cent for pork and manufacturing into sausages and other processed forms.

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. Only a small proportion of total production is in the hands of the smaller producers—some three-quarters of the laying birds on farms are in flocks of 5,000 or more while about three-quarters of the broilers are in flocks of 50,000 or more. The average yield of eggs per bird is about 230 a year. About 248 million broilers and other special table chickens were slaughtered in 1975. 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 flower crops which are worth nearly 11 per cent of the total value of agricultural output—an estimated £539 million in 1975-76 out of a total of £5,054 million.

At the June 1975 census the land on which these crops were grown amounted to nearly 285,000 hectares (705,000 acres), about 2.4 per cent of the land used for crops and grass. Fruit accounted for about 70,000 hectares (173,000 acres), vegetables, excluding potatoes, for about 198,000 hectares (490,000 acres) and flowers, bulbs and nursery stock for about 15,000 hectares (37,000 acres). Crops under glass, plastic and in sheds, including mushrooms, occupied about 2,000 hectares (5,000 acres).

Horticultural crops are largely grown on specialised holdings where soil, climate, skilled labour and irrigation can produce maximum yields of high-quality crops and where access to markets or good roads enable them to be sold at economic prices. 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. Some horticultural crops form parts of general farm rotations but the returns from increased specialisation favour separate horticultural enterprises within the general farm.

Fruit Of the land used for fruit growing in 1975 17,000 hectares (42,000 acres) were devoted to soft fruit and the remainder was under orchards. The area of apple orchards (excluding cider apples) is some 35,000 hectares (86,000 acres). Dessert apples are the most important fruit crop, the main production areas being Kent and neighbouring counties, in the south-east, the southern part of East Anglia, and Hereford and Worcester. Recent plantings are largely of Cox's Orange Pippin which is marketed throughout autumn and winter;

more of the new orchards consist of closely planted dwarf trees which can be efficiently pruned, sprayed and picked. England and Northern Ireland are among the few countries which grow varieties of apples especially suitable for cooking, the best-known of which is Bramley's Seedling. There are about 5,000 hectares (12,350 acres) in the West Midlands and the south-west of England devoted to cider apple production.

Although pears thrive best in the warmer continental climate, in the east and south-east of England where somewhat similar conditions prevail the Conference pear and a few other high-quality varieties are produced. 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. This forms the basis of an important processing industry.

Strawberries are the most widely grown soft fruit, accounting for some 6,900 hectares (17,000 acres); they are produced mainly in Kent and East Anglia. Blackcurrants are also widely grown in Britain, mainly for the preparation of juice for the manufacture of soft drinks and flavours for confectionery. Other fruits include gooseberries, red and white currants, loganberries and blackberries. Almost all the nuts consumed in Britain are imported but a few cob nuts and filberts are still grown in parts of Kent.

Glasshouse Crops

Much of the glasshouse sector of the horticultural industry has been re-equipped since the mid-1960s with the aid of grants. There are now, in many parts of the country, units with automatic control of heating, ventilation, and semi-automatic control of watering coupled with carbon-dioxide enrichment of the atmosphere. Tomatoes form the most important glasshouse crop, either as a single crop or in rotation with others, and together with lettuce and cucumbers represent some 95 per cent of the total value of glasshouse vegetable output. There is also increasing production of a range of crops not traditionally grown under glass and the areas under sweet peppers and celery have increased significantly. Cucumbers are extensively grown in the traditional glasshouse area in the Lee Valley to the north of London and more recently in Yorkshire. Mushrooms, whose farmgate value is forecast at over £26 million for 1975-76, are grown in specially constructed sheds in numerous parts of the country. Production in Northern Ireland, in particular, is steadily increasing each year.

Nursery Stock and Bulbs

Bulbs occupied some 6,500 hectares (16,000 acres) and hardy nursery stock some 7,300 hectares (18,000 acres) in June 1975; flowers in the open took about 1,200 hectares (3,000 acres). Many nurseries concentrate on the production of plants in containers for sale through the garden centres which have been established on the outskirts of many towns.

The production of dry bulbs for sale and bulb flowers for market takes place particularly in the Holland area of Lincolnshire, Norfolk, the east of Scotland, Cornwall, and in the Isles of Scilly where more than 50 per cent of the cultivable land is devoted to bulbs which flower from November to May.

Vegetables

Vegetables and outdoor salad crops are grown in the traditional areas of the Thames Valley, north Kent, Vale of Evesham, south Lancashire and Humberside, but newer areas, especially suited through soil type or climate to production of a particular crop, have come into prominence. West Cornwall, south Devon, Dyfed and Kent send winter cauliflowers and spring cabbage to most urban markets while almost half the summer and autumn cauliflowers come from Lincolnshire. The light soils of Norfolk and Cambridgeshire are

especially suitable for carrots and onions, and the Holland area of Lincolnshire accounts for just over a quarter of the onion acreage. Brussels sprouts are grown extensively in Bedfordshire, the Vale of Evesham, and well up the east coast of England wherever freezing factories are sited for the processing of fish as well as vegetables. Peas and dwarf beans are increasingly sold frozen, canned or dried and so are grown close to factories in the east of England and in Scotland. Celery is mainly grown on the moss soils of south-east Lancashire, the peats of Norfolk and the fens of Cambridgeshire. Nearly three-quarters of the early rhubarb is produced in Humberside where plants grown in the open are then forced in unlit sheds.

Hops

Hops for the brewing industry are grown in Kent, East Sussex, Hampshire, and Hereford and Worcester. They occupy only about 6,500 hectares (16,000 acres) but have a very high yield per hectare and value by weight.

FOOD SUPPLIES

Britain now produces just over half of its total food requirements or nearly 70 per cent of those supplies that can be produced in temperate climates.

Home Production

Home production of the principal foods is shown as a percentage by weight of total supplies in Table 22.

TABLE 22: United Kingdom Production as a Percentage of Total Supplies

Food product	1956	1964-66 average	1975 (provisional)
Carcase meat and offal	62	69	80
Bacon and ham	42	36	43
Shell eggs	96	98	98
Milk for human consumption (as liquid)	100	100	100
Cheese	43	43	61
Butter	9	7	9
Oils and fats (crude oil equivalent)	16	11	17
Sugar (as refined)	22	29	23
Wheat and flour (as wheat equivalent)	20	46	45
Potatoes for human consumption	93	94	91

Source: *Ministry of Agriculture, Fisheries and Food*

FARM EXPENDITURE AND EARNINGS

Estimates of farm expenses and sales and the aggregate net income of agricultural producers are prepared annually by the agricultural departments. The aggregate net income of farmers (unadjusted for inflation) rose from £455 million in 1965-66 to an estimated £1,357 million in 1975-76. The figures given in Table 23 show that Britain's farming is predominantly based on livestock enterprises. Nearly seven-tenths of total farm output is in the form of livestock or livestock products.

Of all farm expenses, purchased feedingstuffs amount to more than a quarter, wages to nearly one-fifth and machinery (including depreciation) to over one-fifth. Since 1960 male agricultural earnings have increased four-fold (by about half in real terms), offsetting the manpower economies made possible by mechanisation and larger farms, while labour productivity has risen by about 4.5 per cent a year since 1964-65.

Capital Requirements

The capital required for land and buildings may be provided by the farmer, if he is an owner-occupier, or by the landlord, if the farm is let to a tenant.

TABLE 23: Estimated Farm Output and Input 1975-76

Output	£ million	As a per- centage of total	Input	£ million	As a per- centage of total
Farm crops	1,147	22.7	Feedingstuffs	1,214	44.1
Horticulture	539	10.7	Seeds	125	4.5
Livestock	1,940	38.4	Imported livestock	132	4.8
Livestock products	1,396	27.6	Fertilisers and lime	370	13.4
Other	32	0.6	Machinery	355	12.9
			Farm maintenance	175	6.4
<i>Total Output</i>	5,054	100.0	Miscellaneous expenditure	384	13.9
Production grants and sundry receipts	175		<i>Total expenditure</i>	2,756	100.0
			Stocks change	+6	
<i>Total Receipts</i>	5,230		<i>Gross Input</i>	2,762	
Work in progress change	+355		<i>Gross Product^a</i>	2,823	
			Depreciation	509	
<i>Gross Output</i>	5,585		<i>Net Product</i>	2,314	
			Labour	836	
			Net rent and interest	121	
			<i>Net Income</i>	1,357	

Source: *Annual Review of Agriculture 1976*

Figures may not add to the totals shown because of roundings.

^a Gross product = Gross output less gross input.

It is estimated that £239 million was added to the value of buildings and works and £415 million was invested in new plant, machinery and vehicles in 1975. The bulk of the capital required to stock and run the farms is provided by the occupiers. Bank advances are an important source of outside capital, both fixed and working; about two-thirds of the total bank advances to agriculture are believed to be for short-term purposes. Agricultural merchants are also an important source of short-term credit. Mortgage loans form the chief source of long-term credit and are provided by specialised financial institutions (see p. 287) and private sources.

Accounts of some 2,000 farms in England and Wales, collected by agricultural economists in 1975, show average valuations of occupiers' capital ranging from about £30 per hectare (£12 per acre) on hill farms with extensive rough grazings to over £300 per hectare (£120 per acre) on some lowland farms. On all types of farm investment in machinery is a heavy item: on dairy and arable farms it averages about £80 per hectare (£32 per acre); on stock-rearing farms it may amount to £30 per hectare (£12 per acre).

Mechanisation

Britain has one of the heaviest tractor densities in the world, with 530,000 tractors in 1975 or one to every 13 hectares (32 acres) of arable land. Power-take-off implements now characterise arable farming; and some 66,000 combine harvesters were in use in 1975. 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 Great Britain have an electricity supply and

accompanying equipment. There are about 1,700 farmers' machinery syndicates through which farmers have the use of expensive equipment without tying up their own capital.

Research, development and testing of farm machinery are carried out by the National Institute of Agricultural Engineering.

Net Incomes

The range of net incomes between individual farms is very wide; incomes vary with the type and size of farm, quality of land, and managerial ability of the occupier. The average net income for farms in England and Wales of different types is generally within the range of £30 to £110 per hectare (£12 to £45 per acre) with the exception of pig and poultry farms and horticultural holdings, which are more intensive in their use of land. Net income per hectare on dairy and arable farms has nearly always been higher than on stock-rearing farms, which are generally greater in area than the other types and are situated on poorer land.

THE ROLE OF THE GOVERNMENT

The functions of government in relation to agriculture are mostly exercised by the agricultural ministers; for England and Wales the Minister of Agriculture, Fisheries and Food and the Secretary of State for Wales, for Scotland the Secretary of State for Scotland, and for Northern Ireland the Secretary of State for Northern Ireland. The Advisory Council for Agriculture and Horticulture in England and Wales exists to provide the Minister and his department with independent advice on any agricultural or horticultural subjects remitted to it.

The Ministry of Agriculture, Fisheries and Food operates through functional divisions. Its relations with individual farmers are conducted mainly through its local offices, grouped in England in regions, with Chief Regional Officers. Local offices in Wales are grouped under a Welsh Secretary with similar functions and with special responsibility for Welsh affairs.

In 1966 an Economic Development Committee for agriculture was established, comprising representatives of farmers, workers and landowners, as well as official and independent members.

In Scotland most of the agricultural functions of the Secretary of State are discharged through the Department of Agriculture and Fisheries. The Secretary of State for Scotland also appoints the members of the Crofters Commission (see p. 288) and the Red Deer Commission, which deals with the conservation and control of red deer.

The Northern Ireland Department of Agriculture is responsible for implementing agricultural policy. It is organised on similar lines to the Ministry of Agriculture, Fisheries and Food, for which it acts as agent in the administration in Northern Ireland of United Kingdom agricultural schemes.

Since 1st February 1973 Britain has applied the European Community system of agricultural support under the Common Agricultural Policy (CAP) (see p. 286). The system is administered by the Intervention Board for Agricultural Produce; although administratively separate from the agricultural departments, the board maintains close working links with them and is responsible to the agricultural ministers, who remain responsible for policy.

The principal tasks of the Intervention Board in administering this system are the issue and control of export/import licences and the payment of export and import refunds, market support for certain commodities, including support buying, aids to private storage and the payment of denaturing premiums. The board also pays the minor Community production and producer subsidies not administered by the agricultural departments.

Annual Review

Each year, the agricultural ministers review the economic condition and prospects of the industry in consultation with representatives of agricultural producers (in practice, the three farmers' unions of Britain). They consider such factors as production trends and market requirements, world market prospects, the cost of subsidies, income trends in the industry as a whole, the increasing efficiency of the industry and changes in production costs. 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 government agricultural policy.

**Common
Agricultural
Policy**

For most commodities British producers now rely for support on the mechanisms of the Common Agricultural Policy of the European Community (CAP). Under the CAP producers' returns for most of the main commodities are supported by a combination of charges on imports from third countries and internal support prices which, for some of the more important products, 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 variable premiums payable on cattle and beef. For most commodities Britain is gradually adopting full Community support price levels over the five-year transitional period which expires at the end of 1977.

The level of support prices under the CAP is reviewed by the Community each year, and the results of the British Annual Review (see above) help to shape the Government's approach to the negotiations in Brussels on CAP support.

Price Guarantees

In the light of the British Annual Review, agricultural ministers also determine guaranteed prices for the coming year for potatoes, fat sheep, milk and wool. Guaranteed prices for other commodities have been terminated in accordance with the Treaty of Accession (see p. 74). The guaranteed price of milk is also to be terminated by the end of the transitional period: in the meantime the level of the guarantee is subject to rules under the Treaty of Accession.

**Other Grants and
Subsidies**

In addition to market support under the CAP and the British guaranteed prices, producers also receive support through certain capital and production grants. These include grants to help producers with the costs of capital investment under the Farm Capital Grant Scheme and the Horticulture Capital Grant Scheme. Grant aid is also available to producers undertaking development plans under the Farm and Horticulture Development Scheme. Special financial assistance is also available under Community arrangements for farmers in hill areas.

Cost of Support

Estimated expenditure in 1975-76 on United Kingdom price guarantees, grants and subsidies is £230 million, of which £4 million is expected to be reimbursed from the European Agricultural Guidance and Guarantee Fund (FEOGA). Expenditure in the United Kingdom under CAP market regulation in 1975-76 is estimated at about £305 million, of which some £247 million is likely to be reimbursed from FEOGA.

**Marketing
Boards**

For milk and wool in the United Kingdom the Government operates the guarantee through the appropriate marketing boards (see also p. 289) which take account of any payments from or to the Government in deciding what to

pay producers for their produce. In the case of milk there are five boards covering different areas; the Government pays the guaranteed price on a specified gallonage termed the standard quantity or the total gallonage sold off farms, whichever is the less. Any milk produced in excess of the standard quantity would be sold for manufacturing and the returns from these two sources averaged by the boards to give the 'pool price' paid to producers.

For wool a fixed price is guaranteed to the British Wool Marketing Board for every pound of fleece wool it buys from producers. This enables it to fix in advance a schedule of producers' prices, based on types and quality, after making allowance for the board's marketing costs.

For potatoes ministers fix each year a target area designed to achieve self-sufficiency. In Great Britain the Potato Marketing Board ensures, as far as possible, that this area is planted and may with government agreement undertake support buying of any surplus, re-selling as much as possible for stock-feed. In Northern Ireland the Department of Agriculture undertakes any support measures. Most of the cost is met by the Government. Any deficiency payment arising is shared between the Potato Marketing Board and the Department of Agriculture and can be used to meet the cost of support buying.

OTHER GOVERNMENT ASSISTANCE AND ACTION

Agricultural Credit

In England and Wales finance for the purchase or improvement of agricultural land and buildings is available from the Agricultural Mortgage Corporation Ltd. whose funds are derived mainly from public issues of stock, with some government support. Loans for agricultural purposes secured on agricultural land in Scotland are granted by the Scottish Agricultural Securities Corporation Ltd. which works on a similar financial basis to the Agricultural Mortgage Corporation Ltd.

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. Short-term finance for agricultural machinery is arranged on a hire purchase basis, whilst medium- or long-term loans are arranged for such purposes as the purchase of livestock, the erection and improvement of farm buildings and farm dwellings, and the purchase of land for amalgamation and subsequent restructuring.

The Government can make loans in Great Britain to help finance the purchase of land acquired for approved amalgamations of small farms and approved remodelling expenditure. These loans may be granted up to 90 per cent (100 per cent for certain small amalgamations) of the valuation of the combined unit determined by the Agricultural Mortgage Corporation Ltd. in England and Wales and the Scottish Agricultural Securities Corporation Ltd. in Scotland, which act as the Government's agents.

Where a farmer or grower requires a bank loan for improvements to or purchase of buildings, machinery, plant, equipment, livestock or working capital, but cannot provide sufficient collateral, he may be eligible to obtain medium-term credit through the Agricultural Credit Corporation Ltd. The corporation guarantees some or all of the money borrowed from a bank and the scheme extends to farmers' and growers' co-operative associations.

Smallholdings

In England and Wales, about 10,000 smallholdings are provided by local authorities and about 800 lettable holdings by the Ministry of Agriculture, Fisheries and Food. For financial assistance in improving smallholdings, authorities can obtain the amalgamation and capital grants available to farmers generally. 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 now owns and maintains about 167,500 hectares (413,900 acres) of land settlement estates, comprising some 2,930 crofts and holdings.

Crofting

Within the crofting areas of Scotland (comprising the former counties of Argyll, Caithness, Inverness, Orkney, Ross and Cromarty, Sutherland and Shetland) much of the land is held by crofters or 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).

The Crofters Commission, with headquarters in Inverness, is responsible for the administration and regulation of crofting. Its functions are to re-organise, develop and regulate crofting in the crofting areas, to promote the interests of crofters and to keep under review matters relating to crofting. The commission's statutory powers include supervising the letting of crofts and collaborating with other organisations whose activities affect crofting interests. It also acts as the Secretary of State for Scotland's agent in administering grants to crofters for cropping and land improvement.

Arterial Drainage and Sea Defence

Ten regional water authorities are responsible for land drainage (including flood prevention) in England and Wales; they took over these functions from the former river authorities and catchment boards in 1974. There are no comparable authorities in Scotland, where arterial drainage of agricultural land is the owners' responsibility.

The work of the water authorities includes, in both urban and agricultural areas, the improvement of land drainage, the prevention of inland flooding, and the construction and maintenance of defences to protect low-lying coastal areas from tidal flooding. Most of the funds needed are obtained from local authorities, but the Government pays grants toward the cost of improvement schemes varying from 10 per cent to 80 per cent according to the financial position of the authority, with an additional premium for sea defence works.

Within the water authority areas, in low-lying areas where there are special local problems of land drainage, there are 305 internal drainage districts administered by internal drainage boards which carry out work for the special benefit and protection of their districts. The number of these boards is expected to decrease slightly as a result of rationalisation carried out in several parts of the country. The boards finance their work from drainage rates levied on owners and occupiers. They also receive government grant at a flat rate of 50 per cent for improvement schemes.

Local authorities in England and Wales also have general land drainage powers and may receive government grants of between 20 per cent and 50 per cent of the cost of improvement work. In Scotland 60 per cent grants (70 per cent if for the benefit of hill land) 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 for watercourses designated by the Drainage Council as main or minor watercourses and also has responsibility for urban drainage.

Land Tenure

In Great Britain more than half, and in Northern Ireland almost all, farms are owner-occupied. In order to protect the respective interests of landlords and tenants and to eliminate uncertainty as to their rights and liabilities, a code of landlord and tenant relationships has been written into legislation.

Legislation provides for any tenancy of agricultural land, with the exception of certain short-term lettings, to continue in force from year to year until

terminated by a valid notice to quit. With certain exceptions the tenant can contest it by serving a counter-notice; the notice to quit then becomes inoperative unless the landlord can satisfy an independent body (in England and Wales the Agricultural Land Tribunal and in Scotland the Scottish Land Court) that his claim for possession is in the interests of sound estate management or good husbandry or that the land is required for certain specified purposes.

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.

MARKETING

Agricultural products are marketed mainly through private trade channels, through producers' co-operatives or through marketing boards operating under the Agricultural Marketing Act 1958 or Northern Ireland legislation. The practice of selling under contract is growing. The marketing boards are producers' organisations with statutory powers to regulate the marketing of particular products. The schemes under which they are constituted and operate must be approved by Parliament and, except in Northern Ireland, confirmed by a poll of the producers. Most board members are elected by the producers but a minority are appointed by the agriculture minister or ministers concerned. Further safeguards serve to protect consumers and other interests affected by schemes and the public interest generally.

Marketing boards fall into two broad categories: first, those which are sole buyers of the regulated product from all producers not specially exempted or those which exercise a comparable influence by controlling all contracts between producers and first buyers; and, secondly, boards which maintain only a broad control over marketing conditions, leaving producers free otherwise to deal individually with buyers. The boards for hops, milk and wool and the Northern Ireland pigs and seed potato boards fall into the first category and the Potato Marketing Board into the second.

For certain other commodities there are broadly-based organisations representing producer, distributor and independent interests.

The Home-Grown Cereals Authority was set up to improve the marketing of home-grown cereals. It provides market intelligence, operates a wheat classification scheme, and promotes research and development. It also acts as agent for the Intervention Board for Agricultural Produce in respect of the support buying, storage and disposal of cereals and oilseed rape.

The Meat and Livestock Commission is charged with improving the production, marketing and distribution of livestock and meat in Great Britain. It has a range of executive functions extending from breeding to retail distribution, including acting as agents for the Agricultural Departments and the Intervention Board in administering price support schemes for fatstock producers. It is not empowered to trade in either livestock or meat.

The Eggs Authority, which represents the industry and consumers, was set up with the general duty of improving the marketing of eggs. It provides market intelligence, carries out promotional work and undertakes research and development projects.

Under the CAP a wide range of fresh horticultural produce and also cut flowers and flowering bulbs are subject to common quality standards which, with certain minor exceptions, apply at all stages of distribution. The Community standards apply to all produce entering Britain and to British produce sold on the domestic market.

Community regulations prescribe grades consisting of a range of up to four

classes and specify requirements concerning colour, size, etc., and relating to packing, presentation and labelling. All fruit and vegetables subject to the standards which are exported from or imported into the Community must meet the requirements of at least Class II.

Co-operation

The Central Council for Agricultural and Horticultural Co-operation was established to promote and develop co-operation in agriculture and horticulture and to administer a scheme of grants. The Agricultural and Horticultural Co-operation Scheme 1971 provides grants for co-operative production and marketing of agricultural and horticultural produce, including capital grants on terms similar to those available under the schemes for individual producers (see p. 286). The Federation of Agricultural Co-operatives represents British co-operatives both in Britain and in the Community.

CONTROL OF DISEASES AND PESTS

Animals

The day-to-day work of treating animal disease is the responsibility of the practising veterinary surgeon. Control of animal disease nationally in accordance with the Government's policy is the responsibility of the State Veterinary Service, which is part of the Agricultural Development and Advisory Service (ADAS). The Veterinary Service is also responsible for the administration of legislation providing for the welfare of farm livestock.

For many years Great Britain has been free from many serious animal diseases including rinderpest, contagious bovine pleuro pneumonia, sheep pox, glanders and rabies, except for two isolated cases of rabies in imported dogs in 1969-70. Orders made under the Rabies Act 1974 subject imports of non-farm mammals to the obtaining of an import licence and to six months' quarantine and give the Government far-ranging powers to deal with an outbreak. Sheep scab, eradicated in 1952, reappeared in 1973 and is now the subject of a new eradication campaign; control measures reduced the disease to a low level by the end of 1973. The campaign to eradicate swine fever was successfully completed in 1966 and although three cases of the disease occurred in 1971 the infection was quickly eliminated. An epidemic of a previously unknown swine vesicular disease began in December 1972; it is being combated by a stringent slaughter policy which has reduced the disease to a low level. A major epidemic of foot-and-mouth disease was experienced in 1967-68 but was successfully eradicated. In 1960 the whole of Britain became a bovine tuberculosis attested area. The incidence of the disease 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 the end of 1975 nearly 65 per cent of all herds in Great Britain were subject to eradication measures. In August 1975 the first brucellosis attested area was declared, comprising the Western Isles and Shetland Islands Areas and the former counties of Argyll and Bute. Newcastle Disease (fowl pest) which had declined considerably since 1963, reappeared in serious epidemic proportions in 1970 and early 1971 in England and Wales and then declined again to a low level.

The work of the Veterinary Service is backed by the extensive facilities of the Central Veterinary Laboratory at Weybridge, Surrey, and those of its subsidiary laboratory at Lasswade, near Edinburgh. In addition, there are 24 investigation centres with well-equipped laboratories in England and Wales. These 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 Scottish agricultural colleges.

In Northern Ireland the veterinary services are organised similarly to those in Great Britain but are administered separately by the Department of Agriculture for Northern Ireland. Animal health control policies and the geographical situation have kept the country free from nearly all the major epizootic diseases, including swine vesicular disease. A Brucellosis Eradication Scheme has been successfully carried out and in December 1971 Northern Ireland was declared a brucellosis-free country. The full-time veterinary service is supplemented by the central veterinary laboratory at Stormont, Belfast.

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 Plant Pathology Laboratory at Harpenden, Hertfordshire (part of ADAS), and the Agricultural Scientific Services Station, East Craigs, Edinburgh, provide scientific and technical advice on which statutory controls and certification schemes are based.

Pests and Storage

The Ministry of Agriculture's Pest Infestation Control Laboratory (a component of ADAS) provides scientific and technical advice on harmful mammals and birds and on insects, mites and moulds associated with grain and other stored food products. The laboratory's headquarters is at Slough, Berkshire, where storage problems are studied; vertebrate pests are studied at Tolworth, Surrey, and Worplesdon, Surrey. The laboratory works closely with Regional Pest Officers who advise farmers, local authorities and others on control techniques. Agricultural Scientific Services of the Department of Agriculture and Fisheries for Scotland have a similar function in Scotland and maintain close liaison with the laboratory.

Agricultural Chemicals

Safeguards against the dangers which could arise from uncontrolled use of pesticides have been devised and are operating successfully. Regulations provide protection for operators using the more toxic chemicals. Products cleared for safety under the Pesticides Safety Precautions Scheme (see p. 174) may be submitted through the Agricultural Chemicals Approval Scheme for efficiency approval. The purpose of this scheme is to enable users and advisers to choose efficient proprietary brands of agricultural chemicals.

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). These controls are being brought into operation in stages. The licensing authority (the agriculture ministers) is advised by the Medicines Commission, the Veterinary Products Committee, whose functions are to advise on the safety, quality and efficacy of veterinary medicinal products, and by other expert licensing committees. Until the Medicines Act is fully in operation, existing controls restricting the use of certain antibiotics in animal husbandry and veterinary medicine will be kept in force. (For other provisions of the Act, see p. 134.)

Safety at Work

The Agricultural Safety Inspectors advise farmers and workers about health and safety with particular reference to the Health and Safety at Work Act 1974. They are also responsible for enforcing the relevant statutory provisions

including regulations which cover such matters as the guarding of field and stationary machinery, the safeguarding of work-places, and the fitting of safety cabs to tractors.

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. The service also helps to identify problems requiring investigation and research, to suggest priorities for such work and where appropriate to contribute 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 which are financed almost entirely by public funds. The nature of service is similar to that provided by the ADAS and covers all branches of advice.

Advisory work in Northern Ireland is under the direction of the Chief Inspector of the Department of Agriculture and Advisory Centres are located in the main provincial towns. The resources of the agricultural colleges, the research centres and the specialist divisions of the department are available to the advisory service.

RESEARCH, EDUCATION AND TRAINING

Research

An outline of the organisation of agricultural research and development in Britain, including that carried out by the Agricultural Research Council (ARC) and the universities, is given on p. 388. 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 ADAS, and has funds which are used to commission work from the ARC, the Natural Environment Research Council and outside research organisations. In England and Wales, research in agricultural economics is undertaken by 12 university departments of agricultural economics. Nine of these and one college of agriculture conduct work on farm incomes and the economics of particular products for the ministry (see p. 284).

The Ministry of Agriculture, Fisheries and Food has four economic divisions and two statistics divisions. In Scotland, agricultural economists are on the staff of three agricultural colleges and the Department of Agriculture and Fisheries for Scotland.

In Northern Ireland, the Department of Agriculture has an Economic and Statistics Division and eight other research divisions.

Agricultural Education and Training

Fifteen universities in England and Wales, three in Scotland and one in Northern Ireland provide degree and postgraduate courses in agriculture or agricultural sciences. The National College of Agricultural Engineering at Silsoe, Bedfordshire, 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. In Scotland the three agricultural colleges which provide the advisory services are also teaching establishments, associated with the agricultural departments of the neighbouring universities. 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, block-release, day-release and other part-time courses for farmers, farm workers and horticulturists, as well as an advisory service for domestic producers.

The Agricultural Training Board, established under the Industrial Training Act, provides a training advisory service and organises training courses in agricultural and horticultural subjects. The board gives grants towards the cost of career training for new entrants, for attendance at approved short courses, training groups and schemes of training at places of work for those already engaged in the industry.

FISHERIES

The industry falls into three main divisions, concerned respectively with demersal fish, pelagic fish and shellfish. The major element of the catch (about 73 per cent by weight) is demersal fish: the catches of pelagic fish comprise about 18 per cent and shellfish 9 per cent of the total catch. The principal demersal fish (in terms of value) are cod, haddock, plaice, coalfish (saithe), whiting, soles and skate. The pelagic species live mainly in midwater or near the surface: they include herring, sprats and mackerel, of which herring is the most important. Shellfish include crustacea (such as lobsters, nephrops and crabs) and molluscs (such as scallops, mussels, cockles, queens and oysters).

Britain's exclusive fishing limits were extended to 12 miles in 1964, although a number of states enjoy historic rights allowing them to fish in designated parts of a 6-12-mile belt for designated species for which they have traditionally fished. In July 1976 the Council of the European Community accepted the principle of extending the limits of fishing zones to 200 miles, fishing within these limits being subject to the Common Fisheries Policy of the Community, of which Britain is now seeking a thorough reappraisal. Britain's fisheries dispute with Iceland, which began when the interim agreement of November 1973 expired, ended on 1st June 1976 with an agreement which is to last for six months. Under the terms of the Common Fisheries Policy vessels registered in member states may also fish within British waters although, by virtue of arrangements embodied in the Treaty of Accession, which are due for revision by 1982, they are currently excluded from all areas within 6 miles and certain areas between 6 and 12 miles.

Fishing Ports

The principal fishing ports in England and Wales are Hull, Grimsby, Fleetwood, North Shields, Lowestoft, Brixham, Newlyn and Milford Haven. In Scotland the chief ports for demersal fish are Aberdeen, Peterhead, Fraserburgh and Lerwick; herring landings are made mainly at the west coast ports of Stornoway, Ullapool, Mallaig, Oban and Ayr and in the Shetland Islands. In Northern Ireland the main fishing ports are Kilkeel, Portavogie and Ardglass.

Methods of Sea Fishing

The chief methods of catching fish are by trawling, seining and purse-seining. Trawling is carried out in the distant and near waters for all species of demersal fish. Seining is also used for catching demersal fish all the year round, mainly in the North Sea, the Minches, the Firth of Clyde and the Irish Sea.

The pelagic fisheries are seasonal. There is summer fishing for herring based on the Shetlands, the east coast ports of Scotland and the north-east coast ports of England. Other seasonal fisheries take place off the west coast of Scotland, in the Isle of Man area and off southern Ireland and East Anglia. A mackerel fishery takes place, mainly during the late summer, off the west coast of Scotland, and during the winter, off south-west England.

The inshore fisheries comprise a great diversity of types of vessel and methods of capture; there are extensive fisheries for crabs, lobsters, shrimps, mussels, scallops, cockles and oysters, and, off Scotland, north-east England and in the Irish Sea there are valuable catches of nephrops (Norway lobsters or Dublin Bay prawns).

The Fishing Fleet

Distant water trawlers, which operate mainly from Hull, Grimsby and Fleetwood, number 127. They are 140 feet (42.7 metres) and over in length and most of them make voyages lasting up to 80 days to fishing grounds off Iceland, in the Barents Sea, around Bear Island and off the coasts of Norway and Greenland. Freezer trawlers and factory ships, which spend from one to six months at sea and freeze much or all of their catch, in some cases as fillets, have become an important part of the distant water fleet in recent years and number 44. There are about 407 Scottish seiners, and about 224 operating from English ports. Excluding seiners, there are about 260 near and middle water vessels of between 80 and 139 feet (24.5 and 42.4 metres) long and most of them work nearer home, making voyages lasting from a few days up to more than two weeks, although some of the larger vessels fish regularly off the Faroes and seasonally as far afield as Iceland. Included in the near water group are vessels engaged in fishing for herring which normally make daily landings. The inshore group consists of some 2,000 vessels of over 40 feet (12.2 metres) and over 6,000 smaller vessels, many of which do not fish regularly. The majority are seldom at sea for longer than two or three days and more usually make daily landings, often fishing within sight of land, although some seiners operate for up to three weeks in the North Sea.

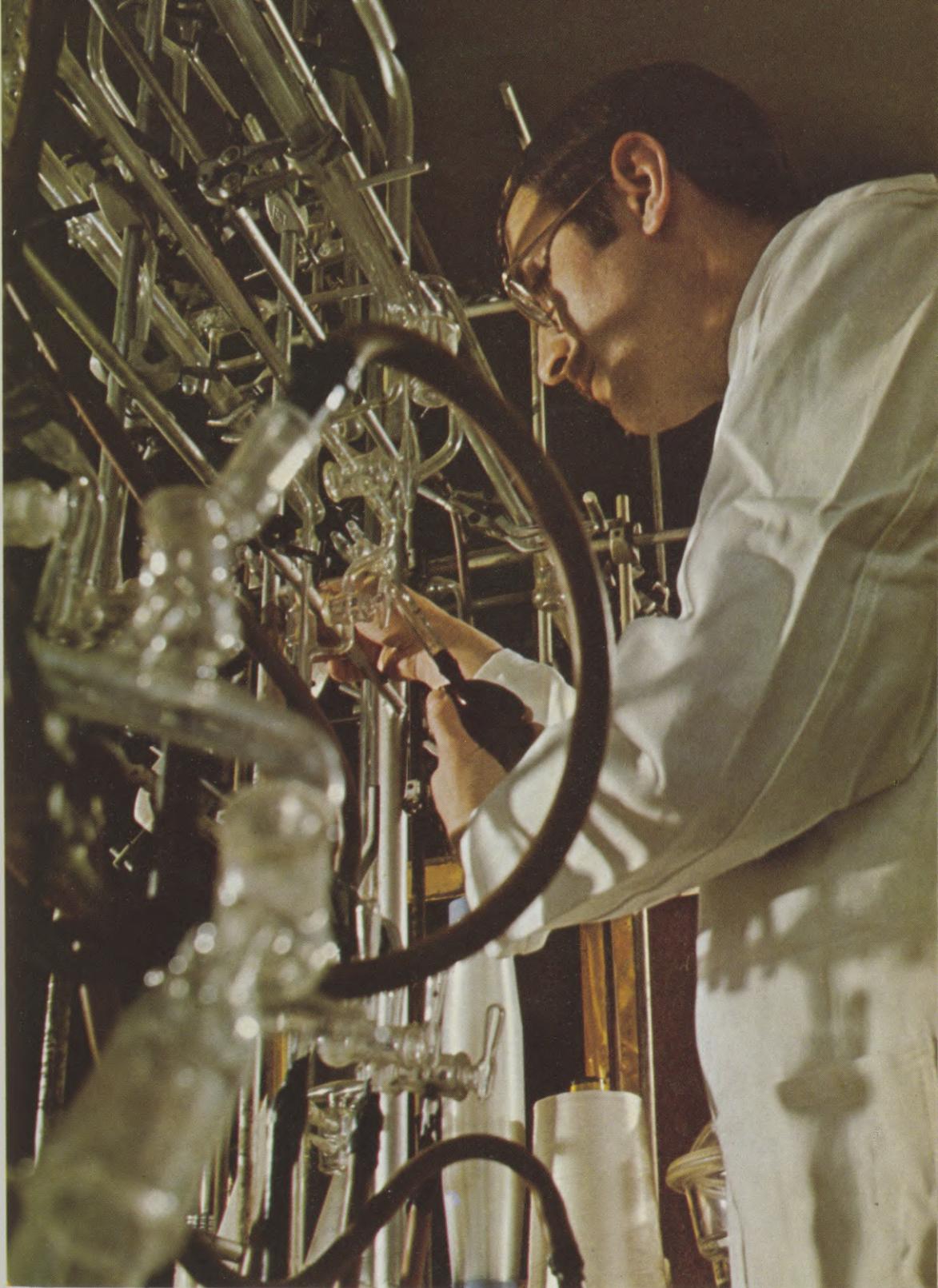
In the British fishing industry in 1975 there were about 17,500 fishermen in regular employment and some 5,000 occasionally employed; about 45 per cent of the former and 28 per cent of the latter were from Scottish ports. In Northern Ireland there are about 600 regular fishermen and 200 part-time.

Supplies

In 1975 landings of all types of fish (excluding salmon and trout) by British fishing vessels totalled 868,948 tonnes (579,032 tonnes of demersal fish, 222,513 tonnes of pelagic and 67,403 tonnes of shellfish), valued at £151 million. Cod accounted for 44 per cent of the total value of demersal and pelagic fish landed by British vessels; haddock (19 per cent) and plaice (7 per cent) were the other most important sources of earnings to the industry.

Imports of all fresh, frozen and cured fish and shellfish totalled 122,706 tonnes valued at nearly £64 million. Imports of canned and preserved fish and shellfish amounted to 71,756 tonnes valued at nearly £72 million. Imports of fish meal amounted to 237,960 tonnes, worth £30 million, and those of fish oils to 182,895 tonnes, worth nearly £30 million. Exports and re-exports of fish and fish products amounted to 144,196 tonnes and were worth nearly £58 million.

Weekly disposal of fresh, frozen and cured fish (excluding shellfish and imported canned fish) in Britain averaged about 15,000 tonnes landed weight in 1975. Total fish consumption, which has declined from its peak of 28.7 lb (13 kg) per head in 1948 on an edible weight basis, was running at a level of

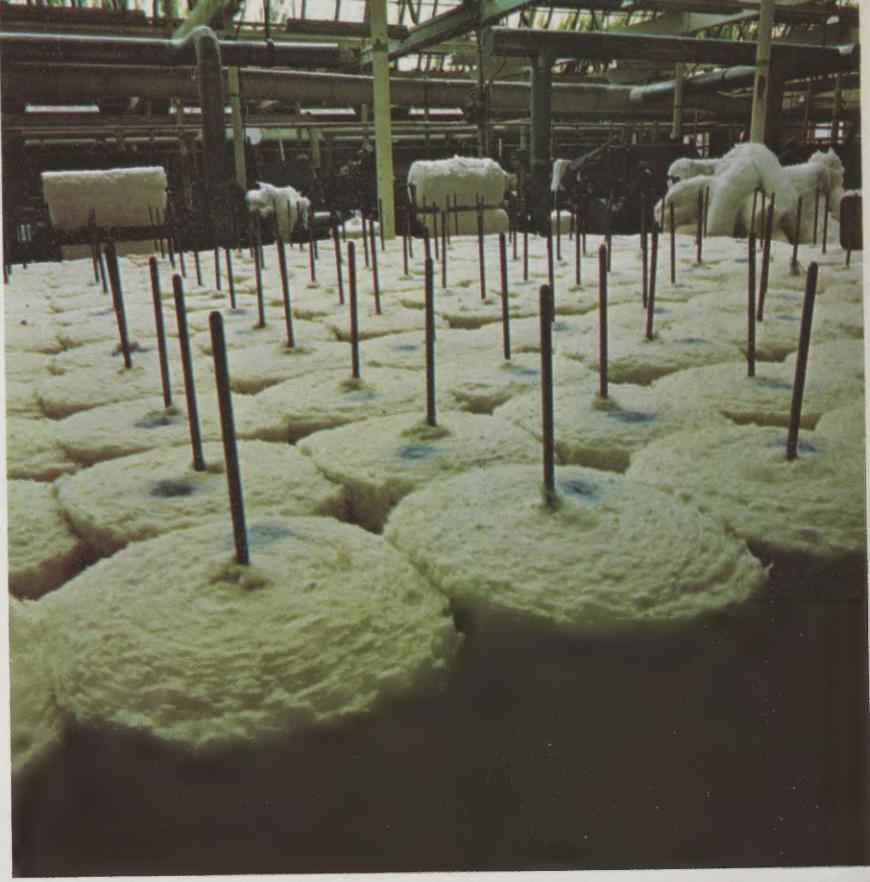


Textile Industry

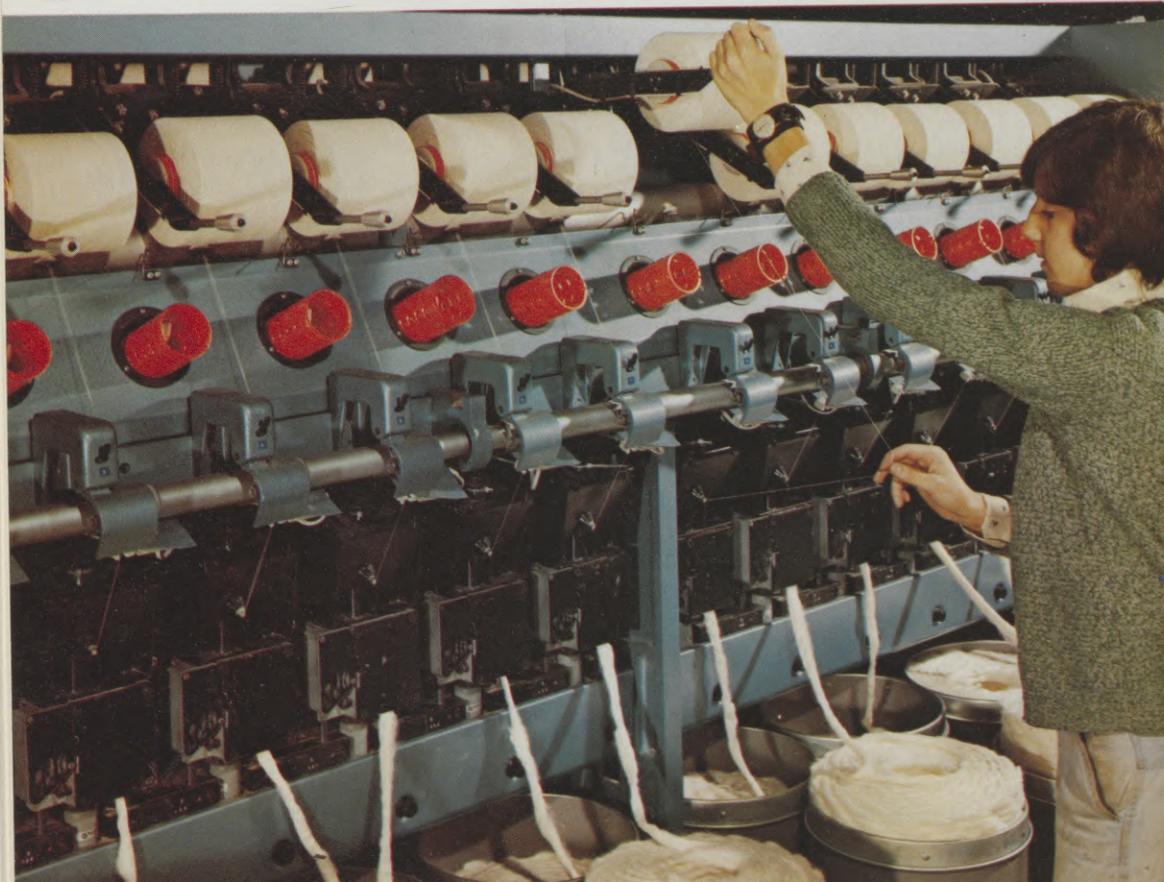
The Shirley Institute, Manchester, carries out research for the industry.

Textile Industry

Raw cotton.



A roto spinning frame.





Weaving polypropylene fabric on looms in a former jute factory at Dundee, Scotland.

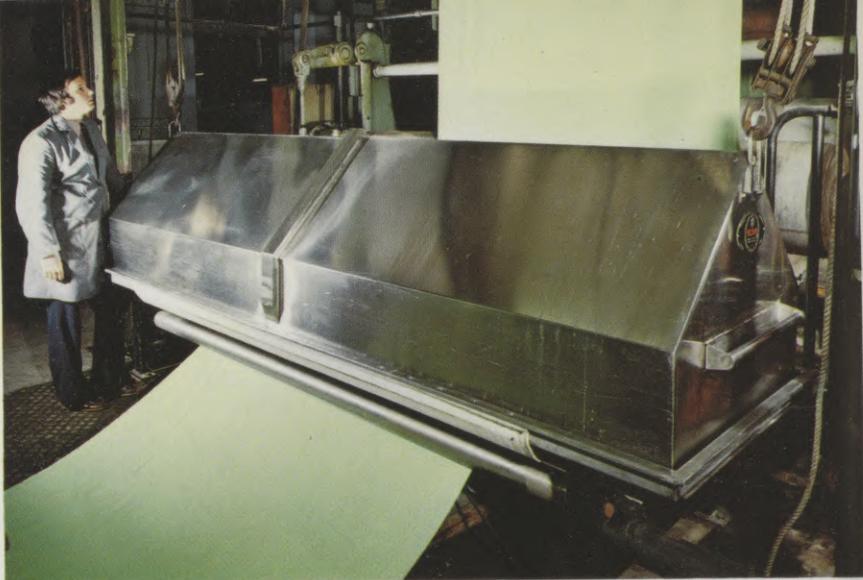


Manufacturing top quality woollen cloth at Langholm, Scotland.

Textile Industry

Proban-X curing unit for flame-retardant textile finishes.

Many easy-care fabrics are produced for domestic use.



approximately 14.7 lb (7 kg) a head in 1975. Home production provided about 83 per cent of supplies.

Sea Fish Processing

Processing and packaging of fish are the subject of continuing research and development. The growth of quick-frozen fish production has radically altered the structure of the industry. With the increase in quick-freezing (which now processes just over a quarter of all white fish landings), new export outlets have opened up for white fish, which account for over 60 per cent of the total exports of fish and fish preparations. Experiments are being carried out in the catching and processing, for human consumption and fish meal, of previously under-exploited species of fish of which large stocks are known to exist in the sea adjacent to the British Isles.

A valuable by-product of the industry is the manufacture of fish meal for animal food and, to a much lesser extent, for fertilisers. Home production of white fish meal and herring meal, including other pelagic fish, in 1975 was 92,700 tonnes.

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 exclusive fishery limits. Within the limits 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, where salmon fishing is a private right, the main commercial methods are fixed nets on the coast outside estuaries and sweep netting within estuaries and in rivers. Water authority licences are required for the limited amount of estuary and river netting carried out in England and Wales. In England and Wales the landed value of the salmon catch in 1975 was approximately £400,000, in Scotland it amounted to about £2.7 million and in Northern Ireland to some £288,000. In Northern Ireland, eels worth £980,000 were captured in 1975 by long lines and by eel nets placed in river weirs.

Distribution System

The principal method of distribution is through wholesalers, located at the ports, who buy fish at the auctions and sell to inland wholesalers as well as directly to retail outlets; the port wholesalers prepare the fish for onward shipment. Fish lorries, including insulated and refrigerated vehicles, transport the catch daily from the ports to inland centres, although rail transport is still used from some ports. The principal inland wholesale distributing centre for fish is Billingsgate Market in London, which handles about 180 tonnes a day, but other large cities also have central fish markets. Trawler-owning companies have entered into the marketing and distributive system. This process has been encouraged by the growing popularity of quick-frozen consumer packs.

Promotion and Regulation of the Industry

The government departments mainly responsible for the administration of legislation concerning the fishing industry are the Ministry of Agriculture, Fisheries and Food, the Department of Agriculture and Fisheries for Scotland 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. Research is carried out by the fisheries departments.

Common Fisheries Policy

From February 1973 the provisions of the Common Fisheries Policy of the European Community, based on the establishment of a common organisation of the market and a common structural policy, have applied in Britain. 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 third countries. The responsibility for market organisation is placed largely in the hands of the industry itself through producers' organisations established on the initiative of the industry. Tariff adjustments for intra-Community trade in fish and trade with third countries are following the general agricultural timetable (see p. 286).

The common structural policy covers measures aimed at promoting the harmonious and balanced development of the fishing industry and the rational exploitation of resources. It covers access to waters under the jurisdiction of member states, conservation in coastal waters and common measures for the financing of the improvement of the structure of the fishing industry and the provision of an equitable standard of living for those engaged in it (see p. 293).

The Herring Industry Board

The Herring Industry Board was set up to reorganise, develop and regulate the herring industry and consists of a chairman and two other members, all part-time and independent of the industry, who are appointed jointly by the Minister of Agriculture, Fisheries and Food, and the Secretaries of State for Scotland, Wales and Northern Ireland. The board, whose activities are financed partly by levies and licence fees and partly by government grants and loans, is advised by the Herring Industry Advisory Council, which represents all sections of the industry and consumers.

The functions of the board include the promotion of sales of herring, both at home and abroad, and the application of the benefits of technical progress to the industry including the adoption of new methods of catching, processing and distribution. 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. Fishermen may also obtain loans from the board towards the purchase of second-hand vessels under 80 feet (about 24.5 metres) in length and towards the cost of new nets and gear. Up to 31st March 1976 about £5.8 million in loans and £7.5 million in grants had been approved.

The White Fish Authority

The function of the White Fish Authority is to reorganise, develop and regulate the white fish industry, and that of its Committee for Scotland and Northern Ireland is to advise the authority about the exercise and performance of its functions in Scotland and Northern Ireland. The authority is composed of a chairman and six members, and the Scottish and Northern Ireland Committee of five members and a chairman who is a member of the authority; membership is by appropriate ministerial appointment. The White Fish Industry Advisory Council, which represents the various interests of the fishing industry, advises the authority about the exercise and performance of its functions.

The White Fish Authority administers government grant and loan schemes for the purchase of new fishing vessels and engines and the improvement of existing vessels. It also administers loans to processors, co-operatives, etc., for the acquisition, reconditioning or improvement of facilities. Up to 31st March 1976 about £45 million in loans and £55 million in grants had been approved. Its other activities are financed by levies on first-hand sales of most white fish, and a government grant towards research and development. In

1973 the Herring Industry Board and White Fish Authority formed a unified administration for the expected development of fisheries administration under the Common Fisheries Policy.

FORESTRY

The estimated total area of woodland in Great Britain is 1.98 million hectares (4.89 million acres), or about 8.7 per cent of the total land area; 46 per cent of the area is in England, 43 per cent in Scotland, the remainder in Wales.

The area of productive forest managed by the Forestry Commission, at 0.83 million hectares (2 million acres) constitutes 49 per cent of this category. The annual rate of productive forest expansion is currently about 18,000 hectares (44,000 acres) by the commission mainly in Scotland, and some 10,000 hectares (25,000 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. The major species used are Sitka spruce, Lodgepole pine, Scots pine, Corsican pine and larches. In the older woodlands and taking the country as a whole, the most common coniferous trees are Scots pine, Sitka spruce, Norway spruce and the larches; among the broadleaved, beech and oak occur widely.

Total employment in state and private forests was estimated at 22,000 in 1975 and a further 11,000 people were engaged in the transport and milling of home-grown timber.

Except for the period of the two world wars, when much over-felling took place, home woodlands have until recent years made only a limited contribution to the nation's consumption of wood and wood products, as only some 30 per cent of the commission's woodlands are yet in production. Britain imports more than 90 per cent of its needs, the total import cost of wood and wood products including pulp and paper being £1,400 million in 1975.

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 commission consists of a part-time chairman, a full-time director general, three full-time executive commissioners and five part-time commissioners. The commissioners comply with directions given by the forestry ministers, who are the Minister of Agriculture, Fisheries and Food and the Secretaries of State for Scotland and Wales. Northern Ireland has its own separate organisation (see p. 299). Since 1974 the main objective of forestry in Great Britain, timber production, has explicitly taken account of amenity, environmental and employment criteria.

The commission's total estate covers some 1.23 million hectares (3.04 million acres) and includes 0.91 million hectares (2.25 million acres) of forest land, of which 0.83 million hectares (2 million acres) are under trees in 250 forests distributed throughout England, Scotland and Wales. All these forests are covered by management plans which provide for such work as planting, road construction, thinning, fire protection and timber production, facilities for public recreation, wildlife conservation and the landscaping of plantations.

Much of the Forestry Commission's new planting in Scotland is in the Highland counties, where poorer types of land, such as sour, peaty soil which is unsuitable for agricultural purposes, are used for tree planting after deep ploughing and the application of fertiliser.

As more of its coniferous woods reach the production stage the commission, as managers of the National Forestry Enterprise, has assumed an increasingly

important role as a timber seller and has encouraged the setting up of some 20 major new timber-using industries since the mid-1960s.

Production of felled and thinned timber from commission woodlands amounted to 1.54 million cubic metres in 1975-76. Some of this produce is meeting traditional requirements of the coal mines but much is taken by the paper pulp industry, by sawmills and by factories established to make chipboard, fibreboard and wood wool.

Finance

The Forestry Fund was constituted under the 1919 Forestry Act; from it is paid all the expenditure of the Forestry Commissioners and into it are paid amounts voted annually by Parliament, together with the commission's receipts from sales of produce, rentals and other sources. In the period ended 31st March 1976 drawings from funds voted by Parliament amounted to £26.9 million, and receipts were £23.9 million.

Private Forestry

Privately-owned woods comprise 57 per cent of the total forest area in Great Britain and contain most of the mature and semi-mature timber. The size of woodlands in individual ownership ranges from a few hectares to several thousand hectares and about half of the private woodland area is in ownerships of under 100 hectares (250 acres) in extent.

The effective management of private woodlands is encouraged by the provision of grants. In 1974 a single woodlands dedication scheme replaced the three earlier schemes. Under the new arrangements once-for-all planting grants, based on area, are made available, in return for which owners accept a continuing obligation to manage their woodlands in accordance with sound forestry practice. There are premium rates of grant for planting hardwoods. The Forestry Commission consults with the agricultural departments and local planning authorities before administering grant aid for private forestry. Woodland owners are represented, in their relations with the Forestry Commission, by the Forestry Committee of Great Britain, which co-ordinates the work of the Timber Growers' Organisation (for owners in England and Wales) and the Scottish Woodland Owners' Association.

Advisory Bodies

Under the Forestry Act 1967, the Forestry Commissioners have set up for Great Britain the Home Grown Timber Advisory Committee (HGTAC) to advise on certain statutory functions, including promoting the interests of forestry and the production and supply of timber. The HGTAC includes representatives of associations of woodland owners, timber merchants, processors, and other major timber users and the trade unions, under an independent chairman. It maintains a technical sub-committee to advise it on subjects such as harvesting, transport and utilisation of home-grown timber.

The Forestry Commissioners also maintain National Committees for England, Scotland and Wales, which act in an advisory capacity, particularly on the social, recreational and amenity aspects of the commissioners' activities and relationships with other land users. The commissioners also maintain a regional advisory committee for each conservancy, whose members represent local amenity and planning interests as well as the forestry industry, and, because of its special nature, a consultative panel for the New Forest.

Forestry Education and Research

Forestry education is the responsibility of the education departments. Degree courses in forestry and associated studies are provided at four universities (Aberdeen, Bangor, Edinburgh and Oxford) and supervisory level courses are run at Newton Rigg, near Penrith in Cumbria.

The Forestry Training Council, whose membership is representative of forestry employers (both commission and private) and the trade unions, the education services, the forestry societies and the relevant industrial training boards, makes recommendations to the industry for meeting requirements for training and associated further education, and encourages co-operation at all levels between the agencies and authorities concerned. The Furniture and Timber Industry Training Board is concerned with training for private-sector employees in the home timber trade.

Research at the commission's Southern Forest Research Station at Alice Holt Lodge in Surrey is largely concerned with lowland forests, landscaping and amenity problems, and with the study of hardwood trees. Work at the Northern Research Station at Roslin near Edinburgh is linked to the needs of forest management with special reference to upland forestry. Expenditure on research work in Great Britain amounted to £2.39 million in 1975-76. This sum included grants for special forestry research work to university departments and to various institutions, including the Commonwealth Forestry Institute at Oxford, which is also financed by the university, the Ministry of Overseas Development and overseas governments. Research into the qualities and uses of home-grown timber is carried out by Princes Risborough Laboratory, and also by grant-aided associations.

Forestry in Northern Ireland

The Department of Agriculture is the forest authority for Northern Ireland. It can acquire and manage land, and give financial and technical assistance to private planting. It has introduced measures for the protection of all woodlands against destruction by over-cutting, fire or depredation by animals.

The state forest area has grown steadily since the end of the second world war. Over 66,000 hectares (163,000 acres) have been acquired, of which over 48,000 hectares (119,000 acres) have been planted.

Financial provision is made by sums voted annually by Parliament and from receipts from forest produce and other sources. About 1,500 people are employed in the state forests. There are also about 14,500 hectares (36,000 acres) of privately-owned forests, and private planting is assisted by schemes for the supply of young trees from the department's nurseries at a low cost, by grants towards the cost of the establishment and maintenance of plantations and by free technical advice.

15 Transport and Communications

Transport and communications contribute over 9 per cent of the gross national product and are responsible for a rather higher proportion of the nation's gross domestic fixed capital formation. These activities employed some 1.5 million people in Great Britain in June 1975 and accounted for 7 per cent of the employed labour force. Of these, 446,000 employees were engaged in road passenger transport and road haulage contracting, 227,000 in railways, 439,000 in postal services and telecommunications, 72,000 in port and inland water transport, 87,000 in sea transport, 77,000 in air transport and 146,000 in other transport services and storage.

INLAND TRANSPORT

The passenger and freight traffic of Great Britain is carried mainly by road. However, rail, coastal shipping and, to a lesser extent, pipelines and inland waterways are important in carrying certain types of freight, particularly bulk goods. In 1975 about 66 per cent of freight, in terms of tonne-kilometres, travelled by road, 17 per cent by rail, 14 per cent by coastal shipping, and 3 per cent by pipeline and inland waterway.

Part of the inland transport system of Great Britain is publicly owned: the railways, most road passenger and some road haulage services, most of the inland waterways and some of the vessels on them. Road haulage is largely, and coastal shipping almost entirely, in the hands of private enterprise.

In the third quarter of 1975 there were 17.5 million vehicles licensed for use on the roads of Great Britain. Of these 13.7 million were motor cars, 1.8 million road goods vehicles, 1.2 million motor cycles, scooters and mopeds and 112,000 public road passenger vehicles (including taxis). Private ownership of cars has been growing rapidly for many years and the car is now the most popular form of travel within Great Britain.

Government Policy

The Government has undertaken a review of transport policy and in April 1976 published a comprehensive consultation document. In the light of comments, the Government will announce in 1977 its decisions on the future direction of transport policy.

ROADS

There are three main categories of road in Great Britain: trunk roads (including most motorways which cater for high-speed traffic) which carry most of the long-distance traffic; classified roads; and unclassified roads.

The primary purpose of the Government's road building programme in England is to complete a 3,100-mile (4,989-kilometre) strategic network of trunk roads which will link the major centres of industry and population and the ports. This will benefit industry, relieve towns and villages of heavy through traffic and help to reduce road accidents. About 2,000 miles (3,219 kilometres) of this network are in use and the remaining 1,100 miles (1,770 kilometres) should be completed by the mid-1980s. Priority in the pro-

gramme is being given to those schemes, such as by-passes of historic towns, which will bring major economic and environmental benefits. In Wales one of the Government's first priorities is to improve links between the main ports of south Wales. In Scotland the highest priority in the road programme is being given to oil-related road developments. The Government is generally opposed to the building of new urban motorways because of their environmental impact and high cost, although in exceptional circumstances their construction may be required.

In 1974 road traffic declined for the first time since 1957, primarily as a result of substantially higher fuel costs, after several years of growth averaging 5 per cent a year. Traffic recovered slightly in 1975, rising by 1.8 per cent to 241,182 million vehicle-kilometres, of which cars and taxis accounted for 80 per cent.

Road Mileage

In mid-1976 Great Britain had about 214,000 miles (344,400 kilometres) of public highway. There were 9,670 miles (15,562 kilometres) of trunk roads, of which 1,322 miles (2,128 kilometres) were motorways; 20,500 miles (32,992 kilometres) of principal roads, of which some 60 miles (97 kilometres) were motorways; and 183,830 miles (295,846 kilometres) of other roads.

In Northern Ireland in mid-1976 there were 14,430 miles (23,223 kilometres) of public roads comprising 395 miles (636 kilometres) of trunk roads, 1,033 miles (1,662 kilometres) of Class I roads, 1,760 miles (2,832 kilometres) of Class II roads, 2,938 miles (4,728 kilometres) of Class III roads and 8,304 miles (13,364 kilometres) of unclassified roads.

Motorways

At the end of March 1976 in England 1,185 miles (1,907 kilometres) of trunk motorways had been opened for traffic and construction had started on a further 84 miles (135 kilometres). There were some 55 miles (89 kilometres) of local authority motorway in use and a further 4 miles (6 kilometres) under construction. In Wales 27 miles (43 kilometres) of trunk motorway were in use and 30 miles (48 kilometres) under construction. In Scotland about 115 miles (185 kilometres) of trunk and local authority motorway had been opened and construction had started on a further 11 miles (18 kilometres). About 67 miles (108 kilometres) of motorway were in use in Northern Ireland. The motorway network in Britain is shown on the map at the end of the book.

Bridges and Tunnels

Modern bridges include the suspension bridge across the Firth of Forth and the Severn Bridge, both incorporating major advances in suspension bridge design, and a £10 million continuous steel box-girder bridge across the river Clyde at Erskine. A bridge across the river Humber, with a span of 4,626 feet (1,410 metres)—longer than any existing bridge span in the world—is to be completed in 1978.

Among major recent tunnel schemes has been the second Mersey crossing of which the first twin tunnel was opened in 1971 and the second in 1974. A second crossing of the Thames at Dartford, Kent, is under construction and should be completed in 1977.

Road Safety

Britain's road accident record is considerably better than that of many other countries, even though it has one of the highest densities of road traffic in the world. There has been a long-term decline in road casualties and a substantial fall in casualty rates. In 1975, 6,350 people were killed on the roads of Great Britain, about 77,000 seriously injured and 241,000 slightly injured.

Modern roads, designed for present-day traffic and segregating pedestrians

from vehicles, are safer than the roads they replace and surveys have shown they result in a marked fall in casualties. There are three classes of national speed limit: a general limit of 30 mph (48 km/h) in built-up areas; a limit of 70 mph (113 km/h) on motorways; and temporary fuel-saving limits of 60 mph (97 km/h) and 50 mph (80 km/h) on other non-motorway dual and single carriageway roads respectively. To meet local needs the urban limit can be raised and the other limits lowered on specific stretches of road. Other measures directed primarily towards road safety include the provision of pedestrian crossings and the system of road markings and traffic signs. A computer-controlled signalling system has been installed on most busy motorways to warn motorists of advisory speed limits in certain conditions and of lane closures.

The design of vehicles, their use on the roads, and the maintenance of their mechanical condition are controlled by regulations. The regulations are kept under constant review, and amended whenever necessary in the interests of safety or for control of pollution and noise. The Government intends to introduce a 'type approval' scheme under which the sale of cars first manufactured after the end of September 1977 and first licensed for use in Great Britain after 1st April 1978 will not be 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 eight 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 for driving are: 16 for driving invalid carriages and mopeds; 17 for passenger vehicles with nine or fewer seats (including that of the driver), motorcycles and goods vehicles not over 3.5 tonnes maximum 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, unless they have either held a full British licence or passed the driving test in the last ten years, are required to pass the 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 (except on a two-wheeled vehicle or in a one-seat vehicle) by a qualified driver. (Newly arrived residents of Britain may drive under their overseas driving licences for three months before becoming subject to these rules.) 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). Professional driving instructors must be approved by the Department of Transport. There are schemes for special licensing and testing of drivers of heavy goods vehicles and public service vehicles. The Driver and Vehicle Licensing Centre at Swansea, which began operating in 1973, will eventually deal with all licensing and registration of vehicles and drivers in Great Britain.

The Road Traffic Acts, which embody the law relating to road users, are enforced by the police and the courts. A person convicted of any of the 26 most serious offences is liable to be disqualified from driving for a period. The standard of conduct for all road users and a summary of the requirements of the law are set out in the *Highway Code*. A failure to observe the code does not render a person liable to criminal proceedings but may be taken into

account in such proceedings. The Road Safety Act 1967 made it an offence to drive with more than a prescribed level of alcohol in the blood, at present 80 milligrams of alcohol per 100 millilitres of blood. The Secretary of State for Transport proposes to introduce regulations for Great Britain requiring the wearing of seat belts where they are fitted in the front seats of cars or vans. It is estimated that compulsory wearing will save nearly 1,000 deaths and 11,000 serious injuries a year.

National campaigns to persuade people to take greater care on the roads are conducted by government departments and the Royal Society for the Prevention of Accidents with assistance from local authorities. In recent years major publicity campaigns have been undertaken to increase the wearing of seat belts and reduce pedestrian casualties.

Transport Planning in Towns

With the exception of trunk roads, which are the concern of the central Government, traffic is the responsibility of local authorities. Urban transport planning has involved the development of medium-term transport studies, which have been carried out or are in progress in many cities and towns in Great Britain. Following a study the local authority adopts a preferred strategy which provides the framework for more detailed short-term traffic management and public transport operational measures.

Several cities have abandoned extensive urban motorway schemes in favour of limiting the amount of traffic permitted to enter central areas and providing better public transport. Limited urban road improvements are continuing, but local authorities are relying on measures to improve traffic flow and road safety, and, in some cases, to assist the flow of certain types of vehicle, usually buses. Comprehensive traffic management schemes may include 'one-way' systems, improved traffic signal control and area traffic control systems, parking controls, pedestrian precincts and bus lanes. Following experiments on methods to control by computer a large number of traffic signals in an urban area, several local authorities are installing these systems. The first purpose-built automatic traffic control system for a whole city was opened in Leicester in 1974. In most town centres street parking is permitted for limited periods only; in London and many other towns schemes for payment at parking meters or residents' parking spaces are under the supervision of traffic wardens. In many big cities new shopping precincts are specially designed for pedestrians and motor traffic is excluded. Streets in many town centres have been converted wholly or partly to pedestrian use.

The Government's road programme (see p. 300) is designed so that eventually heavy goods vehicles will be able to avoid town centres and residential suburbs wherever possible. The Government is devising, in co-operation with local authorities, a system of lorry routes.

Research

Research on roads is carried out at the Department of Transport's Transport and Road Research Laboratory (TRRL). The laboratory provides technical and scientific advice and information to help in formulating, developing and implementing government policies relating to roads and transport, including their interaction with urban and regional planning. Work is concerned with planning, design, construction and maintenance of roads and structures such as bridges and tunnels; safe, efficient and convenient movement of people and goods, including road layout and transport networks, control of traffic flow, study of road accidents and methods of reducing their frequency and severity; assessment of existing and projected passenger or freight transport systems and investigation of technical developments and

their environmental effects. The TRRL employs over 1,000 people of whom about half are scientists and engineers.

Administration

In England the Secretary of State for Transport, in Scotland the Secretary of State for Scotland, and in Wales the Secretary of State for Wales are responsible for the administration of trunk motorways and other trunk roads, and the costs of their construction, improvement and maintenance are provided by central Government. Work on major trunk road schemes in England, including motorways, is controlled by regional road construction units, manned jointly by Department of Transport and county council staff. The highway authority for non-trunk roads in England and Wales is, in general, the county council in whose area the roads lie. Part of the block grant to the highway authorities towards transport expenditure (see p. 305) is attributable to their expenditure on the construction, improvement and maintenance of non-trunk roads. In Scotland the highway authority for non-trunk roads is the regional or islands council and the cost of maintenance and construction of these roads is eligible for grant under an extension of the rate support grant system.

In Northern Ireland the Northern Ireland Department of the Environment is responsible for public roads and bears the cost of maintenance and construction.

ROAD HAULAGE

There are some 140,000 operators in the road haulage industry. Many are small firms, the average size of a vehicle fleet being only about four. Most of the industry is privately owned, but the biggest operator in Great Britain is the National Freight Corporation (NFC), a public corporation established under the Transport Act 1968 to operate road and intermodal freight services. Its turnover amounted to £291 million in 1975 and at the end of 1975 it had 44,600 employees and owned or leased 22,400 vehicles, 18,100 trailers and 12,300 containers and demountable bodies. The Government's policy is to extend public ownership in the road haulage industry. Public haulage (private road hauliers and the NFC carrying other firms' goods) accounts for 64 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

Under the Transport Act 1968 those operating vehicles of over 3½ tons 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 hours worked by drivers. It may also be necessary to demonstrate adequate financial resources for compliance with these conditions. Over 1 million goods vehicles not exceeding 3½ tons gross laden weight are exempt from operators' licensing.

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. International road haulage is governed mainly by bilateral agreements, concluded with 22 other European countries, which authorise British road hauliers to carry goods to or through these countries. Permits are required in some cases, in most of which the number is limited to a quota negotiated annually. Within the European Community there is also a Community quota which authorises holders of a limited number of permits to carry out hire and reward operations between any two member countries.

PUBLIC PASSENGER TRANSPORT

Public road passenger transport in Britain is provided mainly by publicly owned operators. In the public sector in Great Britain 25,400 vehicles are operated by the National Bus Company and the Scottish Transport Group, 11,100 by the seven passenger transport executives, 6,900 by the London Transport Executive and 6,200 by other local authority undertakings. There are more than 5,600 privately owned undertakings (of which the majority have fewer than five vehicles) comprising some 27,800 vehicles; only a small proportion of these operators are concerned with scheduled bus services.

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 in order to secure proper co-ordination and to avoid unnecessary competition; to this end they may settle routes, timetables and fares.

Grants

A new system of grants for local transport came into operation on 1st April 1975 in England and Wales, replacing a number of grants previously paid on specific services at varying rates. A block grant is paid to each county council on expenditure on local transport services above a certain level. Below this level transport expenditure qualifies for the normal rate support grant. The Department of the Environment and the Welsh Office distribute the grants following the annual submission by county councils and the Greater London Council of their five-year transport plans. In Scotland the new grant system, which came into operation on 16th May 1975, is based on an extension of the rate support grant.

In addition, grants at the rate of 50 per cent are available towards the cost of new buses complying with specifications approved by the Department of Transport. The Government also makes grants to offset the duty charged on fuel used on local bus services.

Publicly Owned Bodies

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. At the end of 1975 it owned some 20,500 vehicles and employed 70,500 people. In 1975 passenger journeys on the company's buses amounted to 2,040 million, gross revenue was £301 million and the company made a loss of £19 million.

The Scottish Transport Group (with 4,300 vehicles) operates all the main bus services in Scotland outside the major cities. It also runs shipping services to the main islands off the west coast of Scotland; modernised vehicle ferries have been introduced on many of these services.

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 300 and 900 vehicles respectively.

Passenger Transport Authorities

In the metropolitan counties 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), controls and co-ordinates different forms of transport, as well as being responsible for land use policy and transport matters in general. In Scotland the Strathclyde Regional Council is the PTA for Greater Glasgow

although the passenger transport area does not cover all of the region. The PTAs are responsible for policy as a whole, and appoint professional passenger transport executives (PTEs) to be responsible for day-to-day management and operations. The PTEs operate bus services in their areas and are responsible for reaching agreements with the British Railways Board concerning the provision of such rail services as are considered necessary by the PTAs. Several similar agreements have been reached with other bodies, including National Bus Company subsidiaries.

London Transport

The Greater London Council (GLC) is the transport planning authority for London as a whole and is responsible for the central bus and Underground rail services, managed and operated by the London Transport Executive which is appointed by the GLC. The buses serving areas around London and the long-distance Green Line coach services are run by London Country Bus Services Ltd., a subsidiary of the National Bus Company. Some 11,700 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 16,000 licensed cab drivers. In addition, numerous car-hire firms are in operation.

The London Transport System

London Transport's railway network stretches 22 miles (35 kilometres) from north to south and 35 miles (56 kilometres) from east to west. In January 1976 the total length of the railway over which London Transport trains operated was 251 miles (404 kilometres), of which nearly 100 miles (161 kilometres) were underground. London Transport trains serve 278 stations and its buses travel over 1,739 miles (2,799 kilometres) of roads. To carry traffic over all this area London Transport owns 4,409 railway cars and 6,907 buses. The total staff employed is over 60,000.

London Transport is engaged on a 20-year modernisation programme for the Underground. Improvements planned include an extension of automatic ticket issue and control and the introduction of new signalling and train control techniques. Work is in progress on the construction of the first stage of the new Fleet line, which is projected to link north-west and central London, and on a scheme to extend the Piccadilly line to Heathrow airport—the section to Hatton Cross was opened in 1975 and the extension should be completed in 1977. Plans to improve bus services include the introduction of a limited network of services using continuous bus lanes.

Development

Improvements to public transport services are being undertaken in many areas of Britain to try to halt the substantial decline in the use of public transport 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. 'Dial-a-bus' services, which pick up passengers as a result of a telephone call to a central control point, are being evaluated in a number of areas; some of the largest and most advanced dial-a-bus projects in Europe are at Harlow (Essex), Solihull (West Midlands) and Sale (Greater Manchester). Many uneconomic bus services have been withdrawn, particularly in rural areas, leaving some villages without access to public transport; the Government intends to introduce a number of experimental services to assess ways of meeting the transport needs of rural communities.

Urban rail projects are proceeding in several areas. In Greater Glasgow

two major rail projects are being undertaken by the PTE to modernise the underground system and to reopen and electrify the central low-level line, the major part of the 'Clyderail' scheme which is designed to improve access to the centre of Glasgow and integrate rail services on the north and south banks of the Clyde. On Merseyside two complementary railway schemes, partly underground, are due to open in 1977. 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 1978 and the whole system, 34 miles (55 kilometres) long with 46 stations, should be in operation by the early 1980s. The project is the largest provincial urban transport scheme to have been prepared in Britain in the twentieth century.

RAILWAYS

The railways first came under government direction during the first world war, and afterwards some 130 private companies were amalgamated into four large regional groups under the Railways Act 1921. Following the second world war the Transport Act 1947 brought the railways in Great Britain under public ownership as a single enterprise. In 1963 the British Railways Board was set up with sole responsibility for managing railway affairs.

In 1973 the board and the Government completed a comprehensive review of railway policy. It was concluded that a railway network of roughly the present size and quality could be maintained only through continuing and substantial financial support from the Government. Accordingly, since the beginning of 1975 the board has been obliged by the Government to operate the rail passenger network; it is compensated by the Government for the net annual loss.

Operations

In 1975 the railway network operated by British Rail amounted to 11,258 route-miles (18,118 kilometres) of which 2,271 miles (3,655 kilometres) were electrified. A total of 715 million passenger journeys was made and 176 million tonnes of freight traffic carried by rail. Total railway receipts amounted to £774 million (excluding financial support for current operations of £409.6 million, which included £324.1 million in respect of public service obligations for the passenger network and a special grant of £66.3 million to meet the deficit on freight and parcels). The board made a loss of £60.8 million following interest payments of £32.5 million. Capital expenditure amounted to about £110 million. At the end of 1975 it employed 251,600 people and operated 3,508 diesel and 352 electric locomotives, 3,412 diesel and 7,225 electric passenger multiple-unit vehicles, 6,826 passenger carriages and a fleet of 216,400 freight vehicles.

Subsidiaries

British Rail Engineering Ltd. has 13 main workshops, employing about 35,300 people, mostly on the repair and construction of British locomotives, rolling stock and containers, although some manufacturing work is done for export. The Railway Technical Centre at Derby employs about 2,500 people and has a £5 million research and development programme. British Transport Hotels Ltd. runs 29 hotels and controls Travellers-Fare, responsible for catering facilities on trains and at stations. British Rail's Shipping and International Services division, which carries more sea-going passengers than any other fleet in the world, operated a fleet of 43 vessels in 1975, providing passenger and freight services on most of the important routes between Britain and the Irish Republic and on the short-sea routes to the continent of Europe, as well as on some domestic routes. British Rail Hover-

MAIN RAILWAY PASSENGER ROUTES

Inter-City services

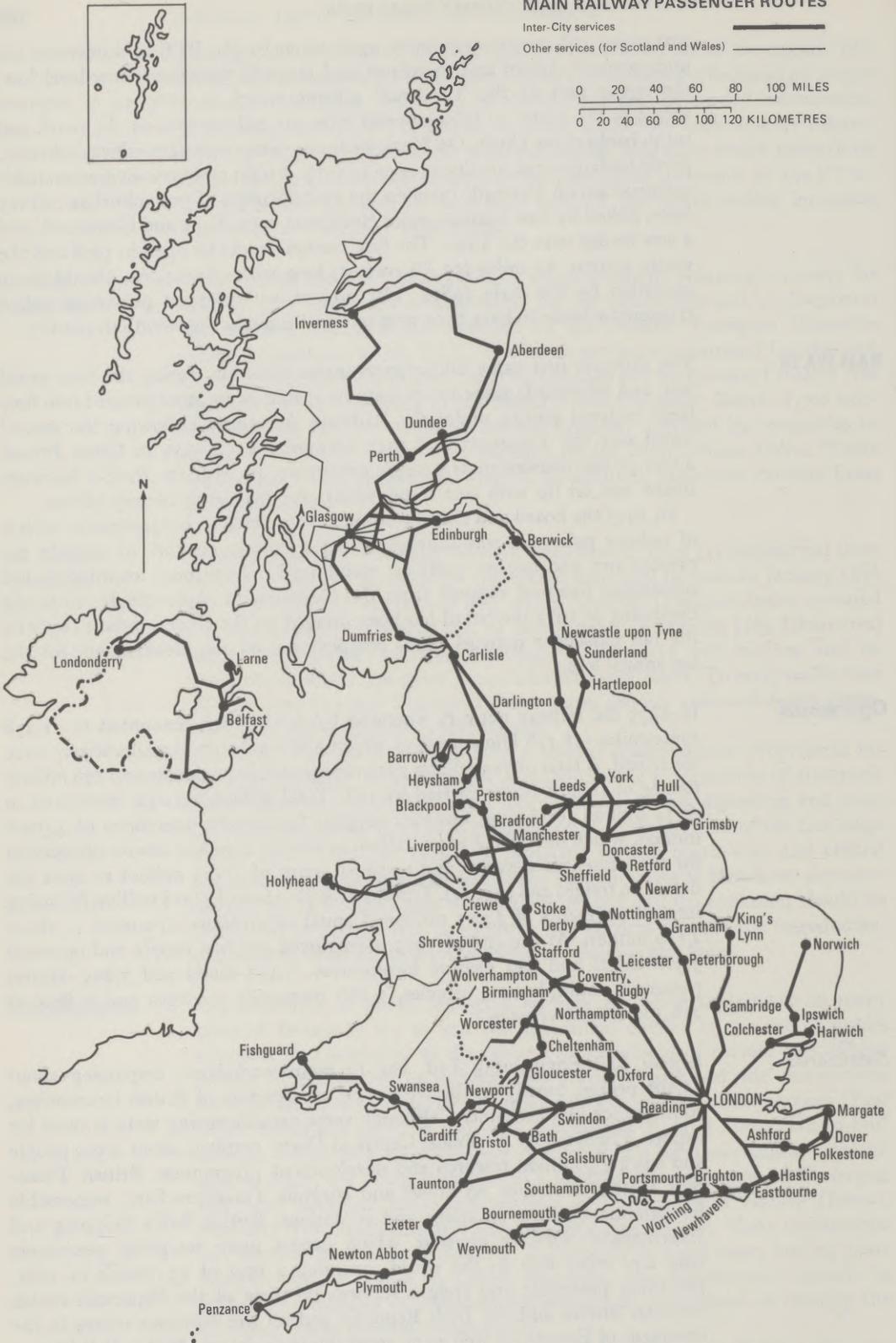


Other services (for Scotland and Wales)



0 20 40 60 80 100 MILES

0 20 40 60 80 100 120 KILOMETRES



craft Ltd. runs hovercraft services (see p. 317). Transportation Systems and Market Research Ltd. provides consultancy services overseas on railway and associated operations.

Development

In recent years the most important developments have been the replacement of steam by diesel and electric traction completed in 1968; the improvement of inter-city passenger services with the emphasis on speed, reliability, comfort and better train connections; and an increase in freight trainload traffic, allowing higher speeds, and greater mechanisation in the carrying of coal, other bulk commodities and containers. The standards of track and signalling are being raised to allow faster running speeds and improved operating efficiency.

Passenger Services

The two main functions of the passenger network are the provision of the high-speed inter-city network, linking the main centres of Great Britain, and of commuter services in and around the large conurbations, especially London and the South East. The board's plans for inter-city services include a programme to replace old passenger coaches by new air-conditioned stock. Some 59 'high speed trains' are on order; the prototype entered regular passenger service in 1975 and the first of the remainder will begin carrying passengers in the Western Region in October 1976. They will operate at a sustained speed of 125 mph (201 km/h). Higher speeds will follow the introduction into service of the advanced passenger train (APT) capable of speeds up to 155 mph (250 km/h). Development work, which has included the construction of an experimental APT, has involved fundamental research into the guidance and stability of railway vehicles which will enable substantially higher speeds to be attained on existing track. Three prototype electric APTs are being built and will enter service between London and Glasgow in 1978, covering the 400-mile (644-kilometre) journey in four hours. The electrification of this route was the largest capital investment project ever undertaken by the British Railways Board and included station reconstruction, bridgeworks, new colour-light signalling and new rolling stock. Train speeds of 100 mph (161 km/h) are now common on most of British Rail's main lines.

Motorail services (carrying both passengers and their cars) have an annual capacity of over 100,000 cars on 50 services.

The board's proposals for commuter services include the development of new multiple-unit trains to replace old stock, while several urban railway projects are in progress (see p. 307).

Freight

The most important freight commodities handled in 1975 were coal and coke (97 million tonnes) and iron and steel (26 million tonnes). In recent years attention has been directed towards other traffic, especially petroleum products, cars and motor components, refuse, roadstone and construction materials, and containers.

The efficiency of freight operations is being improved as new types of wagon are introduced with larger capacities and capable of higher speeds; a network of regular high-speed freight services using these new wagons is being established. Freight traffic is being concentrated at fewer and better equipped and sited marshalling yards and terminals. The installation of a computer-based total operations processing system, allowing continuous monitoring of all consignments and freight train and wagon movements in Great Britain, has reduced operating and maintenance costs by the more

intensive use of rolling stock and will enable British Rail to withdraw 20,000 obsolete freight vehicles. The board is concentrating on traffic particularly suitable for carriage by rail, especially long-distance and bulk trainload traffic, often between specialised company terminals. Long-term contracts are in operation for the carriage of cars, oil, china clay, milk, newspapers, grain, chemicals, coal, steel, refuse, and sand and gravel aggregates. The 'merry-go-round' system, whereby trains are loaded and discharged automatically while in motion, is being used increasingly where there are heavy flows of mineral traffic, such as the carriage of coal to power stations and iron ore to steelworks. Express container services are operated by Freightliners Ltd., a company jointly owned by the National Freight Corporation (see p. 304) and the British Railways Board (with 51 per cent and 49 per cent of the shares respectively).

Discussions initiated by the Government are in progress between many of Britain's largest firms and the British Railways Board on the potential for transferring freight to the railways.

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.

Railways 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 £10 million scheme to streamline the railway network in the Belfast area is in progress. The Belfast central line was re-opened early in 1976 following modernisation and rationalisation of stations. Delivery of the last of the new rolling stock to complete the scheme is expected in 1977.

INLAND WATERWAYS

In Great Britain there are about 3,000 miles (4,828 kilometres) of canal and river navigations, of which about 2,000 miles (3,219 kilometres) are controlled by the publicly owned British Waterways Board. A further 500 miles (805 kilometres) are managed by the regional water authorities and the remaining 500 miles (805 kilometres) are controlled by local authorities, independent commissioners, companies or charitable trusts. As part of the Government's proposals to reorganise the structure of the water industry (see p. 274), the British Waterways Board might be merged within a centralised structure to form the nucleus of a national navigation authority.

Inland waterways are important for land drainage and water supply and are popular for recreation (see p. 442). Among the most popular canal and river navigations are the river Thames (managed by the Thames Water Authority); the Norfolk Broads (managed by independent commissioners); and the Llangollen branch of the Shropshire Union Canal, the Oxford Canal, and the Leeds and Liverpool Canal (managed by the British Waterways Board).

In 1975 the turnover of the British Waterways Board amounted to £8.5 million. The board received government grants of £8 million in 1975, most of which were used to maintain its waterways to statutory standards. Some 340 miles (547 kilometres) of the board's waterways are commercial waterways, maintained for use by freight-carrying vessels, and about 1,100 miles (1,770 kilometres) are cruising waterways, maintained for use by pleasure

craft. The principal commercial waterways are the river navigations and broad canals in the Yorkshire-Humberside area. The board also operates docks, warehouses and inland freight terminals, and has a freight-carrying fleet, although most of the freight traffic on its waterways (4.2 million tonnes in 1975) is handled by independent carriers or by traders in their own craft. Limited improvements are being undertaken to cater for freight traffic. The British Waterways Board is operating on some of its commercial waterways a specially designed interlocking modular barge system.

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. The Government intends that all commercial ports and cargo-handling facilities should eventually be brought under public ownership and control; this would involve the establishment of a new National Ports Authority to exercise essential central controlling functions.

Ports run by nationalised undertakings represent over a quarter of total capacity, the majority, including Southampton, Hull, Immingham, Newport, Cardiff and Swansea, being owned by the British Transport Docks Board. In 1975 shipping arrivals and departures at the board's docks totalled 131 million net registered tons (including fishing vessels) and total cargo handled was 77.3 million tonnes. The board's revenue totalled £77.5 million and it achieved a net surplus of £1.7 million. The British Railways Board controls certain ports, which are largely used for its shipping services to the continent of Europe, Northern Ireland and the Irish Republic (for example, Folkestone, Holyhead, Heysham, Stranraer and Parkeston Quay at Harwich) while the British Waterways Board owns Sharpness (Gloucester) and Weston Point (Manchester).

The constitutions of public trust port authorities traditionally consisted of representatives of shippers, importers, exporters, shipping companies, local authorities and trade unions. However, recently a number of the major trust port authorities (such as the Port of London Authority, the Port of Tyne Authority, the Clyde Port Authority and the Forth Ports Authority) have been reconstituted and the reconstitution of some other port authorities is in progress. The main features are fewer members, a greater proportion of executive members and the appointment of non-executive members by the Government. Local authorities own about one-third of Britain's ports, including Bristol, Preston and Sunderland. 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 petroleum, china clay and paper pulp.

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 as a statutory body under the Harbours Act 1964, is financed 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 315 million tonnes of cargo a year pass through the ports of Great Britain. Coastal traffic accounts for over 90 million tonnes consisting mainly of petroleum and coal. Of some 175 million tonnes of imports from overseas, about 102 million tonnes consist of petroleum and petroleum products. Manufactured goods form about two-fifths of exports.

A large proportion of the general cargo traffic through British ports is handled by unitised transport methods in containers and roll-on goods vehicles, which carried 29 million tonnes of goods in 1975. London, Felixstowe, Dover, Southampton and Hull all handled large amounts.

Principal Ports

London is Britain's largest port for non-fuel traffic. In 1975, 41 million tonnes of goods were handled, including 23 million tonnes of petroleum. Southampton is the chief port for ocean passenger traffic and the main trading port on the south coast. It has the advantages of deep water and double tides. Medway is an important port for petroleum and petroleum products. Some of the ports in the South East and East Anglia, particularly Dover, Felixstowe and Harwich, are growing rapidly with modern facilities especially for roll-on/roll-off and container traffic. Dover is Britain's leading port for passengers and roll-on/roll-off traffic.

Liverpool is a very important export outlet, especially to countries outside Europe and the Mediterranean. The inland port of Manchester, reached from the Mersey via the 36-mile (58-kilometre) Manchester Ship Canal, exports manufactured goods and chemicals.

The port of Tees and Hartlepool handles petroleum products, chemicals, iron and steel, and iron ore. The port of Tyne and some other north-east coast ports, such as Blyth and Sunderland, have an important outward trade in coal. Grimsby and Hull are Britain's two main fishing ports; with Immingham they also serve the industrial areas of northern England and the Midlands, especially in trade with Scandinavian and Baltic ports. Immingham handles imports of iron ore and crude oil and exports of coal and petroleum products.

Milford Haven, handling 45 million tonnes a year, is Britain's major oil port and now Britain's leading seaport in terms of tonnage handled. Much of the traffic through the other south Wales ports is connected with the local steel industry—imports of iron ore and exports of iron and steel, and tinplate.

In Scotland the principal port facilities serving the central industrial area are Greenock (handling particularly containers and raw sugar) and Glasgow (iron ore and grain) on the Clyde, and Grangemouth (containers and timber) and Leith (grain and whisky) on the Forth. The Clyde also has a major crude oil terminal at Finnart. Aberdeen is Britain's third largest fishing port.

Belfast is the principal port of Northern Ireland and with Larne handles the main traffic across the Irish Sea.

Tanker Terminals

Most of the oil tankers coming to Britain to discharge crude oil are berthed at special tanker terminals owned and operated by the oil companies to serve their own refineries. British ports offer the deepest water access in Northern Europe for fully laden tankers to pipe crude oil direct to refineries. Milford Haven can accommodate fully laden vessels of up to 275,000 deadweight tons on all tides at five private oil company terminals and Finnart on the Clyde will accept vessels of 325,000 deadweight tons. An offshore mooring monobuoy, where tankers discharge oil which is carried by pipeline to the shore, is in operation at Tetney Haven, off the mouth of the Humber, and a similar buoy has been installed at Amlwch (Gwynedd).

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. Britain's largest oil port is planned for Sullom Voe in Shetland, which is expected to become the biggest oil port in Europe by the 1980s. Other terminals, primarily for handling oil for export, are being provided on the Tees (where a £29 million marine terminal with eight jetties is being developed) and at Flotta in Orkney.

Development

Modernisation of the ports industry has been taking place in recent years, as a result both of the increase in Britain's trade, especially with other European countries, and of technological changes affecting sea-going traffic. The growing size of tankers and bulk carriers has necessitated more deep-water berths, while development of mechanical handling methods, packaging of general cargo, containers and 'roll-on/roll-off' services has created a demand for new types of port facilities.

A major development at Tilbury, Port of London, costing £30 million over a number of years, has provided 12 deep-water berths, four of them for container traffic, and a riverside grain terminal. A £16 million container terminal is to be built at Tilbury for completion in 1978. Another major scheme has been the construction of the £50 million Royal Seaforth dock complex at Liverpool which provides ten deep-water berths including four container berths, a grain terminal and refrigerated meat berth, and two timber berths. A new dock under construction at Bristol at a cost of some £37 million will provide six berths and have the largest entrance lock in Britain; it is due to open in late 1976. Deep-sea container facilities have also been constructed at Felixstowe, Greenock on the Clyde, Manchester and Southampton, where new facilities are being built to accommodate the container service to South Africa, due to start in 1977. At Hull a major extension of roll-on/roll-off facilities was completed in 1974. In Northern Ireland an expansion scheme at Warrenpoint, providing new container and roll-on/roll-off facilities, was completed in 1975. An £8 million terminal for cross-Channel hovercraft is to be built at Dover. Modern ore terminals have been built at Port Talbot, Redcar and Immingham and a £25 million terminal for handling iron ore and coal is being built at Hunterston on the Clyde. Construction of an £8 million terminal at Peterhead (Grampian), primarily to handle fuel oil for the power station which is under construction (see p. 266), began in 1976.

The exploration for, and production of, offshore oil and gas has led to several port developments, such as tanker terminals (see p. 312), mainly in Scotland. Supply bases for offshore vessels have been built at Leith, Dundee, Montrose, Aberdeen, Peterhead, Lyness (Orkney), and Lerwick and Sandwick in Shetland. Three new harbour authorities have been established, partly to provide for the development of facilities for offshore activities, for the Cromarty Firth, Orkney and Shetland.

Labour

About 65,000 people are employed in Britain's ports industry; of these, 32,000 dockers responsible for the physical and mechanical handling of cargo, were registered with the National Dock Labour Board at the end of 1975. The system of casual labour common among dock workers in the past has gradually been superseded. In 1947 the National Dock Labour Board was established to administer the Dock Workers Employment Scheme under which registered dock workers received a minimum wage for attendance even when no work was available. In 1967 each registered dock worker was placed in employment on a permanent basis with an employer licensed by the port authority, under the provisions of the Docks and Harbours Act 1966.

SHIPPING

Of the world's active sea-going tonnage of 100 gross tons¹ and over, nearly 10 per cent is registered in Britain, making the British merchant fleet, at 33·2 million gross tons, the third largest in active employment after those of Liberia and Japan. The oil tanker fleet, at 16·1 million gross tons, is the world's third largest, and the ore and bulk carrier fleet, at 8·1 million gross tons, the fourth largest. The British fleet has grown steadily, particularly over the last few years; since 1970 it has increased by 28 per cent, much of the additional tonnage consisting of new purpose-built container, tanker and bulk carrier vessels.

Role of the Government

The Department of Trade is the government department responsible for most matters connected with merchant shipping. Under the Merchant Shipping Acts it administers many regulations for marine safety and welfare, for instance: certifying the load-line (or Plimsoll line) that shows that a ship is not overloaded; ensuring that standards of safety are observed in ship construction; ensuring the provision of adequate life-saving, fire-fighting and radio equipment; and dealing 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. In the offices of the Registrar General of Shipping and Seamen, at Cardiff, a record of all British ships is kept.

THE MERCHANT FLEET

In July 1975, 30·4 million gross tons of trading vessels of 100 gross tons and over were both owned and registered in Britain.² These ships are usually employed as follows: 5·2 million gross tons as foreign-going passenger and cargo liners; 8·4 million gross tons as foreign-going tramps; 16 million gross tons as foreign-going tankers; and 754,000 gross tons in coasting and trade with ports between the Elbe and Brest (home trades). Rapid 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, with generally lower building costs per ton. Labour-saving devices and faster turn-round facilities are helping to combat rising costs, while shipowners are paying greater attention to operating vessels at speeds of optimum fuel efficiency following increased fuel costs.

The tendency to greater average size has been most marked in tankers, bulk carriers and container vessels. Tanker size has increased from a maximum of about 20,000 deadweight tons in the early 1950s to nearly 500,000 deadweight tons for the largest ocean-going tankers. Several combined carriers of over 200,000 deadweight tons are now in operation. The largest modern container ships of up to 60,000 gross tons have a capacity of 2,800 containers of 20-foot (6-metre) equivalent units. The growing use of container and roll-on/roll-off vessels has resulted in the safer and quicker carriage of a wide range of goods.

Lloyd's Register of Shipping surveys and classifies ships with particular regard to their safety and operational efficiency.

¹ 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.

² The remaining tonnage included fishing vessels, tugs, river and estuary craft, Ministry of Defence vessels (mostly tankers) not usually engaged in the commercial carriage of cargo, and shipping registered in Britain but owned in other Commonwealth countries.

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 part of their normal commercial operations, one example being British Rail (see p. 308). About two-thirds 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. 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, for the most part, owners of fishing vessels) is the General Council of British Shipping.

TRAFFIC

Almost all Britain's overseas trade by weight, nearly four-fifths by value, is carried by sea. Ships registered in Britain carry 34 per cent by weight, 45 per cent by value, of foreign seaborne trade. Tanker cargoes, mostly imports of crude oil, account for over half seaborne foreign trade by weight but less than 15 per cent by value, and foodstuffs and manufactured goods account for over four-fifths by value.

The proportion of passengers travelling to or from Britain by sea is about one-third, compared with about one-half in the early 1960s. Sea traffic between Britain and the continent of Europe has increased by over 160 per cent since the early 1960s, reflecting the growing popularity of motoring holidays, while the number travelling on routes between Britain and countries outside Europe and the Mediterranean has fallen by four-fifths, with the growing competition of air travel.

Conferences

British shipping companies operating liners 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 or passenger fares from each port of departure. Each conference meets from time to time to review and revise existing rates and practices. There are about 100 conferences dealing with trade to and from Britain.

EMPLOYMENT OF SEAFARERS

The Department of Trade holds examinations for, and issues certificates of competency to, ships' officers as master, first mate and second mate of foreign-going ships, or master and mate of home trade passenger ships and as first-class engineer and second-class engineer. Officers may not normally serve on board ships in these grades unless they hold the appropriate, or a higher, certificate.

Radio officers are required to hold certificates of competency in radio-telegraphy issued by the Home Office on the results of an open examination.

A seaman may not be rated an efficient deck hand unless he holds a certificate issued by the Department of Trade. To qualify for this certificate he must be not less than 18 years old, have not less than one year's sea service and pass a Department of Trade examination. To become rated as able seaman a seaman must have served at least three years at sea on deck. Seamen qualify by seniority and efficiency for promotion to the rating of petty officer.

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 School at Gravesend, Kent, the world's largest ratings' establishment, which trains 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 the majority of 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. Most officers and ratings are registered with the Merchant Navy Establishment Administration. Minimum wages and holidays with pay are guaranteed for both officers and ratings. The Merchant Navy Established Service Scheme, introduced in 1947, removed a great deal of the uncertainty formerly associated with a seafaring life. Under the latest 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 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 Coastguard Service, and certain administrative functions concerning lighthouses and pilotage. The department makes regulations to ensure safety of navigation at sea and conducts inquiries into shipping casualties and accidents.

Sea Rescue

The Coastguard Service co-ordinates search and rescue measures for vessels in distress off the coasts of Britain, and gives direct assistance where appropriate. There are some 600 regular coastguards and about 8,000 part-time auxiliary coastguards. Constant watch is maintained all the year round at certain main stations and where necessary at a number of others. During 1975 life-saving action was taken on 4,628 occasions.

The Coastguard Service calls upon shipping, the lifeboats of the Royal National Life-boat Institution, and Service aircraft to assist as necessary. It can also call upon the services of a long-range civilian helicopter based at Aberdeen. The Royal National Life-boat Institution is supported entirely by voluntary contributions, and depends for its operation on voluntary workers. Lifeboats were launched 2,876 times in 1975 and rescued 1,038 people. In 1975 improvements in Britain's search and rescue organisation, including a reorganisation of the Coastguard Service, were begun to meet the growing number of incidents.

Lighthouses

The general lighthouse authority for England and Wales, the Channel Islands and Gibraltar is the Corporation of Trinity House, which received its first Royal Charter in the sixteenth century and 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 180 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 45 pilotage authorities for the 85 pilotage districts and over 1,600 licensed pilots. Trinity House is the chief pilotage authority, licensing some 700 pilots in 41 districts in England and Wales, including London, Southampton and Milford Haven. In some cases the harbour authority or local council is the pilotage authority. The Government intends to introduce legislation to modernise pilotage operations which will involve the establishment of a central pilotage board and the extension of compulsory pilotage to nearly all port areas.

Traffic Control

The first traffic separation scheme adopted by the Inter-Governmental Maritime Consultative Organisation (IMCO—a United Nations agency with headquarters in London) was introduced in the Dover Strait, one of the world's most congested seaways, on a voluntary basis in 1967. It was revised, extended and made mandatory for British shipping in 1972, and now stretches from the Greenwich meridian in the Channel as far as other separation schemes operating in the southern North Sea. It consists of inshore traffic zones on each side of the Channel for coastal shipping, and main traffic lanes in the centre. Britain and France operate radar surveillance services which keep watch on ships not conforming to the traffic separation scheme and 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 improving safety in the English 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 around the coasts of Britain since the mid-1960s. Services are concentrated on cross-Channel routes and on routes across the Solent between Southampton and the Isle of Wight. Two operators provide cross-Channel services: British Rail Hovercraft Ltd., a subsidiary of the British Railways Board, with routes between Dover and Boulogne, and Dover and Calais; and Hoverlloyd Ltd., which has a purpose-built hoverport at Pegwell Bay for its car and passenger ferries between Ramsgate and Calais. A hovercraft crossing takes about one-third of the time taken by ships and hovercraft have accordingly gained nearly one-third of the short-sea traffic in this area. Several hovercraft have had or are to have their capacity increased to meet the growing demand.

CIVIL AVIATION

Airline services are operated by British Airways and by a number of independent airlines. In 1924 four small British companies merged to form Imperial Airways Limited and this company pioneered the commercial development of intercontinental air routes. The two public corporations, the British Overseas Airways Corporation (which took over the undertakings of Imperial Airways Limited and British Airways Limited in 1940) and British European Airways (established under the Civil Aviation Act 1946), became divisions of British Airways under the Civil Aviation Act 1971 which created the Civil Aviation Authority (CAA) and the British Airways Board (BAB). The new bodies became fully operative in 1972.

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 the International Civil Aviation Organisation and other international aviation bodies), airports policy, amenity matters such as aircraft noise, aviation security policy and investigation of accidents. The Secretary of State appoints the chairman and other members of the CAA, and issues a written guidance on the general policies to be followed, which requires approval of both Houses of Parliament.

Civil Aviation Authority

The Civil Aviation Authority is an independent statutory body, responsible for the economic, technical and operational regulation of the industry, the provision by the National Air Traffic Services of air navigation services and the aerodrome navigation services at certain British airports and the operation of eight aerodromes in Scotland. It issues licences and certificates to airlines, aircraft, aerodromes and personnel, including pilots, air traffic controllers and maintenance engineers.

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 its deficit on revenue account, assessed annually in advance; it amounted to £60.5 million in 1975-76.

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 determines categories of licence, content of applications, and conditions and tariff provisions of licences. With certain exceptions it is required to license only one British airline to provide scheduled services on an international route. British Airways is the preferred airline for all long-haul routes other than those to the areas in the 'sphere of interest' of British Caledonian Airways, as defined in the policy guidance of February 1976. In considering applications for licences to provide short-haul international or domestic services, the CAA is required to take account of the effects of the introduction of a new service on the operation of scheduled services by British airlines, particularly the possible diversion of traffic, and, in general, to license only one British airline on an individual short-haul international route, except on a route to and from London. In issuing licences the CAA must also consider the applicant's financial resources, staffing and organisation, the need for the proposed services, and any representations made by interested parties. Appeals may be made to the Secretary of State for Trade. The CAA also licenses air travel organisers. The Airline Users Committee was established by the CAA in 1973 to assist in protecting the interests of passengers and other airline users, and to investigate individual 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, the approval of work schedules to which transport aircraft are maintained, and the publication of the British Civil Airworthiness Requirements, a code with which all aircraft built in Britain or flown by British airlines must comply. It has similar duties in relation to hovercraft. The CAA is advised in these duties by the Airworthiness Requirements Board. A mandatory

system of reporting of incidents and structural or mechanical defects was introduced in 1976.

*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. Applicants for professional pilots' licences are required to attend approved courses of training before attempting qualifying examinations and flight tests.

**Air Traffic
Control and
Navigation
Services**

Responsibility for policy planning and execution of both civil and military air traffic control over Britain and the surrounding seas rests with the National Air Traffic Services, under the joint control of the Civil Aviation Authority and the Secretary of State for Defence. Britain is a member of Eurocontrol, a European international agency set up in 1963, which has responsibilities for control at the higher flight levels for civil aircraft and for military aircraft operating according to civil procedures.

A system of airways, introduced in 1950 and covering the main traffic routes with control zones around the major airports, has been gradually extended. The primary navigation aids have been the very high frequency omnidirectional ranges (VORs) and distance measuring equipment. Re-equipment with the more accurate Doppler VOR system began in 1974 and should be completed before 1980. During the last few years virtually the whole of the airspace over Britain above 5,000 feet (1,500 metres) has been brought under surveillance by modern primary and secondary radar equipment to provide data for use in two air traffic control centres, located at West Drayton (Greater London) and Prestwick. The first stage was introduced at West Drayton in 1971 and in 1975 a subsidiary centre was opened at Manchester. A new Scottish centre under construction at Prestwick is due to enter service in the autumn of 1977. Extensive use is being made in these centres of automatic data processing and other advanced electronic techniques.

The development of all-weather landing systems, on the basis of an improved version of the standard instrument landing system, was pioneered by the Royal Aircraft Establishment, airlines and private industry. All Britain's major airports are now fitted for use with this improved version. A microwave landing system is being developed to replace the instrument landing system.

British Airways

The board of British Airways controls the activities of the seven divisions of British Airways—British Airways European Division, British Airways Overseas Division, British Airways Regional Division, British Airways Associated Companies Ltd., British Airways Engine Overhaul Ltd., British Airways Helicopters Ltd. and International Aeradio Ltd. The chairman and members of the board are appointed by the Secretary of State for Trade. British Airways' total borrowing limit is fixed at £560 million, but may be increased up to £700 million by statutory order. During the year 1975-76 the board's turnover was £916 million, and it made a net loss of £16.3 million. Net overseas earnings amounted to £215 million. Revenue earned by the airline divisions amounted to £804 million. Some 13.8 million passengers were carried on scheduled services. At March 1976 British Airways employed about 58,200

staff. Its assets of £620 million included £462 million of aircraft and spares and £92 million of land and buildings.

British Airways has the largest route network in the world, almost 500,000 miles (800,000 kilometres), covering 170 destinations in 80 countries.

Airline Divisions

The Overseas Division is engaged on long-haul operations. Its scheduled services link Britain with continental Europe, the Middle East, the Far East, Australasia, East and South Africa, and North America. In January 1976 British Airways inaugurated, jointly with Air France, the world's first supersonic passenger services, using *Concorde* aircraft. *Concorde* services are operated by the division between London (Heathrow) and Bahrain, and Heathrow and Washington. The European Division operates on short-haul and medium-haul services in Britain and the rest of Europe and to North Africa and the Middle East. In 1975 it introduced 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 a similar service between Heathrow and Edinburgh started in April 1976. The Regional Division is responsible for secondary domestic services and for a network of services to Europe.

Other Divisions

British Airways Associated Companies Ltd. is responsible for the group's investments connected with some 34 hotel companies and 9 air companies in different parts of the world. The helicopter division—British Airways Helicopters Ltd.—operates a scheduled service between Penzance, Cornwall, and the Isles of Scilly, undertakes charter work, provides links between oil rigs in the North Sea and the mainland and operates air-sea rescue services from Aberdeen. 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. Other operations controlled by British Airways include British Airtours which operates charter flights, British Airways Travel Division which handles sales of passenger tickets in Britain and British Airways Cargo UK which handles British Airways' cargo sales in Britain and controls cargo-handling facilities at 18 airports in Britain.

Aircraft

The British Airways fleet of some 189 aircraft in September 1976 is the world's largest passenger fleet operating international services. Aircraft in the Overseas Division consist of *Concordes* (2), *Super VC10s* (15), *Boeing 707-436s* (4), *Boeing 707-336s* (11), *Boeing 747s* (19), and 2 *Lockheed TriStars*. The European Division contains *BAC One-Elevens* (18), *Trident Threes* (25), *Trident Twos* (15), *Trident Ones* (10) and 5 *Lockheed TriStars*. British Airways has converted the *Vanguard* aircraft into the *Merchantman* used solely for freight and five are now in service. The Regional Division's fleet consists of *BAC One-Elevens* (7), *Viscounts* (20), *Trident Ones* (3) and *HS748s* (2). British Airtours has 9 *Boeing 707-436s*. Helicopters in the helicopter division include *Sikorsky 61Ns* (13), *Sikorsky 58Ts* (2), *Bell Jet Ranger* (1) and *Bell 212* (1). Major orders include three further *Concordes*, six *Boeing 747s* and eight *Lockheed TriStars*.

Air Services

Since 1962 more passengers have entered or left Britain by air than by sea. In 1975 a total of some 30 million passengers travelled by air (international terminal passengers) and 15.9 million by sea. British Airways accounts for

some 93 per cent of scheduled services flown by British airlines. The charter market is dominated by independent companies; British Caledonian Airways has 16 per cent of the market, other independent airlines 67 per cent and British Airways' charter operations 16 per cent. Total capacity offered on all services by British airlines amounted to 8,917 million capacity-tonne-kilometres in 1975.

*The Independent
Airline Companies*

In 1975 the independent airlines carried some 3 million passengers on scheduled services. British Caledonian Airways operated a fleet of 29 aircraft and carried about 1 million scheduled service passengers. Its scheduled services are primarily to West and Central Africa and South America. Over 240 aircraft operated by some 120 companies are engaged in air-taxi operations mainly for carrying businessmen. Helicopters are also used to transport businessmen, but are being employed increasingly 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, aerial survey and photography, and flying instruction.

Air Freight

The value of overseas trade by air rose by 12 per cent to £6,690 million in 1975 and the proportions of Britain's overseas trade carried by air amounted to 17 per cent of the value of exports and 14 per cent of imports. Among the main commodities exported by air are machinery, medicinal and pharmaceutical products, and diamonds.

Private Flying

The estimated number of aircraft on the British register used for business and private purposes is 3,000 while approximately 800 are owned by clubs, groups and training schools. About 20,000 private pilots hold licences and there are some 10,500 glider pilots.

Airports

Of the 118 licensed civil aerodromes in Britain, just over one-quarter each handled more than 100,000 passengers in 1975. Britain's civil airports handled a total of 43 million passengers (41.8 million terminal passengers and 1.2 million in transit) in 1975. The two major airports in the London area (Heathrow and Gatwick) handled most passengers, 21.6 million and 5.4 million respectively. Other leading airports were Manchester 2.7 million passengers, Luton 1.9 million, Glasgow 1.8 million, Belfast 1.2 million, Birmingham 1.1 million, Edinburgh 0.9 million and Aberdeen 0.7 million. As a result of the increasing use of wide-bodied aircraft, air transport movement fell by 1.3 per cent in 1975 to 701,000, while the number of passengers carried increased by 4.3 per cent. Freight traffic handled at Britain's airports amounted to 638,000 tonnes in 1975.

The Government has initiated a detailed review of airports policy to consider the alternative ways of handling the predicted increase in traffic through Britain's airports. Two documents have been issued, one dealing with airports in the London area and the other with regional airports, as a basis for comprehensive consultations with organisations concerned with airport development.

*Ownership
and Control*

The British Airports Authority (BAA), an independent statutory body operating on a commercial basis, was created in 1966. It owns and manages seven airports—Heathrow, Gatwick and Stansted in the south-east, and Glasgow, Edinburgh, Prestwick and Aberdeen in Scotland—which handle

73 per cent of air passengers and 84 per cent of air cargo traffic in Britain. In 1975-76 the BAA's income was £77.6 million and it recorded a £6.2 million profit after interest and taxation.

Eight small aerodromes in the Highlands and Islands of Scotland are controlled by the Civil Aviation Authority 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 in Britain (apart from those controlled by the Government or by the CAA) must be licensed annually 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.

Development

Work is in progress to develop facilities at many of Britain's airports. A major modernisation programme is under way at Heathrow, the world's busiest centre for international travel, including improvements to passenger facilities and construction of a station for the Underground railway link.

Gatwick airport, 28 miles (45 kilometres) south of London, is the second major airport for the London area and was the first in the world to bring together road, rail and air transport connections in one unit. Its capacity will be increased to about 16 million passengers a year by 1978, when a £70 million redevelopment programme reaches completion.

An extension to Manchester airport, opened in 1974, nearly doubled the airport's passenger-handling capacity and enabled it to accommodate large wide-bodied aircraft. Improvements to facilities at Luton airport will increase capacity to 4 million passengers a year. Under a £13 million redevelopment scheme for Edinburgh airport, a 2,560-metre runway was opened in April 1976 and a new terminal building will be completed in 1977. Construction of a new terminal is in progress at Aberdeen airport, Britain's fastest developing civil airport as a result of offshore oil and gas activities, and should be completed in 1977. The BAA is undertaking a £10 million modernisation plan at Glasgow airport. At Sumburgh (Shetland), an important staging post for communications between the Scottish mainland and many North Sea oil rigs, a £7 million scheme to improve the runway was completed in 1975.

THE POST OFFICE

The Post Office, founded in 1657, provides postal, public 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 members of the board are appointed by the Secretary of State for Industry. It has some 421,000 employees and 23,400 post offices. Income excluding internal transactions totalled £3,206 million in 1975-76 and a profit of £148 million was recorded. The Post Office is investing some £4,200 million at March 1976 prices in the period 1975-79; capital expenditure on fixed assets amounted to £963 million in 1975-76. The Government has set up a committee to examine the organisation and operations of the Post Office.

Postal Services

Some 170 million parcels and 9,903 million items of other correspondence (including 9,278 million inland letters) were handled by the Post Office in 1975-76; of these, 479 million items including 2.6 million parcels were sent by air.

New highly mechanised sorting office buildings are being opened in Britain.

Postal address coding (postcode) is in operation over the whole country; 17 offices have been equipped with code sorting machinery.

'Datapost', a door-to-door overnight collection and delivery service for computer data and important packages, provides 40,000 services each week. International datapost services are available to eight overseas countries.

The British Postal Consultancy Service offers professional advice on all aspects of postal business to overseas administrations and work was done in 1975-76 for nine overseas postal administrations.

Counter Services

At the post office counter, besides making use of its postal and telegraph facilities, a person may draw a pension or a family allowance, buy a licence for his dog, a licence for his television receiving set, renew his motor vehicle licence, obtain a British visitor's passport, buy national insurance stamps, and use the savings and investment facilities of the National Savings Bank (see p. 362) and the money transmission services of the National Giro (see p. 360). In much of its counter service the Post Office acts as agent for government departments and local authorities.

Public Telegram Services

Britain has a comprehensive telegram service. Telegrams may be sent anywhere in the world and are transmitted through the International Telegram Retransmission Centre in London, one of the world's largest and most modern computer-controlled telegram retransmission centres, which has direct access to terminals in over 80 countries. With the exception of the small number of foreign telegraph companies licensed to operate in Britain, all international public telegram services are operated through the provincial and London offices of the Post Office International Telegraph Service.

Telex Service

The telex service combines the speed of the telephone with the accuracy of the printed word. The British telex service is fully automatic. Calls may be made direct between the rapidly increasing number of telex users in Britain (59,000 in March 1976) and also to well over 870,000 subscribers throughout the world. Britain is linked to some 179 countries by telex and about 98 per cent of international calls are directly dialled. These include calls to virtually the whole of Europe. Calls to countries not available through the automatic service are connected through the International Telex Exchange in London. The Post Office is planning for a system of about 100,000 British subscribers by 1982.

Data Communications Services

The demand for data communications is increasing and the trend is towards higher speeds. The Post Office offers a range of datel services providing for transmission at rates of up to 110 bits per second (bit/s) over telegraph circuits or up to 2,400 bit/s (to be increased to 4,800 bit/s) over speech circuits. Higher speeds up to 50,000 bit/s are available over special wideband circuits. International services allow data transmission to the rest of Europe, the United States and a number of other countries. In 1976 there were 41,300 Post Office datel terminals in Britain, more than in any other European country. An experimental packet switched service is being implemented, with packet exchanges at London, Manchester and Glasgow.

Telephone Services

The Post Office operates the largest telephone system in Europe and the third largest in the world. At the end of March 1976 there were 6,265 local telephone exchanges and 21.1 million telephones. During 1975-76, 0.5 million new lines were installed. Trunk dialling by subscribers (STD) began in Bristol in 1958; virtually all local and trunk calls can be dialled direct. In 1975-76 some 16,184

million telephone calls were made comprising 13,736 million local calls, 2,356 million trunk calls and 92 million international calls.

Hull District Council is the only local authority to exercise its option of operating its own service under licence from the Post Office; this service is connected to the Post Office trunk network.

The first operational electronic exchange in Europe was opened at Ambergate, Derbyshire, in 1966. There are now over 700 such exchanges in Britain. Mobile electronic exchanges were introduced in 1973 and the first of a new series of electronic telephone exchanges, with capacities of up to 40,000 lines, was brought into service in Birmingham in February 1976. Pulse code modulation systems are being used to increase the circuit capacity of lines on routes between exchanges.

International subscriber dialling operates from London and most other major cities to 32 countries including most of western Europe and a number of countries outside Europe. The Post Office is engaged in a five-year programme costing £250 million to expand Britain's international telephone exchange network. The Edgware international exchange in London is the largest of its kind in the world. Calls to Europe are connected via cable and microwave radio links, and to countries outside Europe by way of transatlantic and Commonwealth cable networks, communications satellites and high frequency radio systems.

A radio tower, 620 feet (189 metres) high, in London provides microwave radio links for carrying long-distance telephone and television circuits. There are about 200 Post Office communications masts and towers in use.

Special Telephone Services

Several specialised services are available by telephone, including the '999' emergency dialling service enabling subscribers to be connected as quickly as possible, and free of charge, to the police, ambulance or fire brigade services. A public radiotelephone service operating in several areas enables users of vehicles fitted with suitable equipment to make or receive calls to or from any telephone in the British network. Initial trials are in progress on 'viewdata', a service in which a telephone subscriber calls a centre to obtain information which is displayed on his television screen or on a special screen; full-scale trials are planned to start in late 1977. Recorded information services include: the speaking clock, weather forecasts, motoring information, recipes, cricket scores, Financial Times Share Index and Business News Summary, and 'Dial a Disc'. In London a recorded service provides details in five languages of events taking place, and a similar service, in English only, is provided in Edinburgh during the summer.

Submarine Cables

There are some 25 submarine cable systems between Britain and the continent of Europe and five between Britain and North America, covering a total of about 17,800 nautical miles (33,000 kilometres). Cable systems using transistors in place of thermionic valves have been developed and refined by British manufacturers in consultation with the Post Office Research Station and are used in all new systems. A comprehensive Commonwealth telephone cable plan, completed by 1967, involved the construction of three long-distance telephone cable systems covering a total of 17,300 nautical miles (32,100 kilometres). Subsequently there have been large increases in the capacity of new submarine cables—a cable to France installed in 1976 has 3,400 circuits and one to Belgium, which will be laid in 1977, will have 4,000 circuits. The Post Office acts as a consultant to overseas administrations on the installation of submarine cables.

Satellite Communica- tions

Three aerials at the Goonhilly satellite communication earth station in Cornwall, which was brought into operation in 1962 and took part in the first satellite communications experiments, provide commercial telephone and television circuits via high-capacity geostationary satellites positioned over the Atlantic and Indian Oceans. In March 1976 Britain operated some 1,300 satellite telephone circuits to 80 countries. A new earth station is being built at Madley (Hereford and Worcester) to accommodate the rapid growth in international telecommunications; the first aerial should be in service by 1978. The satellites used in the global communications systems are provided by the International Telecommunications Satellite Organisation (see p. 406) in which Britain is the second largest shareholder.

Radio Communica- tions with Ships at Sea and Offshore Installations

In addition to the radio stations for overseas telecommunications, the Post Office has 11 coast radio stations in Britain which provide radiotelegraph and radiotelephone communications with ships at sea at ranges of up to some 500 miles (805 kilometres) and 250 miles (402 kilometres) respectively, and with oil rigs and pipe-laying barges in the North Sea. There is also the long-distance radiotelegraph and radiotelephone station, Portishead Radio, which communicates with ships in all parts of the world.

These coast stations are an important part of the search and rescue services concerned with safety of life at sea (see p. 316). They broadcast navigational warnings and weather bulletins, keep continuous watch on the international radiotelegraph and radiotelephone frequencies for distress calls from ships or aircraft and take immediate action to obtain assistance for any vessel in distress. During 1975-76 the stations handled 750 urgency and distress calls. The stations also exchange radiotelegrams with ships and connect radiotelephone calls between telephone subscribers ashore and suitably equipped ships. Radio teleprinter facilities are being introduced at selected coast stations to enable ships to be connected to telex subscribers ashore.

An £8 million microwave radio system is being developed to link oil and gas production platforms in the North Sea with the mainland. Two new radio stations in north-east Scotland and south Shetland entered service in 1976.

Data Processing Service

The Post Office is one of the largest users of automatic data processing equipment and techniques in Britain. Its computer organisation has two parts: the Post Office Data Processing Service for internal services, and the National Data Processing Service for services to firms and other external users.

'Confravision'

The world's first purpose-built system of conferences by television, 'Confravision', was introduced by the Post Office in 1971. Using Post Office video circuits the service allows private communication between studios in London, Birmingham, Bristol, Glasgow, and Manchester. An experimental international Confravision link to Sweden was opened in 1974 and a further extension to the Netherlands began operating in 1975.

Research

The Post Office is spending some £40 million a year on research and development, in collaboration with industry and the universities. An £11 million research centre, the largest complex of its kind in Europe, at Martlesham Heath, Suffolk, has recently been completed.

16 Employment

Employment policy in general, industrial relations and pay policy are the responsibility of the Department of Employment, while the Manpower Services Commission is responsible for the public employment and training services (other than the careers service, see p. 331) and for advising the Government on manpower questions generally. In Northern Ireland employment matters are the responsibility of the Department of Manpower Services.

MANPOWER

The total working population of Britain at the middle of June 1975 was 25.9 million, about 46 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 (13.5 million men and 9.2 million women) in employment. The percentage of women (particularly those working part time) in the labour force continues to rise. The great majority of the working population work for a wage or salary, but nearly 2 million are employers or self-employed.

The total working population of Northern Ireland, including employers and self-employed, was 594,000 in June 1975 (380,000 males and 214,000 females). The number of employees in employment was 494,000. The largest non-service industries are agriculture, engineering, textiles and clothing. Most of the agricultural workers in Northern Ireland are family workers. Farmers and small-holders working their own holdings account for about 6 per cent of the working population.

Growth in Working Population

The working population increased slowly until 1966, and declined between 1966 and 1971, since when it has been rising again (see Table 24). One reason for the fall after 1966 was the increased number in full-time education. During the late 1970s the male labour force is expected to start increasing slowly, while the number of females is expected to continue to increase.

TABLE 24: Manpower in Britain 1965-75

Thousands^a

Year	Employees in employment ^b	Employers and self-employed	Unemployed ^c	Armed Forces	Total working population ^d
1965	23,080	1,702	299	423	25,504
1970	22,471	1,895	555	372	25,293
1971	22,122	1,910	724	368	25,124
1972	22,120	1,899	899	371	25,194
1973	22,662	1,947	575	361	25,545
1974	22,790	1,925	542	345	25,602
1975	22,707	1,925	866 ^d	336	25,834

Source: *Department of Employment*

^a Discrepancies between totals and their constituent parts are due to rounding.

^b Part-time workers are counted as units.

^c Excluding adult students.

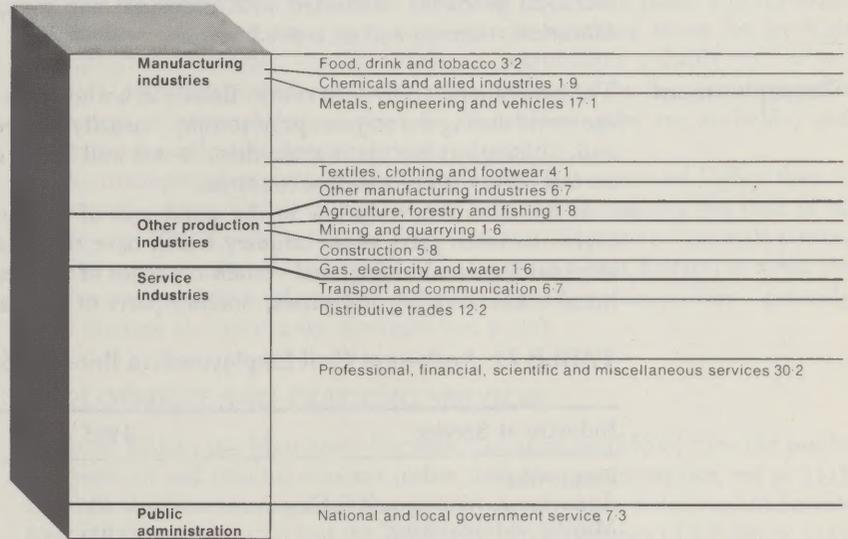
^d The working population figures and the Forces figures include ex-Service personnel on leave after completing their service.

Though successful development policies in the less-prosperous regions may raise the working population above the levels forecast, any increasing demand for labour must in general be met by better deployment of manpower, improved productivity and more training. In general, non-employed married women form the only substantial reserve.

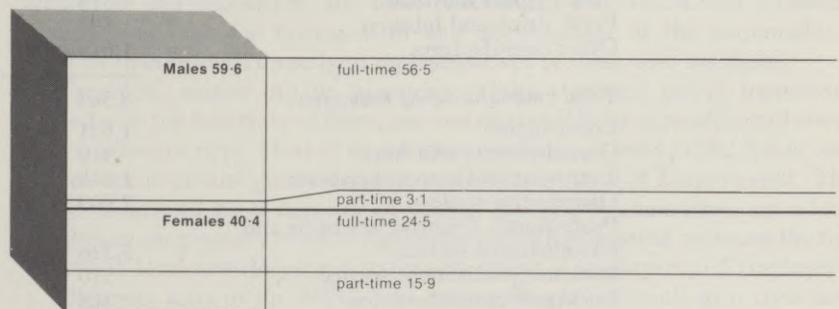
Distribution of Manpower

The distribution of employees both by industry and by sex is shown in the diagrams below.

Percentage distribution of employees in Britain by industry, June 1975



Employees by sex, 1975



Most industries employ women as well as men though not always for the same types of work; for example, few women are managers and few personal secretaries are men. The Sex Discrimination Act 1975, in general, forbids discrimination against women in opportunities for employment (see p. 335). Women are chiefly employed in the food, drink and tobacco industries; the manufacture of electrical goods, textiles and clothing; transport and communication; the distributive trades; the financial, professional, scientific and miscellaneous services; and public administration.

It is estimated that in October 1975 in manufacturing industries in Great Britain (comparable figures for Northern Ireland are not available) nearly 28 per cent were administrative, technical and clerical employees (the ratio ranged according to industry from 14.6 per cent in clothing and footwear to 40.9 per cent in chemicals and allied industries).

Manpower Research and Planning

As an aid to government manpower policies the Manpower Services Commission, both independently and through its Employment Service Agency, maintains a continuing study of manpower resources and requirements both for the whole economy and for certain industries and occupations. The MSC's Training Services Agency also co-operates with industrial training boards on technical problems connected with industrial and manpower planning, recruitment, training and careers advice.

Unemployment

The general unemployment rate in Britain as a whole was among the lowest in the world during the 20 years prior to 1967—usually between 1 and 2 per cent—and, although it has risen since then, it was still lower during 1976 than in several other major industrial countries.

It 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, coalmining, and certain branches of the heavy engineering and metal manufacturing industries, notably parts of Scotland and Wales, and

TABLE 25: Analysis of Civil Employment in Britain 1965–75

Industry or Service	<i>Thousands^a</i>		
	1965	1970	1975
Employees:			
Agriculture, forestry and fishing	605	468	401
Mining and quarrying	617	410	352
Manufacturing industries:			
Chemicals and allied industries	488	491	430
Metals, engineering and vehicles	4,374	4,315	3,887
Textiles	765	678	529
Clothing and footwear	514	455	402
Food, drink and tobacco	795	792	726
Other manufactures	1,625	1,608	1,517
<i>Total: manufacturing industries</i>	8,561	8,339	8,244
Construction	1,621	1,335	1,313
Gas, electricity and water	419	391	353
Transport and communications	1,648	1,573	1,518
Distributive trades	2,909	2,676	2,763
Professional, financial, scientific and miscellaneous services ^b	5,326	5,801	6,861
National government service	570	589	650
Local government service	804	890	1,005
<i>Total: employees</i>	23,080	22,471	22,707
Employers and self-employed persons (all industries and services)	1,696	1,902	1,977
<i>Total in Civil Employment</i>	24,776	24,373	24,684

Sources: *Department of Employment and Northern Ireland Department of Manpower Services*

^a Discrepancies between totals and their constituent parts are due to rounding.

^b Excludes private domestic service.

north-east England and Merseyside. These areas have been the subject of a series of measures of selective assistance to stimulate industrial expansion; and counter-measures have been taken to limit expansion in areas of manpower shortage (see p. 210). The general unemployment rate in Great Britain in July 1976 was 5.4 per cent: the areas with the highest rates were Wales and Scotland and the north of England.

Since August 1975 the Government has progressively introduced a series of measures to check the rise in unemployment, to help keep people in jobs and at the same time to safeguard and expand Britain's industrial potential so as to provide the base for more jobs in the medium term. The measures include: a temporary employment subsidy for firms with good long-term prospects to suspend redundancies which would otherwise have taken place; a job creation programme providing temporary employment for those worst hit by high unemployment—largely young people; a recruitment subsidy for school leavers; expansion of training programmes; additional funds to encourage the movement of unemployed workers to areas where jobs are available; and assistance for industrial investment (see p. 210).

The unemployment rate in Northern Ireland has remained higher than in other parts of the United Kingdom. In July 1976 it was 9.9 per cent of all employees. The Northern Ireland Department of Commerce has wide powers (similar to those of the Department of Industry in Great Britain) to assist the development and diversification of industry. It is using these powers vigorously in an attempt to improve the situation (see p. 57).

EMPLOYMENT AND TRAINING SERVICES

Manpower Services Commission

In Great Britain the Manpower Services Commission (MSC) runs the public employment and training services (other than the careers service, see p. 331). Its responsibilities are exercised through two agencies, the Employment Service Agency (ESA, see p. 330) and the Training Services Agency (TSA, see p. 333), both of which are statutory organisations headed by a chief executive appointed by the MSC with the approval of the Secretary of State for Employment. The MSC has a chairman and nine other members appointed after consultation with employers and employees, and local government and educational interests; responsibility for the management and development of the commission's services thus belongs directly to representatives of those who use them.

The MSC carries out its functions within a general policy framework agreed with the Secretary of State, and was responsible for expenditure of about £300 million in 1975. Most of its activities are financed from public funds, and it receives an annual grant-in-aid from 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, to secure the full benefit of local knowledge and the co-operation of employers and employees.

The main duty of the MSC is to make such arrangements as it considers appropriate for assisting people to select, train for, obtain and retain employment, and for assisting employers to obtain suitable employees. Its responsibilities include running the offices of the employment service, Professional and Executive Recruitment (PER), the Occupational Guidance Units and other employment services, operating the Training Opportunities Scheme (TOPS) and co-ordinating the activities of the industrial training boards (see p. 333). The services in Northern Ireland are run on similar lines by the Department of Manpower Services but there are some variations related to the much smaller area of administration.

While many of the employment and training functions of the Secretary of State have been transferred to the MSC, he retains responsibility for general manpower policy, manpower aspects of regional policy and regional economic planning, and for the department's unit for manpower studies, the race relations employment advisory service, certain executive duties under the Race Relations Act 1968 (see p. 142), certain functions in relation to redundancy payments, the issue of work permits to immigrants and international aspects of employment and training matters, and the wages inspectorate. Management of unemployment benefit has been separated from that of the employment services and is administered under a regional benefit manager at each of the department's regional offices.

EMPLOYMENT SERVICES

The main government employment services (other than the careers service) are provided in Great Britain through a country-wide network of employment offices and jobcentres run by the MSC's Employment Service Agency.

Employment offices provide a comprehensive service for employers needing staff and for people, whether or not already in employment, seeking jobs. Information and advice on any employment problem is available to all. Use of the service is voluntary. Employers and individuals alike remain free to use general or specialised fee-charging private employment agencies and direct recruitment by advertisement or personal introduction. There are some 950 local offices, which placed people in some 1,290,000 jobs in 1975, some 20 per cent of total adult placings in Britain.

The employment offices handle the full range of occupations and deal with full-time, part-time and temporary vacancies. Details of unfilled vacancies (or of people seeking jobs) can be circulated quickly in the 'travel to work' area, or more widely if necessary.

Employment offices are being gradually replaced by jobcentres which provide self-service facilities in addition to other services. The first jobcentre was opened in 1973 and a network of 800 is to be in operation by 1980.

Special Services

A commercial employment service for office and shop work is available at all employment offices and also at a number of specialised commercial employment offices. In the hotel and catering industry a specialist service is based on the Hotel and Catering Trades Office in London and more than 20 hotel and catering trades sections of employment offices elsewhere.

The Regular Forces Resettlement Service, in which the ESA and TSA collaborate with the Ministry of Defence and the voluntary organisations concerned with former regular servicemen, helps members of the Forces to achieve a satisfactory transition to civilian life.

A nursing employment service is available at all employment offices providing advice and help to people in nursing, midwifery, and related occupations and to those wishing to enter the profession. At larger offices specially trained staff provide a point of reference for more difficult cases and the service is supported by a small team of professional consultants.

In large-scale redundancy situations, teams of officers from local employment offices visit firms to assist in the redeployment of redundant workers to new jobs or training.

Professional and Executive Recruitment

Professional and Executive Recruitment (PER) provides a specialised service for men and women looking for professional, managerial, technical and scientific appointments (separate divisions deal with executive secretary and overseas appointments, and salary surveys). Each of its 36 offices is staffed by experi-

enced consultants who can quickly identify job opportunities in any part of the country by use of a computer-assisted matching and selection system. The service is free to candidates, while employers are charged a fee on all successful placings, based on the starting salary. A broadly similar service, free to both employers and candidates, is operated in Northern Ireland.

*Occupational
Guidance
Units*

Occupational guidance units are situated in 45 centres of population. They are available free to anybody who wishes to take expert advice before choosing or changing his occupation.

**Careers
Service**

All local education authorities have a duty to provide a vocational guidance service for people attending educational institutions and an employment service for those leaving them (the careers service). In addition these authorities have powers, which they must exercise as required by the Secretary of State for Employment, to extend these services to people in their early years in employment (see also p. 329). At the same time the ESA offers its services to young people who have left school and choose to make use of the facilities provided by the agency.

In Northern Ireland the Youth Employment Service has recently been absorbed into the Department of Manpower Services, which provides a single comprehensive guidance and placement service for people of all ages.

**Disablement
Resettlement
Service**

The Disablement Resettlement Service is designed to help disabled people to get and keep suitable work. It is available to anyone over school-leaving age who is substantially handicapped. The service is administered by the ESA, while the careers service operated by local authorities helps young disabled people about to start their careers.

Vocational guidance and help in finding jobs is given at employment offices by specialised disablement resettlement officers (DROs) who can arrange for a course of industrial rehabilitation or training or both. A Register of Disabled Persons is maintained and all employers of 20 or more persons are required to employ a quota (3 per cent for all industries, except shipping in respect of the manning of ships) of registered disabled persons.

Employment rehabilitation is provided at 26 centres (including one linked with a medical rehabilitation unit). Attendance at a centre is voluntary and maintenance allowances are paid. Financial assistance is also given to various voluntary and other organisations operating approved employment rehabilitation.

There are vocational training facilities for the disabled at skillcentres (see p. 333), 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 Training Services Agency. Grants are available to disabled people qualified to undertake study or training for professional or comparable employment.

Remploy Ltd., a non-profit-making company, partly supported by public funds, provides sheltered employment in 87 factories in Great Britain for about 8,400 registered severely disabled people who are unlikely to obtain work except under special conditions. (A similar organisation, Ulster Sheltered Employment Ltd., exists in Northern Ireland.) In 1975 the Department of Employment was helping local authorities and voluntary organisations with the cost of providing facilities for sheltered employment for over 5,000 severely disabled people (3,000 sighted and 2,000 blind or partially sighted), of whom 200 were trainees. Advice on matters relating to the employment and training

of disabled people is given by the statutory National Advisory Council on Employment of Disabled People and its district advisory committees.

Mobility of Labour

As part of the policy of assisting geographical mobility of labour within Britain to balance resources and demands, the ESA also makes grants and allowances to help with costs of fares, temporary lodging and acquisition of and removal to a new home, in specified instances. The grants are available to unemployed workers moving away from home to take up employment; to key workers transferred by a firm to a new plant in an assisted area (see p. 208); and to local unemployed workers recruited to new plants in areas of high unemployment and sent to the parent works for preliminary training.

Regional Employment Incentives

The Government offers incentives both to encourage industrial expansion and reduce unemployment in the assisted areas. The incentives include grants towards the cost of new buildings and equipment; tax allowances; help with training; and a regional employment subsidy (see also p. 210).

Immigrant Workers

In general, people coming to Britain for employment (including Commonwealth citizens who do not have the right of abode, see p. 11, but excluding nationals of European Community countries) need a work permit issued by the Department of Employment. This must be applied for by the prospective employer and is issued for a specific job and for a fixed initial period not exceeding 12 months in the first instance. People admitted as holders of work permits may only change their jobs with the approval of the Department of Employment. Normally their stay is extended if they remain in approved employment. After four years' approved employment the time limit attached to their stay may be removed and a worker may change employment without restriction. Permits are in general issued only for work requiring a professional qualification, skill or experience, where the Department of Employment is satisfied that the worker is necessary, and where the wages and conditions are not less favourable than those generally available in the area for similar work.

Subject to an annual quota for both men and women (other than the more highly skilled), permits may, however, be issued for work in the hotel and catering industry, hospitals, and resident domestic work. (In the hotel and catering industry permits for employment as resident domestics are normally issued to single women and married couples for full-time work in residential establishments; permits are not issued to single men or to married men or women either on their own or with children under the age of 16.)

Commonwealth citizens and foreign nationals (other than nationals of European Community countries) 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.

In Northern Ireland employment permits are issued by the Department of Manpower Services and are required for non-Northern Ireland workers. Legislation defines Northern Ireland workers and makes certain occupations exempt.

The European Community regulations, now enforced in Great Britain, establish the rights of workers to move freely between member States for the purposes of employment. In Northern Ireland there is a transitional period extending up to 31st December 1977 before this applies. 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 insurance and industrial injury benefits. Workers who wish to remain in the United Kingdom for longer than an initial period of six months are expected to apply to the Home Office for a residence permit. If they are in permanent employment the residence permit is 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.

Britain, as a member of the Organisation for Economic Co-operation and Development, participates with 13 European countries in the arrangements for assisting nationals of the countries concerned to obtain employment in other member countries.

Race Relations

Race relations employment advisers, based in the Department of Employment's regional offices, provide advice and information to employers, trade unions, and other organisations with the aim of improving employment opportunities for immigrant workers.

TRAINING SERVICES

The task of managing and developing the country's training programme, expenditure on which is being considerably increased, is the responsibility of the Training Services Agency (TSA) of the Manpower Services Commission.

Most industrial and commercial training has always been carried out by individual employers, but in recent years the Government has taken a number of measures based on the need to provide trained manpower to sustain the growth of the economy, and to provide opportunities for people to make the best use of their skills and to acquire new skills when old ones are no longer in demand.

The 23 industrial training boards (and the Foundry Industry Training Committee), covering some 12 million employees, are responsible for industrial training in their respective industries.

Exchequer funds are available to cover the boards' operating expenses, including advisory services, and for grants for certain key training activities; the boards have powers to raise levies to finance other training activities, the levy rate normally being limited to 1 per cent of employers' payrolls. The boards' plans and budgets are agreed with the TSA for a running five-year period. The TSA is also empowered to promote training for some 10 million people employed in industries not covered by the statutory industrial training boards reporting to the MSC, and maintains liaison with all major industrial training organisations in this sector. The TSA has a duty to ensure that training in this sector is of adequate standard.

Training Opportunities Scheme

The Training Opportunities Scheme (TOPS) is intended to supplement the training given by industry by providing individuals over the age of 19 with the opportunity to acquire a skill or to retrain. Training is carried out at some 58 skillcentres (SCs) which are within easy reach of the main industrial areas. Courses are available in over 60 different trades. Training under the scheme is also provided in colleges and employers' establishments. For severely disabled people training is provided at four residential training colleges run by voluntary organisations with government financial assistance. Trainees are paid earnings-related allowances which vary according to the number of dependants and are substantially higher than unemployment benefit. The Government is expanding the scheme substantially. Some 60,000 people were trained under TOPS in 1975 and the number is steadily increasing (it is expected to be 80,000 in 1976).

Other Training Services

The Training Within Industry Scheme (TWI) is intended to develop the skills of supervisors in job relations, instructing and communicating, improving methods and preventing accidents. Special courses are available for supervisors employed in offices, retail distribution and hospitals. There is also an in-plant training service to aid selection and further the training of operatives and clerks as instructors. Courses in international trade procedures are available for staff employed in export/import offices and (at an advanced level) for customs training clerks. Courses in industrial instruction techniques are available to firms and SC staff at the Training Services Agency's two Instructor Training Colleges (one in England and one in Scotland) and at six Instructor Training Units attached to SCs.

Training services at SCs, TWI courses, and courses at Instructor Training Colleges are available to trainees from overseas under approved schemes (for instance, those of the International Labour Organisation or technical assistance provided jointly by the Department of Employment and the Ministry of Overseas Development).

Other training services comprise the training of firms' own instructors, training of experienced workers in instructional techniques, provision of mobile instructors to train people in employers' own premises, and training of supervisors.

TERMS OF EMPLOYMENT AND WORKING CONDITIONS

Legislation and Conventions

Britain has been a pioneer in the introduction of protective legislation for the safety, health and welfare of employees and in providing certain legal immunities for trade unions. 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 (see p. 338). However, recent legislation, in particular the Employment Protection Act 1975 (see p. 339), provides considerable safeguards for the employee in his terms of employment as well as working conditions. The Terms and Conditions of Employment Act 1959, as amended subsequently, provides machinery, under certain conditions, for enforcing the observance of terms or conditions established by collective agreement. The Contracts of Employment Act 1972 requires an employer to give an employee written information on his terms and conditions of employment, and the procedure available to him where he has a grievance about his employment; it also lays down the right of both employers and employees to minimum periods of notice when employment is to be terminated. Under the Redundancy Payments Acts 1965 and 1969 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 because of a fall in demand) and their employers cannot offer suitable alternative work, the cost being partly met from a fund subscribed to by industry. The Trade Union and Labour Relations Acts 1974 and 1976 give protection against unfair dismissal by providing machinery under which an employee may complain against an employer of unfair dismissal, and obtain reinstatement, re-engagement or compensation; give legal support to the right to trade union organisation by making it unfair to dismiss a person because of his membership or participation in the activities of an independent trade union; and lay down that written collective agreements between trade unions and employers are presumed to be intended to be legally binding only if they contain a provision to that effect. The Employ-

ment Protection Act 1975 extends the rights of employees regarding unfair dismissal and penalisation short of dismissal because of trade union membership or activities, and payment when work is not available for reasons other than as a result of a trade dispute.

The Race Relations Act 1968 makes it illegal for an employer to discriminate on the grounds of race, colour or ethnic or national origin in the engagement, dismissal or employment of workers. The Race Relations Bill 1976 includes proposals designed to strengthen some of its provisions.

The Sex Discrimination Act 1975 makes it unlawful, with some limited exceptions (for example, for employment in a private house), for an employer to discriminate against women in recruitment or treatment of existing employees regarding promotion, training, transfer, dismissal and benefits.

Other legislation prescribes minimum standards of safety, health and welfare in most places of employment (see p. 344). However, it is recognised that the causes of many accidents are not amenable to statutory control. Therefore, voluntary action taken by employer organisations, often in association with trade unions, is encouraged.

Wage Rates and Earnings

Minimum rates of pay for many manual workers are determined by national collective agreements or statutory wages regulation orders. For men these range from about £0.65 to £2.00 per hour. Separate rates for men and women may no longer be specified since the Equal Pay Act 1970 (see below) came fully into force on 29th December 1975. Many employers pay above the national minima. Higher rates are also usually paid for shift-work and overtime, and weekly earnings may be further increased by piecework rates and other incentive schemes. Piecework rates are of declining importance in a number of industries, where methods of production tend to dictate the output of a worker.

On the basis of the latest survey in a series conducted every year by the Department of Employment into earnings and hours of work in manufacturing industries and some non-manufacturing industries throughout Britain, the average earnings of full-time male adult manual workers in October 1975 were £1.37 an hour and £59.50 a week. Full-time women manual workers at the same date earned an average of £0.92 an hour and £34.19 a week. Women's earnings are markedly lower than those of men, partly because on average they work shorter hours, with less overtime paid at premium rates, but also because a smaller proportion of women do skilled work. The Equal Pay Act 1970 requires that a woman doing the same or broadly similar work to a man qualifies for equal pay and conditions of employment.

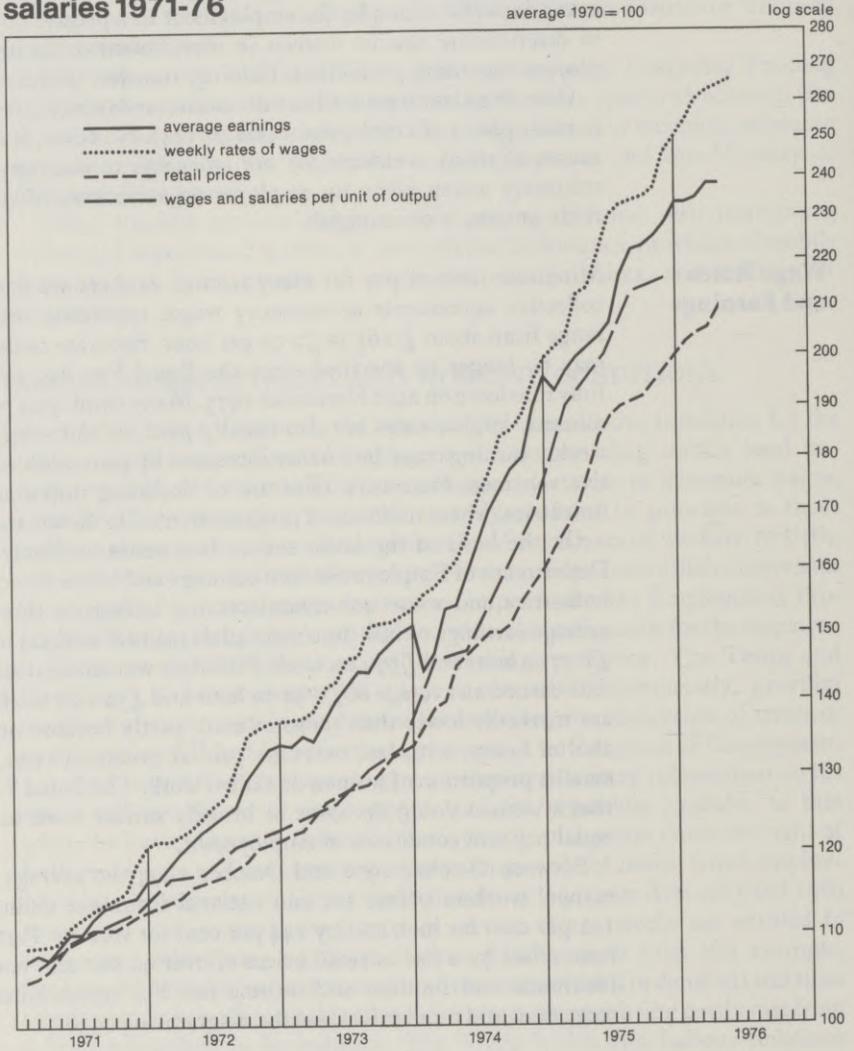
Between October 1970 and October 1975 the average weekly earnings of manual workers before tax and national insurance deductions increased by 112 per cent for men and by 144 per cent for women. Part of the increase has been offset by a rise in retail prices of over 90 per cent and by larger national insurance contributions and income tax. For trends since 1971 in earnings, wage rates and retail prices, see the diagram on p. 336.

Salaries and Fees

Remuneration in commercial, technical and professional careers is normally by annual salary, 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 £2,200 to £2,600 (lower for trainees in their teens and higher for some graduates entering industry). The average weekly earnings of full-time non-manual adult workers in April 1975 were about £68 for men and £40 for women. On average, salaries more than doubled between 1970 and 1975.

Most of the senior posts in business, the professions and the Civil Service command salaries in the range of £8,000 to £15,000 a year gross before tax. The posts with salaries in the range of £15,000 to £30,000 a year include those of Cabinet Ministers, top-ranking judicial appointments, the highest positions in government departments and the largest municipal authorities, editors of daily newspapers, some persons outstanding in their professions and in the higher

Earnings, wage rates, retail prices, wages and salaries 1971-76



managerial posts in industry, commerce and banking. The earnings of a few persons in business, star entertainers and certain other very successful people exceed £50,000 a year gross. The range of net incomes in the country as a whole is, however, reduced by a system of progressive taxation and by provisions for social security.

A Royal Commission on the Distribution of Income and Wealth, set up in July 1975, inquires into, and reports on, such matters concerning the distribu-

tion of personal incomes, both earned and unearned, and wealth as are referred to it by the Government. The work of the commission forms an integral part of government policy on industrial relations and collective bargaining and helps secure a fairer distribution of income and wealth. It works in close co-operation with other bodies involved.

As civil servants, Ministers of the Crown, Members of Parliament, salaried magistrates and solicitors, and in most professions women have been paid the same salary as men for doing the same kind of work for some time. Women in independent professions are not expected to charge lower fees than men. Equal pay as between men and women is now enforced in all occupations (see p. 335).

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 by men in manual occupations are usually somewhat longer than their standard hours; in October 1975 they were 43.6 compared with 37 for women. Men and women in non-manual occupations generally work little or no overtime, although senior salaried staff may from time to time be required to work substantial (unpaid) overtime.

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 (see p. 345) 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 are not restricted by statute.

Holidays with Pay and Bank Holidays

With few exceptions, manual workers (including shop assistants) in industries covered by agreements or statutory orders are entitled to paid holidays of at least three weeks and over one-half have basic entitlements of more than three weeks, in addition to public holidays. Non-manual workers generally have higher entitlements than manual workers. Some agreements, particularly in the non-manual sector, provide for extended holidays related to length of service, or status, or both.

Payment is made for public holidays, which are as follows: in addition to Good Friday and Christmas Day there are public holidays in England and Wales on New Year's Day, Easter Monday, the last Monday in May,¹ the last Monday in August, and the first weekday after Christmas (Boxing Day); while in Scotland, though there are many local variations, there are bank holidays on New Year's Day, 2nd January (in the Civil Service, banks and most major industries but on another additional day elsewhere) and 3rd January if either the 1st or 2nd January happens to be a Sunday, the first Monday in May, and the first Monday in August. Northern Ireland observes all the English holidays and, in addition, has a holiday on St. Patrick's Day (17th March) and on 12th July; the Tuesday after Easter is also a customary holiday for industry and trade.

'Fringe' Benefits

A variety of additional benefits exist in varying degree. It has been estimated that at the end of 1971 11.1 million employees were covered by occupational

¹ To mark the celebration of the twenty-fifth anniversary in 1977 of the Queen's accession to the throne, there will be a bank holiday on 7th June and the spring bank holiday will be held over until 6th June.

pension schemes. Many employees are also covered by occupational sick pay schemes (additional or complementary to the State schemes, see p. 123). A smaller number are covered by schemes for redundancy payments above the statutory minimum (see p. 335). 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. Senior members of firms may use a company car and some firms provide profit-sharing and share-saving schemes.

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 Members of Parliament, the judiciary, the armed forces, and doctors and dentists; it also services inquiries on particular pay structures and related problems.

INDUSTRIAL RELATIONS

The structure of labour relations in Britain has been established mainly on a voluntary basis. The system chiefly rests on the organisation of workers and employers into trade unions and employers' associations. These organisations discuss and negotiate terms and conditions of employment such as wages, hours of work and holidays, and other matters affecting people at their work. Whereas in the past the emphasis has been on formal industry-wide agreements supplemented as necessary by informal local agreements in firms or factories, a gradual change of attitude and structure has led to increasing emphasis being placed on agreements at firm and factory level (plant bargaining), though there have been some important exceptions to this trend, for example in the motor industry. 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 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 (see below). 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.

Under the Industry Act 1975 (see p. 206) trade unions may obtain information concerning the future plans of an enterprise whose contribution to a particular sector of industry is important to the economy, unless it is considered that this would be contrary to the national interest or in breach of a statute or trust of confidence. The Employment Protection Act 1975 (see p. 339) also makes provision for the 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 Confederation of British Industry (CBI) (see p. 340), the Trades Union Congress (TUC) (see p. 341) and the nationalised industries through the National Economic Development Council (see p. 191) 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 (see p. 197).

Both official and voluntary organisations are concerned with promoting better human relationships in industry. The Government has sought to extend by research 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. 391) and the Medical Research Council (see p. 388). 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.

Wages Councils

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 and holidays with pay and after considering any representations make orders giving statutory force to such proposals. The Department of Employment's Wages Inspectorate helps employers and workers to interpret the provisions of wage regulation orders and sees that they are complied with. About 3 million workers are covered by such arrangements.

Agricultural wages boards (there are boards for England and Wales and for Scotland) perform similar functions in relation to employment in agriculture.

On 1st January 1976 important changes in the role, operation and procedure of wages councils were made, designed to encourage the transition from statutory regulation to voluntary collective bargaining and giving the councils a greater measure of independence from the Government such as making their own wages orders and having representative members appointed directly by employers' associations and trade unions. The scope of the councils was widened to enable them to regulate any terms and conditions of employment in addition to remuneration and holidays, and the Government has power to convert a wages council into a statutory joint industrial council (SJIC), as a half-way stage towards full voluntary collective bargaining, where conditions are thought to be suitable. SJICs function in the same way as wages councils, except that they have no independent members.

Legal Framework

The Trade Union and Labour Relations Act 1974 (see p. 334) defines the status of trade unions and employers' associations and sets out certain legal requirements which they must observe. The Act confers immunities on them in respect of actions taken in support of a trade dispute, for example, peaceful picketing, and also provides that collective agreements shall not be legally enforceable unless they specifically provide for this.

The Employment Protection Act 1975 extends the rights of employees in a number of respects and strengthens voluntary collective bargaining. The Act placed the ACAS (see p. 342) on a statutory basis, provided for the appointment of a Certification Officer (see p. 341) and for the setting up of the Central Arbitration Committee (see p. 343); and established an Employment Appeal Tribunal to hear appeals concerning decisions of the Certification Officer and of industrial tribunals (see p. 101). (Industrial tribunals 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.)

Employers' Organisations

Many employers in Britain are members of employers' organisations, many 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 CBI.

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 organisations 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.

The Confederation of British Industry

The central body of employers is the 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 UNICE (the organisation of industrial federations of the European Community). The majority of national employers' organisations and nationalised industries and a large number of individual companies, both large and small, belong to the CBI. Its representatives or nominees sit on the National Economic Development Council, on various government advisory committees, and on other statutory bodies, such as the Manpower Services Commission, the Health and Safety Commission (see p. 344) and the Advisory, Conciliation and Arbitration Service.

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 and attitudes. Trade unions started more than two hundred years ago among the skilled craftsmen and spread later to the general labouring and unskilled classes. More recently

trade unionism has increased 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, that is, they may aim to recruit all employees in an industry whatever their occupation. Some are based on a combination of both principles.

At the end of 1974 the total membership of British trade unions was about 11.8 million. There were 491 unions, but over 78 per cent of all trade unionists were in the 25 largest unions, each with a membership of 100,000 or over, while only 0.6 per cent were in the 255 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 whose name is entered on the list may apply to the Certification Officer for a certificate that it is independent, such a certificate being 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 factories. 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.

Trades Union Congress

In Britain the national centre of the trade union movement is the TUC, which celebrated its centenary in 1968. 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 membership comprises 113 organisations, some of which are themselves federations of smaller organisations. Together they represent about 10.5 million workpeople. 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 successive 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 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. 192), with a further similar body for Wales 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 unionists have also their own national central body, the Scottish Trades Union Congress (STUC) which is similar in constitution and functions 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.

*TUC-Labour Party
Liaison Committee*

The TUC-Labour Party Liaison Committee was set up in 1972 after the general council of the TUC, the national executive committee of the Labour Party and the parliamentary committee of the Labour Party had agreed to establish a liaison committee to discuss policies on industrial relations and management of the economy. In 1973 the committee reached an agreement on the 'social contract' (see p. 193) which was reaffirmed in July 1976.

**Advisory,
Conciliation
and Arbitration
Service**

The independent Advisory, Conciliation and Arbitration Service (ACAS) was placed on a statutory basis under the Employment Protection Act on 1st January 1976, 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. Of 2,500 disputes referred to the ACAS for conciliation in 1975, some 80 per cent were resolved to the satisfaction of both parties.

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 determine differences on the basis of agreed terms of reference. Alternatively ACAS may refer cases for arbitration to the Central Arbitration Committee. Some 300 joint requests for such references were made to ACAS during 1975.

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).

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 has replaced the former Industrial Arbitration Board as the permanent industrial arbitration body able to resolve differences arising in disputes where other means have failed.

The committee is called upon to arbitrate on claims made under various Acts, including the Equal Pay Act 1970 and the Employment Protection Act 1975. It also arbitrates on industrial disputes referred to it by ACAS.

Labour Relations of 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.

Central and Local Government

Non-industrial employees in central Government service, where salaries and conditions of service are dealt with by the Civil Service Department are permitted and encouraged to join the appropriate Civil Service associations and there is a highly developed system of negotiation and joint consultation by means of the National and Departmental Whitley Councils (see p. 63). If there is failure to reach agreement by negotiation a department or association may, subject to certain limitations, report the dispute to the Secretary of State for reference to the Civil Service Arbitration Tribunal, an independent body appointed by the Secretary of State by powers under the Industrial Courts Act 1919. Government industrial employees are similarly encouraged to belong to trade unions and machinery exists for joint consultation. There are four Trades Joint Councils on which representatives of the Government and the trade unions sit to consider pay and conditions of employment affecting individual grades and certain other limited matters. A Joint Co-ordinating Committee, on which the Government and Trades Joint Councils are represented, deals with national pay negotiations, conditions of service and other matters of general application. In the main employing departments there are departmental joint councils for the discussion of domestic matters. 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; in carrying out these duties they are free to choose suitable arrangements. 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 implications 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.

Industrial Disputes

Though time lost through industrial disputes rose in Britain in the 1960s and early 1970s, as in many other countries, the situation has improved considerably since 1972 when the number of working days lost through strikes reached a peak of nearly 24 million. The figure dropped sharply to 5.96 million in 1975, the lowest figure since 1968. The number of strikes that occurred during the first six months of 1976 was the lowest for any corresponding period since 1953. Time lost through strikes is very much less than that lost through sickness, accidents and absenteeism.

Northern Ireland

Northern Ireland has a similar, but separate system of industrial relations under which certain powers and responsibilities devolve upon the Department of Manpower Services. Industrial relations legislation tabled for 1976 will bring the province into line with similar legislation enacted in Great Britain since 1974.

HEALTH AND SAFETY AT WORK

Employers have a duty at common 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 for 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, whose membership is drawn from both sides of industry and local authorities, has responsibility for health and safety at work, formerly held by a number of separate government departments. Its operational arm is the Health and Safety Executive, consisting largely of the former government inspectorates covering factories, mines and quarries,

agriculture, explosives, nuclear installations and alkali works; the Employment Medical Advisory Service (see p. 348) and the Safety in Mines Research Establishment (see p. 256).

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 will be supplemented where appropriate by codes of practice approved by the commission. 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 (see p. 340) against such notices.

Safety Regulations

About 270,000 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 750,000 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 (also part of the new Executive) and local authorities.

The Acts and regulations made under them are designed to secure the health, safety and welfare of employees, and deal with such matters as the fencing of machinery; precautions against the exposure of people to toxic gases and dusts; precautions against fire and special risks; the safe condition of premises; and cleanliness, lighting, temperature and ventilation. 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 general duty to report accidents, as well as 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. It also contains provisions for precautions against dangerous substances and the employment of women and young people.

Comparable provision with appropriate variations covers mines and quarries under the Mines and Quarries Act 1954; two statutes are concerned with agriculture—the Agriculture (Poisonous Substances) Act 1952 and the Agriculture (Safety, Health, and Welfare Provisions) Act 1956; and specialised statutes and delegated legislation are concerned with transport—the Railway Employment (Prevention of Accidents) Act 1900, the Merchant Shipping Acts, the Road Traffic Acts and the Air Navigation Order and Regulations.

As with the Factories Act these other provisions are, with some exceptions, enforced through inspectorates—the Mines and Quarries Inspectorate, the Agriculture Inspectorate, and the Railway Employment Inspectorate of the Department of the Environment. (The Railway Employment Inspectorate performs relevant functions as an agent of the Health and Safety Commission. Enforcement of the building regulations is the responsibility of the Secretaries of State for the Environment and for Scotland.) The Department of Trade is responsible for administering the Merchant Shipping Acts and for safety in air transport (most of the powers in respect of airworthiness in fact being delegated to the Civil Aviation Authority, and the Department of the Environment is mainly responsible for road and rail transport safety matters (though the Health and Safety Commission also has certain responsibilities in this connection). Safety requirements in all other places of work including hotels,

places of entertainment and educational establishments 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. The Health and Safety at Work etc. Act contains provisions to amend the Fire Precautions Act 1971 to allow for the transfer to fire authorities of responsibilities for general fire precautions and means of escape. The National Radiological Protection Board performs certain functions on behalf of the Health and Safety Executive.

The Health and Safety Executive is responsible, through its Nuclear Installations Inspectorate, for granting site licences for nuclear installations. No commercial installations may be constructed or operated in Britain without a licence granted by the executive under the Nuclear Installations Act 1965 as amended by 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 Department of Energy has responsibility for the safety of offshore oil and gas operations and is preparing a comprehensive code of health and safety regulations under the provisions of the Mineral Workings (Offshore Installations) Act 1971.

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 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. 175) 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 is also a Safety in Mines Research Establishment (see p. 256) which is concerned with research into safety aspects of mining and other industries.

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 Factory Inspectorate, besides inquiring into notified accidents and safety aspects of machine design and specification, circulates expert advice and encourages the appointment of safety officers and the formation of works safety committees, and maintains an industrial health and safety centre in London, at which various types of machinery demonstrating the effectiveness of guards are displayed, as well as a wide range of protective clothing and equipment.

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 is to appoint three major advisory committees in addition to the Committee on Major Hazards set up in January 1975; these include one on toxic substances, one on dangerous substances and one on medical matters. Proposals have also been made for the appointment of 18 industry-based committees. The Royal Society for the Prevention of Accidents (RoSPA) and the British Safety Council are national bodies concerned with accident prevention and sponsors a number of local accident prevention groups.

Training and Research in Safety

Training is important in accident prevention and the Training Services Agency provides a course in job safety for supervisors in its TWI scheme (see p. 334). The industrial training boards usually 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 publicity 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. A register of research into industrial health and safety matters has been compiled by the Department of Employment to give an indication of the scale and nature of research being undertaken. 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 helps to meet the need for academically trained safety officers and engineers whose careers will be concerned with the technical aspects of insurance and forensic work.

Health and Welfare

Great importance is attached to preventing health hazards at work and previous legislation relating to factories, mines and quarries and offices has been strengthened and reinforced by the Health and Safety at Work etc. Act. General requirements within the Act relate to the manufacture, safe handling and storage of substances which present a health risk, the maintenance of a healthy environment, and the provision of adequate arrangements for welfare at work. More detailed requirements are also prescribed (for example, in the Factories Act) and relate to matters such as heating, lighting, ventilation, general cleanliness, dust and fume control, sanitary accommodation, washing facilities and first aid. Specific regulations also make detailed requirements for certain processes associated with health risks (for example, dust in foundries and mines, and lead processes). Many industrial firms and organisations, as well as the Health and Safety Executive, supported by extensive laboratory facilities, monitor health hazards to which their employees may be exposed.

Employment of Women and Children

Legislation, besides forbidding employment of children under 13 years of age, forbids the employment of children who have not reached the statutory minimum school-leaving age (now 16) in any industrial undertaking; of 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 (see also pp. 123 and 345). It also limits and defines the permissible hours of employment for young people (see p. 337). Local authorities, moreover, have wide powers under the

Children and Young Persons Acts 1933-63 as well as the Education Acts 1944-48, to regulate hours and conditions of employment of children within their areas.

*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.

*Scientific Support
for Occupational
Health*

The Occupational Medicine and Hygiene Laboratories of the Health and Safety Executive at Cricklewood, north London, provide laboratory services and undertake research in the field of occupational health. Among other things these laboratories assist EMAS in the analysis of blood and urine samples; while 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 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.

**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.

17 Finance

THE PUBLIC SECTOR

PUBLIC EXPENDITURE

Public expenditure includes the current and capital expenditures of central Government and local authorities, together with the debt interest, and capital expenditure of the nationalised industries and other public corporations. Public expenditure, excluding debt interest, in 1975-76 amounted to about £52,200 million, of which 60 per cent was undertaken by the central Government and 30 per cent by local authorities, the remaining 10 per cent representing the capital expenditure of the nationalised industries and other public corporations.

The wide range of functions and purposes of this expenditure and its distribution is shown in Table 26.

The social services programmes accounted for about 44 per cent of the total programmes, whereas defence expenditure accounted for 10 per cent.

Out of the total public expenditure of £57,043 million in 1975-76 some £34,153 million or 60 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 1970-71 and 1976-77 total public expenditure programmes grew in real terms by about 27 per cent. However, measures were taken in 1976 to reduce planned spending on programmes for 1977-78 and 1978-79, designed to prevent the public sector absorbing resources needed for exports and investment (see p. 193).

Public Expenditure Surveys

Each year a survey is made of the whole range of projected public expenditure. The survey, which covers the period five years ahead, 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 as a basis for decisions about the total and the composition of public expenditure. The five-year period 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 report on the survey is prepared in the first half of the year. This is followed by ministerial consideration of the report. The Government's public expenditure plans are published (see Bibliography, p. 469) around the end of the year. They provide the basis for an annual public expenditure debate in the House of Commons.

The House of Commons has a Select Committee on Expenditure to consider public expenditure and its reports provide further information on which debates on public expenditure can be based. The committee has a number

of sub-committees, one to consider general Government financial control and the presentation of information about public expenditure, and others considering public expenditure in particular areas: defence and external affairs, education and the arts, social services and employment, trade and industry and environment. These committees take oral and written evidence from departmental ministers as well as their officials and can take evidence from witnesses outside Government.

TABLE 26: Public Expenditure 1975-76

	<i>£ million</i>
<i>Defence and external relations (UK)</i>	
Defence	5,320
Overseas aid and other overseas services	750
<i>Commerce and industry</i>	
Agriculture, fisheries and forestry	1,463
Trade, industry and employment	2,833
<i>Nationalised industries</i>	
Nationalised industries' capital expenditure	3,894
<i>Environmental services</i>	
Roads and transport	2,679
Housing	4,561
Other environmental services	2,677
Law, order and protective services	1,713
<i>Social services</i>	
Education and libraries, science and arts	7,437
Health and personal social services	6,274
Social security	9,522
<i>Other services</i>	
Other public services	820
Common services	775
<i>Northern Ireland^a</i>	1,487
<i>Statistical adjustments</i>	21
<i>Total programmes</i>	52,226
Debt interest	4,817
TOTAL	57,043

Source: *National Income and Expenditure 1965-75*

^a Including the other services shown above except Defence and external relations.

Estimates

Each department submits its estimates of cash requirements to the Treasury in the December before the financial year beginning on the following 1st 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. 352) and are approved by Parliament for one year ahead, by means of an annual Appropriation Act, in July (expenditure to this date from 1st 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.

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. 359).

Cash Limits

Cash limits are being greatly extended in 1976-77 to all public spending where they can impose greater financial discipline. They are an important part of the Government's policy for reducing inflation and will help in forecasting the Government's financing requirements. About half 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 except new house building and community ownership of development land. The estimates of the financing requirements of the nationalised industries (and the regional water authorities) are being used as a form of cash limit.

Spending departments and authorities are required to provide within their cash limits for any increase in costs due to pay and price changes. The cash limits were published in April 1976 (see Bibliography, p. 469).

Treasury Control The Treasury's authority is required for any new item of expenditure, for any increase in expenditure beyond that originally authorised, for any change in policy which means an increase in expenditure, and for extra-statutory payments. This requirement is, however, subject to any delegated authority which may be given to departments to deal with particular types of expenditure. Treasury control does not imply final sanction by the Treasury—in the last resort the decision is taken by the Government as a whole, and carried out subject to Parliamentary consent.

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. Since 1866 he has had two functions: as Comptroller he ensures that all revenues and other public money payable to and from the Consolidated Fund and the National Loans Fund are duly paid over and that all issues are authorised by statute, and as Auditor General he audits departmental and other accounts and, as required by statute, submits his reports on Appropriation Accounts and other accounts to Parliament. For many years and with the encouragement of the Public Accounts Committee (see below) his statutory audit functions have been extended to include general financial administration, cost-effectiveness and cases of apparent waste or extravagance.

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 properly 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 the accounts and these terms are widely interpreted. Successive committees have investigated whether full value has been obtained for the sums spent by departments and have examined cases in which the administration appears to have been faulty or negligent. The committee has become a powerful instrument for the exposure of waste or inefficiency. It embodies its findings in regular reports and its recommendations are considered by departments and put into effect, so far as they are accepted, by Treasury instructions. The Government's reply to each report is submitted to Parliament in the form of a Treasury Minute and both documents are debated at the beginning of the following Parliamentary session.

THE BUDGET

The Budget (an old word which meant a bag containing papers or accounts) is a set of proposals made usually once a year in either March or April, for financing government expenditure. 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 of the Government's past and prospective revenue and expenditure, and his assessment of the position and prospects of the economy.

The Budget speech is followed by the moving of a set of Ways and Means 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 speech is normally the main occasion for a review of general economic policy. The scale of public expenditure and taxation has an important influence on the general level of output and distribution of resources. The Budget judgment 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 pressure of demand; its measures can also have a broader influence on the pattern of demand and 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 speech as have financial and monetary measures not related to the Finance Act, such as changes in exchange control policies. Such measures, however, are not 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 the Chancellor's disposal, and especially by increasing or reducing the yield of central Government taxes. The tax changes made necessary by the Budget judgment are enacted in the

Finance Act. But the Finance Act 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 or 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 however (income tax and corporation tax) 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 laws, do not come into effect until the appropriate Act—in this case the Finance Act—has received Royal Assent (in the case of the spring Budget, normally at 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. Tax proposals may be made at any time to meet changes in economic circumstances.

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, p. 469) 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 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.

Central Government borrowing may be in the form of borrowing from the public either through the National Savings Movement (see p. 362) or by borrowing on the market by means of new issues of securities. New issues of government securities are made from time to time for the purpose of refinancing maturing issues (conversion loans) or to raise new money (issues for cash). The capital requirements of the nationalised industries are met to some extent by the central Government through the National Loans Fund, while those of the local authorities are met partly by the central Government through the Public Works Loan Board and partly by borrowing directly from the public. Some nationalised industries and local authorities also borrow, under special statutory power and with Treasury consent, in foreign currencies. The euro-currency market has become an increasingly important source of public sector borrowing. After allowing for the changes introduced by the Budget of April 1976 the central Government's borrowing requirement for

1976-77 was expected to be £10,426 million, compared with £8,820 million in 1975-76 and that for the public sector as a whole £11,962 million compared with £10,773 million in 1975-76. (In July 1976 it was announced that the public sector borrowing requirement for 1976-77 was expected to be £11,500 million.)

Table 27 shows total revenue from taxation and other sources in 1975-76 and 1976-77 together with the effects of the Budget changes (for the changes introduced by the 1976 Budget, see p. 193).

SOURCES OF REVENUE

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 capital transfer tax and capital gains tax; and third, taxes on expenditure (including taxes on the ownership or use of certain assets)—these include protective and revenue duties, value added tax (VAT), local rates (see p. 69), stamp duties and licence duties (for example, on motor vehicles). Taxes on individual (but not corporate) incomes are progressive in that large 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.

Taxes on Income

Income Tax

Income tax is imposed for the year of assessment beginning on 6th April. The rates of tax introduced in the April 1976 Budget are as follows: the basic rate of 35 per cent applies to the first £5,000 of taxable income (that is, total income less deductions and personal allowances), a rate of 40 per cent is charged on the £5,001-£5,500 band of taxable income, and the rate for successive bands rises generally in steps of 5 per cent until a maximum rate of 83 per cent is reached at a level of over £20,000 of taxable income. These rates are charged on both earned and investment incomes. Investment incomes are also liable to a surcharge on the amount by which they exceed £1,000 (£1,500 for the elderly); the surcharge is 10 per cent on the first £1,000 (£500 for the elderly) of investment income above the relevant threshold and 15 per cent on the remainder. The tax imposed on an individual is graduated by means of personal allowances and reliefs. In general, married couples 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 1976-77 a single person earning £3,000 a year pays £792.75 in income tax, while a married man with the same earned income pays £670.25; if he has two children under the age of 11 and his earnings plus the family allowance total £3,000 his tax falls to £478.45. The amount of tax payable by a single person varies from, for example, £442.75 on an earned income of £2,000 a year to £10,948.75 on an earned income of £20,000.

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 the United Kingdom and on all income arising abroad of persons resident in the United Kingdom. Interest on certain United Kingdom government securities belonging to persons not ordinarily resident in the United Kingdom is exempt.

The United Kingdom has entered into agreements with many countries providing for relief from double taxation; where such agreements are not in force unilateral relief is allowed.

*Company
Taxation*

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

TABLE 27: Taxation and Miscellaneous Receipts 1975-76 and 1976-77

	<i>£ million</i>			
	1975-76		1976-77 Forecasts	
	Budget forecast	Outturn	Before Budget changes	After Budget changes
<i>Taxation</i>				
<i>Inland Revenue :</i>				
Income tax	14,008	15,068	17,977	17,045
Surtax	85	109	30	30
Corporation tax	2,125	1,987	2,694	2,650
Capital gains tax	325	386	400	400
Estate duty	165	211	70	70
Capital transfer tax	150	116	219	212
Stamp duties	220	282	300	293
<i>Total Inland Revenue</i>	17,078	18,159	21,690	20,700
<i>Customs and Excise :</i>				
Value added tax	3,275	3,415	3,875	3,650
Oil	1,550	1,538	1,600	2,025
Tobacco	1,675	1,676	1,760	1,790
Spirits, beer, wine, cider and perry	1,475	1,560	1,705	1,850
Betting and gaming	275	265	295	295
Car tax	170	163	190	190
Other revenue duties	10	9	10	10
Protective duties, etc.	530	507	555	555
Agricultural levies	40	43	60	60
<i>Total Customs and Excise^a</i>	9,000	9,176	10,050	10,425
Motor vehicle duties	773	781	835	835
<i>Total Taxation</i>	26,851	28,116	32,575	31,960
<i>Miscellaneous Receipts :</i>				
Broadcast receiving licences	234	230	237	237
Interest and dividends	145	152	140	140
Other	880	919	860	860
<i>Total</i>	28,110	29,417	33,812	33,197

Source: *Financial Statement and Budget Report 1976-77*

^a Includes customs duties and agricultural levies accountable to the European Communities as 'own resources'.

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 1975 (1st April 1975–31st March 1976) it is 52 per cent with a reduced rate of 42 per cent for small companies (as defined in the Finance Acts 1972, 1974 and 1976). 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 31st March the profits are apportioned on a time basis. Relief for the effect of inflation on the value of stocks was given in the November 1974 Budget and further extended in those of April 1975 and April 1976.

*Petroleum
Revenue Tax*

Under the Oil Taxation Act 1975 a petroleum revenue tax of 45 per cent (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. Each licensee of an oilfield is to be charged on the profits for that field, computed for half-yearly periods.

Taxes on Capital

*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 £15,000 of transfers is exempt; the rates on the remainder rise from 5 per cent on the slice between £15,000 and £20,000 to 75 per cent on the excess over £2 million for lifetime transfers and from 10 per cent on the slice between £15,000 and £20,000 to 75 per cent on the excess over £2 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. Certain assets may be exempt from tax, including the principal private residence, chattels worth less than £1,000 (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 proceeds of disposals do not exceed £1,000 in any year. In addition 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. The rate of DLT is 80 per cent but the first £10,000 of development value realised in any financial year is completely exempt and for a transitional period up to 31st March 1979 the next £150,000 in any financial year will be liable at a rate of 66.6 per cent. Exemptions from DLT include the sale or development of owner-occupied residences.

*Proposed
Wealth Tax*

In March 1974 the Chancellor of the Exchequer announced the Government's intention to introduce an annual tax on wealth, but only after a thorough public discussion of its form, rates and relationship with other forms of taxation had taken place. A consultative document was published in August 1974 and a Select Committee of the House of Commons has examined the Government's proposals. The committee's report was published in December 1975.

**Taxes on
Expenditure**

The largest group of taxes on expenditure are those administered by the Customs and Excise Department, namely VAT, car tax and the duties on tobacco, hydrocarbon oil and alcoholic drinks, protective duties, betting and gaming and other revenue duties of customs and excise. 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. On 1st January 1976 customs revenue duties were converted into internal taxes (except in the case of tobacco, which is to be completed by 1st January 1978). Prior to this it had been the practice in Britain that a commodity taxed to provide revenue bore a customs duty if it was imported and an excise duty if it was domestically produced. However, under the Treaty of Accession to the European Community Britain undertook gradually to convert revenue duties into internal taxes chargeable alike on imported and home-produced goods. Following the conversion fiscal charges, known as excise duties, are charged on imported goods at the same rates as the duties on similar home-produced goods and any protective charges are levied as import duties under the Import Duties Act 1958. Import duties are being brought into line with the Community's common external tariff (see p. 374). All the revenue duty goods (other than hydrocarbon oil) are subject to the standard rate of VAT.

The Chancellor of the Exchequer has power to vary between Budgets the VAT rates by up to 25 per cent, and the rate of any of the other main groups of customs and excise duties (that is, tobacco, alcoholic drinks, oil and the minor revenue duties) by up to 10 per cent. This power, known as the 'regulator', requires annual renewal. The April 1976 Budget increased the duties on hydrocarbon oil, tobacco products, spirits, wine and beer and introduced a new duty on cider and perry.

Value Added Tax

Value added tax (VAT) is collected 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 £5,000 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 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 most services); public transport fares; young children's clothing and footwear; 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.

VAT is chargeable at a standard rate of 8 per cent except for certain goods which are charged at a higher rate of 12.5 per cent. These include petrol, most domestic electric appliances (excluding cookers, space heaters and fitted water heaters), radios, televisions, hi-fi equipment, boats, aircraft, caravans, cameras, binoculars, furs and jewellery.

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 the Environment; the proceeds are paid into the Consolidated Fund. The licence duty on a private motor car is £40 a year; motor cycles and three-wheel vehicles, etc., pay £4, £8 or £16 a year according to engine capacity. Goods vehicles are taxed by unladen weight, and taxis and buses by seating capacity.

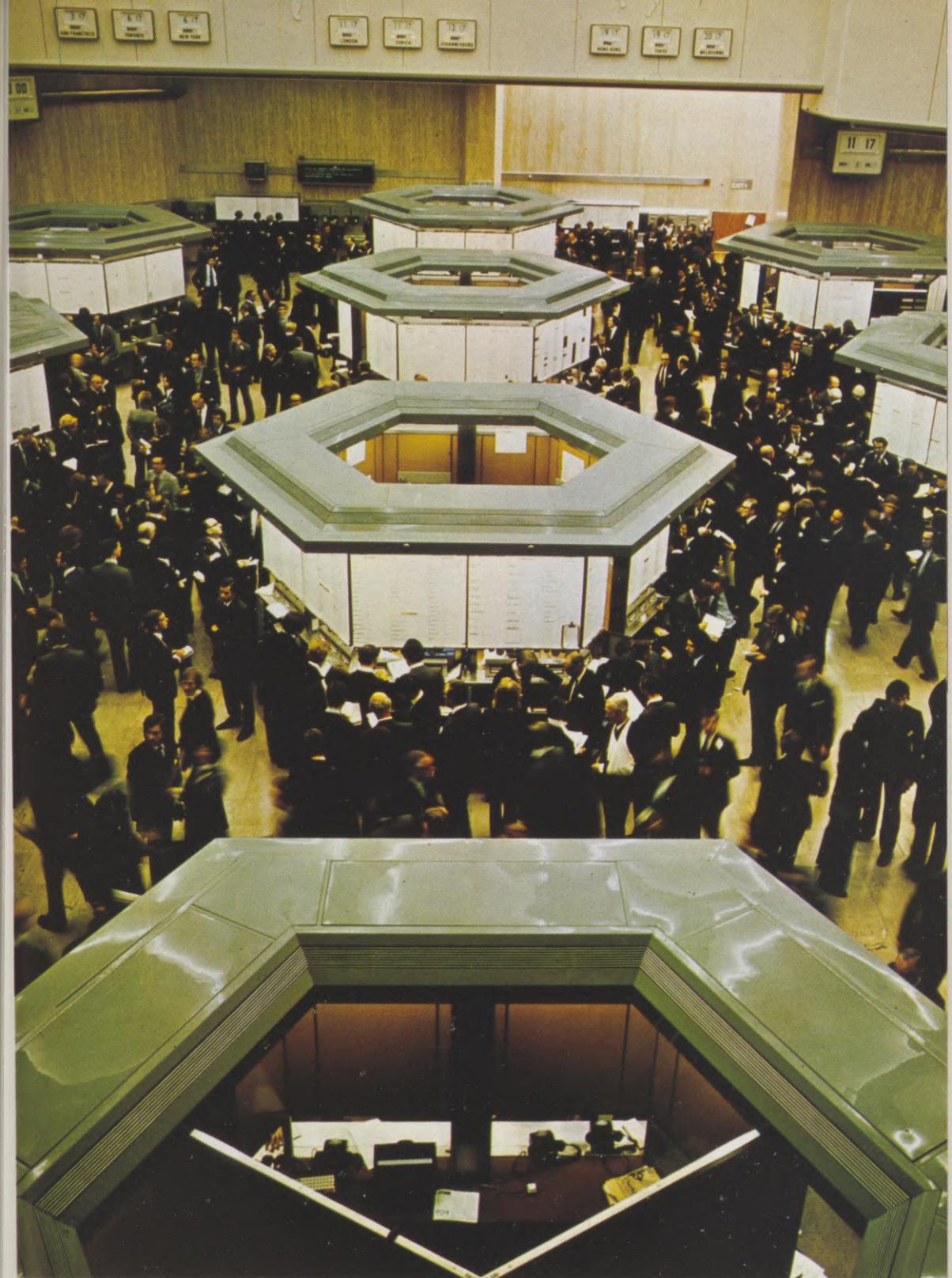
The National Debt

The National Debt increased rapidly during and immediately after the first and second world wars. It rose from £650 million in 1914 to £7,435 million at the end of the first world war, and from £7,131 million in 1939 to £23,647 million in 1946. On 31st March 1976 the total National Debt was estimated at £56,577 million, of which £3,444 million (valued at the rate of £1=§1.9160) was repayable in currencies other than sterling, mainly to the United States and Canadian Governments. Of the £53,133 million of internal debt, £11,994 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 (ranging from 2½ to 13¼ per cent) and with fixed or indeterminate dates of repayment.

PUBLIC FINANCE IN NORTHERN IRELAND

The general system of public finance in Northern Ireland is, in its main features, similar to that operating in the United Kingdom as a whole. 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. This revenue is supplemented by an annual sum voted to the Secretary of State for Northern Ireland. Loans from the United Kingdom National Loans Fund are available (up to a limit of £800 million) to finance capital expenditure programmes in Northern Ireland.

Various funds have been established in Northern Ireland, in addition to



Buying and Selling

General view of the market floor in the Stock Exchange, London.

Buying and Selling

London's wholesale markets play a leading part in the distribution of foodstuffs, particularly imported supplies.

Covent Garden market – fruit and vegetables.





Billingsgate market – fish.



Smithfield market – meat and poultry.



Buying and Selling

National Exhibition Centre, Birmingham, is linked to the road, rail and air network.



Sotheby's, the international auction house.

statutory Reserve and Sinking Funds, for specific purposes. In general, these funds follow the United Kingdom pattern, 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 31st March 1976 a sum of approximately £476 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. 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 the Bank has a major responsibility for advising the Government on the formulation of monetary policy and for its subsequent execution.

The Bank's implementation of monetary policy is carried out through market operations and its arrangements to call for or release special deposits from or to banks and the larger finance houses. The techniques for controlling credit involve reliance among other things on changes in interest rates which the Bank can influence by buying or selling Treasury and other bills in the market and by similar operations in the market for government stocks. An important indication of its intentions is the minimum lending rate (known as 'Bank rate' until 1972), which is the minimum rate at which the Bank will normally lend to the members of the London Discount Market and closely reflects short-term market rates, being normally $\frac{1}{2}$ per cent above the average rate of discount for Treasury bills. Calls for special deposits also influence interest rates and restrict the growth of money supply by reducing the banks' lending base. In order to facilitate the regulation of monetary policy the Bank requires banks to maintain a minimum reserve asset ratio of 12.5 per cent eligible liabilities (basically sterling deposits of two years or less from outside the banking system together with any foreign currency changed into sterling).

The Bank is the recognised 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 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 clearing 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 April 1976 sterling sight and time deposits with these banks from non-bank customers amounted to £24,700 million and accounted for over 70 per cent of the total of such deposits with all banks in Britain, that is including the accepting houses, overseas banks and other British banks. 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.

Membership of the London Bankers' Clearing House, which has consisted of the London clearing banks together with the Bank of England, was extended towards the end of 1975 when the Co-operative Bank and the Central Trustee Savings Bank also became members. In 1975 cheques, drafts, bills and bankers' effects passing through the interbank debit clearing system averaged in value nearly £149,655 million monthly, while the average monthly value of the credit transfer clearing was over £1,840 million.

Current account balances with the deposit banks are repayable on demand and no interest is paid on them, but on deposit account balances interest is paid at a rate below individual banks' base rates. The deposit banks' more liquid assets consist of cash, balances at the Bank of England, money at call (mainly loans to discount houses), and their holdings of Treasury and commercial bills. The banks also hold a proportion of their assets as portfolio (mainly British Government securities) or trade investments.

The banks' profits are largely earned through their advances to customers partly in the form of overdrafts and partly in the form of loans (with or without collateral security). In April 1976 advances by the London clearing banks amounted to about 60 per cent of their total deposits.

The bank giro, a credit transfer scheme, and the direct debiting system, 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. Some banks have automatic cash dispensing machines in operation. Credit cards are in widespread use for the settlement of accounts in retail shops; and cheque cards enable the card holder to cash a cheque up to £30 at any office of the major British and Irish banks, and at offices of many banks overseas.

National Giro

The Post Office National Giro, 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 the National Giro Centre near Liverpool. In March 1976, Giro had 500,000 accounts with deposits of over £150 million. The number of weekly transactions had risen from 1.6 million in March 1969 to 4.8 million by March 1976 when the weekly turnover was £700 million. In addition to its services to individuals Giro'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 accounting system. Over 120 local authorities as well as voluntary housing associations use Giro's rent collection services. Giro's international services also provide money transfer facilities in Europe linking over 16 million account holders in the European Community and other countries in Western Europe. Giro has been authorised to offer a wider range of facilities including personal loans and overdrafts, as well as overdrafts for corporate customers. These new facilities are being introduced on a phased basis.

Overseas Banks

Altogether over 330 overseas banks are represented in London, about 240 directly and 90 indirectly through their holding of stakes in London consortium banks; of those directly represented, 57 are from the United States, 23 from Japan and 86 from Europe, of which 35 are 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

The merchant banks have an influence on Britain's financial affairs which is much greater than their size in relation to other financial institutions might suggest. Traditionally merchant banks have 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.

The Discount Market

The Money or 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. They have recourse to the Bank of England as lender of last resort and the Bank lends to the houses 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.

The assets of the discount houses mainly consist of Treasury and commer-

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.

cial bills, government and local authority securities and negotiable certificates of deposit denominated in both sterling and US dollars. The market accepts as an informal responsibility that it should cover the Government's need to borrow on Treasury bills which are offered on tender each week.

The National Savings Movement

The National Savings Movement started in 1916 to help finance the war by promoting savings. The present movement encourages the widespread investment of savings in Trustee Savings Banks and the National Savings Bank (see p. 263) and in National Savings securities. The movement is led by the National Savings Committee for England and Wales and similar committees for Scotland and Northern Ireland. The committees consist of representatives of the voluntary savings movement in the regions and of various national institutions connected with finance, industry and education. Voluntary local savings committees, often supported by local authorities, co-ordinate the work of voluntary local savings groups. The administration of the National Savings Bank and other forms of national savings is carried out by the Department for National Savings. At the end of June 1976 National Savings totalled £11,867 million.

National Savings Securities

Five forms of National Savings securities are on sale: National Savings Certificates, British Savings Bonds, Premium Savings Bonds, National Savings Stamps (to be withdrawn from sale on 31st December 1976) and Gift Tokens. National Savings Certificates, in units of £1, are encashable at par at any time; interest, which is free of income tax and capital gains tax, is paid only on encashment; the limit on individual holdings is 1,000 units of the current 'fourteenth issue' introduced in 1974. Index-linked National Savings Certificates, Retirement Issue, introduced in 1975, are available only to men aged 65 and over and women aged 60 and over at £10 for 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 will be added to the repayment value. Any gain is free of income tax or capital gains tax. The maximum holding is 50 units (£500). British Savings Bonds, 8.5 per cent, sold in units of £5, are repayable at par on one month's notice. If the bonds are held to maturity (five years from the date of purchase) they are repaid with a bonus of 4 per cent tax free. Maximum holding is £10,000. Premium Savings Bonds are in units of £1 (minimum purchase is £5) and individual holdings are limited to £2,000. After a qualifying period of three months the bonds give investors a chance to win tax-free prizes instead of receiving interest. There is a weekly draw for a prize of £50,000 and 25 prizes of £1,000 and a monthly draw for prizes ranging from £25 to £100,000. At the end of June 1976, £1,153 million was invested in this form of savings. A selection of British Government securities is held on the National Savings Stock Register. Trustee Savings Banks also deal in stock on the National Savings Stock Register.

Northern Ireland issues separately Ulster Savings Certificates and Ulster Development Bonds on similar terms to the corresponding National Savings Certificates and British Savings Bonds.

Contractual Savings

An index-linked contractual savings scheme was introduced in 1975 under the terms of the Third Issue of the Save as You Earn (SAYE) scheme. The scheme enables savings to be made in fixed regular monthly amounts with a minimum of £4 and a maximum of £20 in deposits with the Department for

National Savings, by means of deductions from pay or by other regular payments. Indexation only applies to completed savings contracts, except where the saver dies before completing the contract. At the end of five years, the repayment value will be the total contributions plus any increase due to index-linking of monthly contributions. Completed savings which are not withdrawn will 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 will be able to withdraw the total sum saved (but there cannot be partial withdrawals). Tax-free compound interest will then be paid at the rate of six per cent a year on amounts withdrawn after the first year.

National Savings Bank

The National Savings Bank provides a countrywide system for depositing and withdrawing small savings and has about 21 million active accounts. Ordinary Accounts bear interest at 4 per cent and the first £40 of annual interest is tax free. Up to £30 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 June 1976 the sum of the two accounts totalled £2,185 million.

Trustee Savings Banks

The Trustee Savings Banks, most of which were founded in the nineteenth century, operate under their own trustees but are subject, under the Trustee Savings Banks Act 1976, to the supervision of the Trustee Savings Banks Central Board and the Registrar of Friendly Societies. Following a planned programme of amalgamations, there were 21 individual banks in June 1976 (compared with 67 a year earlier) with 1,599 offices, 14 million accounts and total deposits in excess of £4,000 million. The 1976 Act empowered Trustee Savings Banks to provide a full banking service including credit services and removed the requirement that deposits be invested with the National Debt Commissioners. The Trustee Savings Banks operate their own unit trust and units may be purchased by depositors and non-depositors alike.

**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 finance corporations, hire-purchase finance companies, the stock exchange, investment trust companies, unit trusts, building societies and the insurance market. The firms engaged in such activities are in the main highly specialised, for example, finance houses, stockbrokers, insurers and insurance underwriters and brokers.

**Finance
Houses**

There are about 1,840 firms engaged in the financing of hire-purchase and other instalment credit transactions, and of these 38 constitute the Finance Houses Association which accounts for about 90 per cent of all finance house business. At the end of March 1976 the value of instalment credit debt outstanding to finance houses, including those recognised as banks, amounted to £1,425 million, compared with about £845 million at the end of 1970. Hire-purchase agreements and other instalment credit comprise about 50 per cent of the total selected assets of finance houses (that is excluding fixed assets). About 60 per cent of new credit extended by finance houses relates to cars and commercial vehicles, the remainder relating to industrial and building equipment and household and other goods.

Since 1965 the leading finance houses have complied 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 deposit and maximum repayment period for specific goods financed by certain forms of lending. Finance houses with total eligible liabilities exceeding £5 million, are subject to the same system of credit control as that applied to banks (see p. 359).

Finance Corporations

Finance for Industry Ltd. (FFI) was formed in 1973 as a result of the merger of the Finance Corporation for Industry and the Industrial and Commercial Finance Corporation. It provides capital for the re-equipment and development of industry when finance cannot readily be obtained elsewhere; and provides capital, financial advice and computer and other services to small and medium-sized companies, especially those concerned in technical development. The resources of the company have been expanded substantially to enable it to provide up to £1,000 million of medium-term funds at commercial rates of interest for investment in industry. At the end of April 1976 loans to 28 companies amounting to just over £200 million had been approved, of which £100 million had been advanced.

Equity Capital for Industry Ltd. (ECI) was formed in mid-1976 as a new specialist long-term institution whose primary purpose is to provide 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 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 14½ million 'A' ordinary shares of £1 (£0.10 paid) are held by industrial, shipping, mining and banking interests in Britain, and 11¾ million 'B' ordinary shares of £1 (£0.50 paid) are held by the Bank of England and certain central banks in the Commonwealth. At 31st March 1976 the CDFC held investments of about £35 million spread over a wide range of industries in 40 countries.

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 31st March 1976 loans and investments amounted to £300 million.

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 1975 CDC had a total capital commitment of £268 million.

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 1975, such companies held assets worth £5,703 million, of which over one-third 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, whose 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 by 1939 there were 98 trusts, with assets estimated at £80 million. At the end of July 1976 there were 2.2 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 £2,544 million at the end of July 1976. 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

The principal function of building societies is to supply long-term loans on the security of private dwelling-houses purchased for owner-occupation, though loans are occasionally made on the security of commercial and industrial premises and farms. The funds of building societies are derived mainly from the general public who invest in shares or deposits. The amount of share capital is not fixed; shares are not dealt in on the stock exchange but may be withdrawn at par in cash if notice is given. The Building Societies Act 1962, which consolidated all earlier legislation, prescribes the general way in which societies must conduct their business. The Chief Registrar of Friendly Societies has discretionary powers to stop a society either advertising or accepting money from investors if he considers that the way in which the society's business is conducted is jeopardising investors' money. The rapid expansion of building society activity in the twentieth century has been accompanied by a concentration of most of the business in the hands of a few large societies. At the end of 1975, 382 societies were registered, with total assets of about £24,200 million; just over half of this amount is accounted for by the five largest societies. The amount advanced on mortgage in 1975 was £4,900 million, 67 per cent more than in 1974.

The Stock Exchange

The stock exchanges of the United Kingdom and Irish Republic amalgamated on 25th March 1973. Dealings with the public remain unchanged, but brokers may open offices nationally and firms wherever situated trade on equal terms. The main exchange and central administration are in London. There are also trading floors in Glasgow, Liverpool, Manchester, Birmingham, Bristol, Cardiff, Belfast 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 bourses combined. Some 9,000 securities are quoted on the Stock Exchange; at the end of March 1976 these had a total market value of £250,000 million. About 7,500 securities of companies were quoted, including a number of leading overseas companies. Company issues represented more than four-fifths of the securities at market valuation, the remainder being United Kingdom, Irish Republic and other overseas government and corporation stocks.

The Stock Exchange does not fix dealing prices; the terms on which bargains are made between members reflect the interaction of supply and demand for the securities concerned.

The Foreign Exchange Market

The market consists of about 250 authorised 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 determine in advance the precise sterling equivalent of the foreign currency.

The London Gold Market

All authorised 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 fix a price for all transactions which customers ask to have executed at the fixing. Although much interest centres upon the fixings, active dealing takes place throughout the day. The London fixing price remains the basis on which most of the world's non-monetary gold is traded. Forward prices may also be quoted on request.

The Insurance Market

Although a certain amount of insurance is provided by friendly societies and trade unions, most insurance services in Britain are in the hands of mutual or joint stock insurance companies or Lloyd's underwriters.

Insurance Companies

There are about 800 insurance companies authorised to carry on one or more classes of insurance business in Britain of which about 170 are overseas companies. A number of other overseas insurance companies are represented by agents in Britain although they do not write business here.

Some 300 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.

Lloyd's

Lloyd's is an incorporated society of private insurers in London. The name 'Lloyd's' is derived from Edward Lloyd's coffee house, established in the late seventeenth century, where merchants with maritime and other interests gathered to transact business. Although in its earlier history the activities of Lloyd's were confined to the conduct of marine insurance business, there has also been built up at Lloyd's a very considerable world-wide market for the transaction of other classes of insurance business in non-marine, aviation and motor markets.

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. Since 1969 non-Commonwealth underwriters have been admitted to membership of Lloyd's if they satisfy the requirements.

There are some 8,500 underwriting members of Lloyd's grouped into

nearly 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 re-insurance business, acting as intermediaries in the exchange of contracts between companies, both British and overseas, and often acting as London representatives of the latter.

International Insurance Services

Over 60 per cent of the general (that is, non-life) business of members of the British Insurance Association is carried on overseas, partly by re-insurance 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 re-insurance in the European Community are regulated by directives addressed to the governments of member states. The purpose of the directives is to harmonise the legislation of the various member countries, thus providing a 'common market', which would avoid distortion of competition. Two directives have been approved by the Council of Ministers. The first deals with the conditions of access to non-life insurance business and the second requires member countries not to discriminate in law or practice between their own subjects and those of other member states. Draft directives on life insurance, insurance contracts, and the taxation of insurance policies are also being considered.

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 a number of active futures markets including the Baltic Exchange (grains), the London Commodity Exchange (cocoa, coffee, rubber, soya bean meal, sugar and wool) and the London Metal Exchange (non-ferrous metals, including silver).

The Crown Agents

The Crown Agents for Oversea 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. The individual Crown Agents are appointed by the Minister for Overseas Development, but the office is not a government department. It is a non-profit-making public service which is responsible to its principals for business operation. In April 1976 the Government announced its intention to incorporate the Crown Agents.

18 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 biggest trading area which accounts for over 35 per cent of all trade.

Since the mid-nineteenth century, when the rapid growth of Britain's industry, commerce and shipping was accompanied by its development as an international trading centre, overseas trade has been of vital importance to the country's economy. Britain relies upon imports for almost half its total consumption of foodstuffs, and 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. Its exports of goods represent more than one-fifth of the gross domestic product. It is a major supplier of machinery, vehicles, aircraft, metal manufactures, electrical apparatus, chemicals and textiles.

The existence of a sound commercial banking system and a wide range of financial institutions ensures 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 British overseas trade including its commodity and area distribution, outlines British commercial policies and government services to overseas trade, summarises the balance of payments and gives an account of government aid to developing countries.

OVERSEAS TRADE

PATTERN OF TRADE

Changes in the value, volume, composition and geographical distribution of imports and exports are outlined in the following paragraphs.

Value and Volume

In 1975 Britain's exports of goods were valued at about £18,768 million f.o.b. on a balance of payments basis. On the same basis, after excluding payment for freight and insurance and making some other adjustments, imports in 1975 were about £21,972 million. Between 1974 and 1975 the value of exports rose by 18 per cent while that of imports increased by only 4 per cent. Over the same period the volume index of exports declined by 4 per cent and of imports by 7 per cent; but the unit value of exports rose by 22 per cent and of imports by only 13 per cent. These movements occurred against a background of a low level of domestic activity, higher commodity prices and a further depreciation of sterling (see p. 197).

The value and volume of exports and imports, together with the terms of trade index, from 1970 to 1975 are shown in Table 28.

TABLE 28: Imports and Exports: Annual Figures

	1970	1971	1972	1973	1974	1975
Value (£ million):						
Imports ^a c.i.f. ^b g	9,040	9,825	11,143	15,852	23,234	24,163
Imports, f.o.b. ^c f	7,932	8,530	9,843	14,106	21,119	21,972
Exports of British produce and manufactures, and re-exports f.o.b. ^c d g	8,076	9,187	9,759	12,505	16,600	19,929
Exports f.o.b. ^c f	7,907	8,810	9,141	11,772	15,899	18,768
Volume Index Nos. ^f (1970 = 100)						
Imports	100	104.2	116.3	133.9	135.2	125.6
Exports	100	106.7	106.6	121.8	130.1	124.9
Unit Value Index Nos. ^f (1970 = 100)						
Imports	100	104.7	109.7	139.7	218.0	245.7
Exports	100	105.6	111.1	126.0	162.7	198.5
Terms of Trade ^e f (1970 = 100)	100	100.9	101.3	90.2	74.6	80.8

Sources: *Trade and Industry; United Kingdom Balance of Payments 1965-75*

^a The import figures are shown exclusive of purchases of United States military aircraft (including some missiles) which are being financed by a special United States Export/Import Bank credit.

^b '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.

^c '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.

^d Including an allowance for under-recording of exports.

^e Export unit value index as a percentage of the import unit value index.

^f On a balance of payments basis.

^g On an overseas trade statistics basis.

Commodity Composition Imports

Although Britain is still the largest importer 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 foodstuffs to total imports, on an overseas

Area pattern of trade 1975 (percentages of total values)



Note: Discrepancies between totals and their constituent parts are due to rounding

trade statistics basis, has fallen from 39 per cent in 1954 to 16 per cent in 1975. There has been a similar downward trend in the proportion accounted for by basic materials—from 30 per cent in 1954 to about 9 per cent in 1975.

Imports of petroleum and petroleum products amounted to about 17 per cent of the total value of imports during 1975, when their value was £4,168 million. This was 8 per cent lower than in 1974 due to a reduction in volume following the increase in the price of crude oil which by the end of 1975 had risen to five times the level in the third quarter of 1973.

In recent years there has been a significant rise, in Britain as in other industrial countries, in the proportion of imports of finished manufactures.

TABLE 29: Commodity Composition of Trade 1975^a

Exports (f.o.b.) ^b	£ million	Per cent
Food, beverages and tobacco	1,428	7.2
Basic materials	561	2.8
Fuels	814	4.1
Manufactures:	16,464	82.6
<i>Machinery and transport equipment</i>	<i>8,236</i>	<i>41.3</i>
Non-electric machinery	4,255	21.4
Electric machinery	1,529	7.7
Road motor vehicles	1,737	8.7
Other transport equipment	715	3.6
<i>Chemicals</i>	<i>2,179</i>	<i>10.9</i>
<i>Metals and metal manufactures</i>	<i>1,839</i>	<i>9.2</i>
<i>Textiles</i>	<i>698</i>	<i>3.5</i>
<i>Other manufactures</i>	<i>3,512</i>	<i>17.6</i>
Miscellaneous	662	3.3
TOTAL	19,929	100.0
Imports (c.i.f.) ^c		
Food, beverages and tobacco	4,346	18.0
Fuels	4,310	17.8
Industrial materials:	8,364	34.6
<i>Basic materials</i>	<i>2,214</i>	<i>9.2</i>
<i>Chemicals</i>	<i>1,409</i>	<i>5.8</i>
<i>Other semi-manufactures</i>	<i>4,741</i>	<i>19.6</i>
Finished manufactures:	6,395	26.5
<i>Machinery and transport equipment</i>	<i>4,523</i>	<i>18.7</i>
Machinery	3,343	13.8
Road motor vehicles	883	3.7
Other transport equipment	297	1.2
<i>Other manufactures</i>	<i>1,872</i>	<i>7.7</i>
Miscellaneous	749	3.1
TOTAL	24,163	100.0

Sources: *Trade and Industry; Monthly Digest of Statistics*

^a On an overseas trade statistics basis.

^b See footnote^c under table 28.

^c See footnote^b under table 28.

Such imports rose from about 6 per cent of the total imports in 1957 to 24 per cent in 1974, and to 26 per cent in 1975, when they were valued at £6,395 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 because the countries producing the basic materials increasingly carry out the subsequent stages of manufacture themselves. Imports of semi-manufactured goods (including chemicals) totalled £6,150 million in 1975 and accounted for 25 per cent of total imports.

Exports

About 83 per cent of Britain's exports consist of manufactured goods both finished and semi-manufactured. By far the most important group is machinery and transport equipment, exports of which have been increasing rapidly and accounted for 41 per cent of total exports in 1975. The share of chemicals has grown fairly steadily, but dropped slightly in 1975. However, exports of machinery alone rose from 25.4 per cent in 1974 to 29.1 per cent in 1975.

**Geographical
Distribution of
Trade**

In 1974 there was a marked change in the pattern of British exports. Following the oil price rise at the end of 1973, which generated large reserves for the oil-exporting countries, British exports to these countries rose in value by 51 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 had similar consequences for British exports to these economies. A similar pattern obtained in 1975, when the value of exports to the oil-exporting countries grew by 88 per cent, to other member countries of the European Community by 16 per cent

TABLE 30: Principal British Markets 1974-75

Exports to (f.o.b.) ^a	1974 (£ million)	1975 (£ million)	Percentage change 1974-75
United States ^b	1,777	1,789	+0.5
Federal Republic of Germany	1,026	1,304	+27
France	914	1,164	+27
Netherlands	983	1,115	+13
Belgium-Luxembourg	836	922	+10
Irish Republic	820	907	+11
Sweden	723	826	+14
Switzerland	673	805	+20
South Africa	525	685	+30
Australia	599	631	+5.5
Italy	510	563	+10
Canada	488	538	+10
Nigeria	222	512	+130
Iran	279	495	+77
Denmark	427	443	+3.5
Developed countries	12,435	14,003	+13
EEC	5,516	6,419	+16
Rest of Western Europe	2,953	3,372	+14
North America	2,267	2,332	+3
Other ^c	1,699	1,879	+11
Developing countries	3,591	5,202	+45
Oil-exporting countries ^d	1,210	2,278	+88
Other	2,381	2,923	+23
Centrally planned economies ^e	515	666	+29

Source: *Trade and Industry; Monthly Digest of Statistics*

^a On an overseas trade statistics basis.

^b Including dependencies.

^c Australia, New Zealand, South Africa, Japan.

^d Algeria, Bahrain, Brunei, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Oman, Qatar, Saudi Arabia, Trinidad and Tobago, United Arab Emirates, Venezuela.

^e Soviet Union, Poland, German Democratic Republic, Hungary, Czechoslovakia, Albania, Bulgaria, Romania, Chinese People's Republic, North Korea, North Vietnam (Democratic Republic of Vietnam), Mongolia.

and to North America by only 3 per cent (implying a substantial fall in volume). In 1976 exports to the developed industrial countries have continued the recovery which began in the latter part of 1975 as economic conditions in the European Community and the United States improved. Details of Britain's principal export markets and sources of supply in 1974 and 1975 are given in Tables 30 and 31 (see also the diagram on p. 369).

TABLE 31: British Principal Sources of Supply 1974-75

Imports from (c.i.f.) ^a	1974 (£ million)	1975 (£ million)	Percentage change 1974-75
United States ^b	2,265	2,352	+4
Federal Republic of Germany	1,902	1,999	+5
Netherlands	1,637	1,873	+14
France	1,349	1,628	+21
Belgium-Luxembourg	731	952	+30
Irish Republic	810	921	+14
Sweden	929	886	-5
Saudi Arabia	1,178	857	-27
Canada	984	856	-13
Italy	724	810	+12
Switzerland	765	737	-4
Iran	513	701	+37
Japan	570	672	+18
Denmark	577	622	+8
Norway	408	593	+45
Developed Countries	16,132	17,434	+8
EEC	7,730	8,805	+14
Rest of Western Europe	3,469	3,566	+3
North America	3,249	3,208	-1
Other ^c	1,684	1,855	+10
Developing Countries	6,376	5,940	-7
Oil-exporting countries ^d	3,785	3,274	-14
Other	2,591	2,666	+3
Centrally planned economies ^e	751	753	—

Source: *Trade and Industry; Monthly Digest of Statistics*

^a On an overseas trade statistics basis.

^b Including dependencies.

^c Australia, New Zealand, South Africa, Japan.

^d Algeria, Bahrain, Brunei, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Oman, Qatar, Saudi Arabia, Trinidad and Tobago, United Arab Emirates, Venezuela.

^e Soviet Union, Poland, German Democratic Republic, Hungary, Czechoslovakia, Albania, Bulgaria, Romania, Chinese People's Republic, North Korea, North Vietnam (Democratic Republic of Vietnam), Mongolia.

Invisible Transactions

As far back as estimates have been made, that is, for nearly two centuries, Britain has usually earned a surplus from its invisible transactions: the receipts and payments arising from services (as distinct from goods) supplied to and received from overseas residents; the income arising from outward and inward investment; and transfers between Britain and other countries.

The invisible transactions involved are divided for statistical purposes into six main groups: government services and transfers; transport (shipping and civil aviation); travel; other services (which covers a variety of items including the financial services of the City of London); interest, profits and dividends;

and private transfers (migrants' funds, legacies and private gifts). Table 32 shows the breakdown of the figures from 1965 to 1975. The total invisible balance in 1975 was £1,531 million. Gross earnings of £11,038 million from total invisible exports were about three-fifths of the total of £18,768 million from visible exports.

As shown in Table 32 in recent years there has been a considerable and rapidly rising net surplus on 'other services' and another large surplus on interest, profits and dividends. There has also been a surplus on civil aviation services throughout the past decade. Sea transport transactions have been in deficit since 1969. Except in 1973, travel credits have exceeded debits since 1968, mainly because of the continuing increase in the number of travellers (including tourists) visiting Britain and in the average expenditure per visitor. About half the total debits in respect of government expenditure relate to military expenditure overseas and this has remained steady or fallen in real terms in recent years, though currency changes have caused the sterling value to rise; other substantial items of expenditure are grants to developing countries, expenditure on the diplomatic service, subscriptions to international organisations, and Britain's contribution to the common budget for the financing of European Community expenditure.

TABLE 32: Britain's Invisible Overseas Transactions 1965-75

	Invisible balance	Total invisibles		Government (net)	Transport	
		Debits	Credits		Sea transport (net)	Civil aviation (net)
1965	+197	2,674	2,871	-446	+1	+28
1970	+758	4,248	5,006	-486	-76	+50
1971	+804	4,746	5,550	-527	-54	+57
1972	+856	5,253	6,109	-566	-77	+77
1973	+1,598	6,774	8,372	-797	-101	+84
1974	+1,873	8,280	10,153	-879	-105	+90
1975	+1,531	9,507	11,038	-1,025	+12	+110

	Travel (net)	Other services (net)	Interest, profits and dividends (net)	Private transfers (net)
1965	-97	+283	+435	-7
1970	+50	+698	+556	-34
1971	+47	+794	+500	-13
1972	+19	+909	+551	-57
1973	-1	+1,121	+1,383	-91
1974	+154	+1,312	+1,392	-91
1975	+239	+1,334	+949	-88

Source: *United Kingdom Balance of Payments 1965-75*

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), the International Monetary Fund (IMF), the Organisation for Economic Co-operation and

Development (OECD) and the United Nations Conference on Trade and Development (UNCTAD). As a member of the European Community, Britain is committed to working for the development of world trade by the progressive reduction through reciprocal measures of both tariff and non-tariff barriers. The Community's Common External Tariff (CET) is lower than that of several other major industrial countries.

General Agreement on Tariffs and Trade

Britain's protective tariffs have been considerably modified in recent years as a result of negotiations held under the auspices of GATT which also seek to increase the volume of world trade by reducing tariffs and other barriers to trade, and by eliminating discrimination in international commerce.

As a result of the 'Kennedy Round' (May 1964–June 1967), 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. A new series of negotiations was formerly launched in Tokyo in September 1973 and substantive discussions began in Geneva in February 1975. The negotiations cover a wide range of both tariff and non-tariff barriers to trade.

Community Preference

All tariffs on trade in industrial products between Britain and the other European Community countries are being eliminated in five equal stages over the transitional period ending 1st July 1977. By the same date Britain will be applying the common external tariff to all countries neither belonging to, nor having any special arrangement with, the Community, subject to special arrangements for some industrial materials. By the same date also 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, will have been dismantled.

Commonwealth and Developing Countries

Reciprocal preferential tariff treatment for trade between Britain and other independent Commonwealth countries dates from the Ottawa Conference of 1932.

The special trading relations between Britain and 22 developing Commonwealth countries in Africa, the Caribbean and the Pacific (ACP)¹ were replaced by the Convention of Lomé, the trade provisions of which came into effect on 1st July 1975. This established new trade, aid and co-operation links between the Community and a total of 46 developing ACP countries.² The Convention safeguards the interests of Commonwealth and other countries dependent on the export of particular agricultural products, including sugar for which access to Community markets has been guaranteed for an indefinite period at prices related to those in the Community and in quantities which the producing countries have undertaken to supply.

All British dependent territories (with the exception of Gibraltar, Hong Kong and Bermuda), together with the Overseas Countries and Territories (OCT) of other Community members, were formally linked with the Community as a

¹ The Commonwealth ACP countries are: The Bahamas, Barbados, Botswana, Fiji, The Gambia, Ghana, Grenada, Guyana, Jamaica, Kenya, Lesotho, Malawi, Mauritius, Nigeria, Sierra Leone, Swaziland, Tanzania, Trinidad and Tobago, Tonga, Uganda, Western Samoa and Zambia.

² The non-Commonwealth ACP countries are: Mauritania, Mali, Senegal, Ivory Coast, Upper Volta, Niger, Togo, Benin, Cameroon, Chad, Central African Republic, Gabon, Congo, Zaire, Rwanda, Burundi, Democratic Republic of Madagascar, Somali Democratic Republic, Ethiopia, Liberia, Sudan, Guinea, Equatorial Guinea, Guinea-Bissau.

whole in 1976 under arrangements similar to those embodied in the Convention of Lomé. (The trade arrangements that will operate under this new association were brought into effect on an interim basis in August 1975.) The preference for imports from Commonwealth countries which are neither signatories of the Lomé agreement nor members of the OCT will be phased out by 1st July 1977.

Other special arrangements have been agreed relating to continued access into the Community for New Zealand dairy products.

The Community has stated its continuing objective of expanding and reinforcing existing trade relations with the Commonwealth countries of Asia, taking into account the scope of the generalised system of preferences (see below) from which they derive considerable benefit. A commercial co-operation agreement between the Community and India came into effect in 1974, and with Sri Lanka in October 1975. An agreement with Pakistan was signed in June 1976.

Generalised System of Preferences

The establishment of a generalised system of preferences for manufactures and semi-manufactures exported by developing countries was agreed in principle at the second UNCTAD Conference in New Delhi in 1968. Britain's scheme started early in 1972, but, as a member of the European Community, Britain adopted in 1974 the scheme of the enlarged Community. The Community's scheme has been considerably improved since the enlargement by the establishment of more liberal access into the Community for imports of manufactured and processed agricultural products from developing countries. Continued improvement of the scheme is to be made with the interests of the poorest developing countries (particularly those of Asian members of the Commonwealth) in mind.

GOVERNMENT SERVICES

The Government assists exporters by its efforts to create conditions favourable to the export trade and by providing credit insurance facilities and information and advice about opportunities for trade in other countries. 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 export promotion programme, including the provision of export intelligence, 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 export offices of the Department of Industry throughout Britain and, through these offices, the commercial posts of the British Diplomatic Service overseas.

Overseas officers regularly report on local economic and commercial conditions and (together with the Export Services and Promotions Division of the BOTB) generally assist the exporter to overcome any difficulties he encounters in trade with the country in question, particularly those arising out of governmental regulations. Assistance is also given to British exporters in appointing agents and locating potential importers.

Export Credit Insurance

The Export Credits Guarantee Department (ECGD) provides credit insurance for more than a third of the country's export trade and for much of the external trade of British merchants.

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 £250,000, the ECGD will guarantee loans direct to overseas buyers enabling them to pay on cash terms, or 'lines of credit' similarly covering an agreed buying programme of an overseas country. The banks provide finance against these guarantees.

Since 1975 the 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. Since the same date it has also been prepared to support the issue of performance bonds in the commercial market in respect of cash or near-cash contracts worth over £2 million.

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, 'British weeks' and store promotions overseas is a form of export promotion for which the Government provides information and financial assistance to exporters. In 1973 a British Export Marketing Centre was opened in Tokyo to provide exhibitions and other marketing facilities for individual British firms or organisations.

CONTROLS ON TRADE AND PAYMENTS

There are now very few restrictions imposed by Britain on the movement of goods and services.

Import and Export Control

Under the Import, Export and Customs Powers (Defence) Act 1939 the Department of Trade is empowered to prohibit or regulate the import or export of goods. 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 the IMF, and its European Community membership, Britain has progressively removed quantitative restrictions from almost all its imports from the market economies. There has also been a continuing substantial relaxation of quantitative restrictions on imports from centrally planned economies. In 1975 the importation of gold coins, gold medals and similar articles, minted or made after 1837, was made subject to individual licensing; the remaining controls include those recognised internationally on a few goods such as arms, ammunition and radioactive materials. Controlled goods require a specific import licence and some are subject to quota restrictions. Some further restrictions or prohibitions are applied under separate legislation 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 also a general import

restriction on goods from Rhodesia as part of the Government's sanctions policy against the illegal régime.

Export Controls

Except for the control necessary to ensure that exports to destinations outside the scheduled territories are paid for in the proper manner most British exports are not subject to any government control or direction. The few controls that are in operation are imposed to supervise exports of military and strategic importance; to conserve materials which may be in short supply; on diamonds to assist exchange control operations (see below) in preventing the export of capital in that form; to ensure the humane treatment of cattle, sheep and pigs; and to prevent the export of antiques (including works of art and documents), and documentary and photographic material over 70 years old, on grounds of national importance. There is a general export prohibition on goods to Rhodesia. (The scheduled territories comprise the United Kingdom, the Channel Islands, the Isle of Man, the Irish Republic and Gibraltar.)

Exchange Control

Britain applies exchange control principally in order to conserve its reserves of gold and foreign exchange. The powers under the Exchange Control Act 1947 are conferred mainly on the Treasury which has delegated the administration of most parts of the Act to the Bank of England and to HM Customs and Excise. The Bank has in turn authorised most commercial banks in Britain to execute a wide range of transactions.

The general effect of exchange control regulations is to control transactions between residents of the scheduled territories and non-residents. Payments in sterling may in general be made freely between residents, but the acquisition of other currencies by them is subject to control.

The aim of exchange control policy is not to discourage investment abroad but to regulate the manner in which investment outside the scheduled territories is financed. Official exchange is usually available only for projects which promise early and continuing benefits to the balance of payments. Where the use of official exchange is not permitted investors can finance their approved projects in other ways, for example, by borrowing foreign currency or purchasing investment currency (which, because it is drawn from a limited pool of currency, normally changes hands at a premium). Payments for goods exported to destinations outside the scheduled territories have in general to be in foreign currency or in sterling from an external account, and must be received within six months of export unless they are covered by an approved export credit arrangement. Control is also exercised over imports to ensure that currency authorised for their payment is used for that purpose.

There are certain restrictions on dealings in gold bullion and on the use of gold for manufacturing and industrial purposes. Purchases of gold coins minted after 1837 by United Kingdom residents other than authorised dealers in gold are allowed only if the coins are in Britain and are being sold by a resident who is not selling on behalf of a non-resident.

Residents are entitled to purchase up to £300 in foreign currency for their travel expenditure on each journey outside the scheduled territories, other than to Rhodesia, irrespective of the purpose of the journey. Further travel funds may be obtained for business, professional or other reasons. Non-residents may be permitted by the Bank of England to hold an external account in a British bank and are entitled to change their sterling on external account for other currencies and to make and receive payments in any currency to and from non-residents in any other part of the world. Special restrictions apply to transactions with residents of Rhodesia.

People living outside the scheduled territories who visit Britain temporarily are regarded as non-resident and not subject to most of the exchange control provisions. On the other hand, people coming to Britain from outside the scheduled territories and intending to take up permanent residence in Britain are normally regarded as resident, though they may be eligible for certain exemptions from their obligations under the Exchange Control Act 1947.

Visitors to Britain may import notes in any currency, travellers' cheques and letters of credit without limit. On departure, visitors may take with them sterling or scheduled territory notes up to a value of £25, foreign currency notes up to a value of £300 and, as a concession, any foreign currency notes which they brought in with them.

BALANCE OF PAYMENTS

Britain's balance of payments has usually been characterised by a deficit on visible trade offset by a surplus on invisible earnings. Estimates of the balance of payments and its main constituent items are given in summary since 1965 in Table 33 and in greater detail since 1973 in Tables 34 and 35. 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

TABLE 33: United Kingdom Balance of Payments 1965-75

	Current balance	Balance for official financing	Gold subscription to IMF. SDR allocation ^a	Official financing		
				Total	Official borrowing ^b	Official reserves ^c
1965	-26	-353	—	+353	+599	-246
1970	+733	+1,287	+133	-1,420	-1,295	-125
1971	+1,084	+3,146	+125	-3,271	-1,735	-1,536
1972	+154	-1,265	+124	+1,141	+449	+692
1973	-736	-789	—	+789	+999	-210
1974	-3,347	-1,672	—	+1,672	+1,751	-79
1975	-1,673	-1,479	—	+1,479	+810	+669

Source: *United Kingdom Balance of Payments 1965-75*

^a Gold subscription to IMF in 1970 was -£38 million.

^b Drawings (+)/ repayments (-).

^c Drawings on (+)/ additions to (-).

net result of all external flows, that is the current account, capital transfers, investment and other capital flows (including official long-term capital transactions, investment flows, trade credit, and changes in Britain's net external banking and money market liabilities in sterling and in overseas currencies) and other flows which are unidentified transactions reflected in the balancing item. The balance for official financing shows the impact of all external flows 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 34 gives details of the current account since 1973. Both exports and imports rose strongly after the devaluation of sterling in 1967. In 1971 exports rose in value faster than imports resulting in the highest-ever surplus on visible trade of £280 million which, together with a substantial surplus on invisibles, produced a record current account surplus of £1,084 million. This trend was reversed in 1972 and 1973 with the development of a visible trade deficit reflecting increases in world commodity prices, expansion of activity in the domestic economy, and the depreciation of sterling. The increase in oil prices (see p. 370) was the main cause of a substantial rise in the visible deficit in 1974 to £5,220 million, offset to some extent by a surplus on invisibles of £1,873 million. In 1975, the low level of domestic activity and substantial de-stocking reduced the volume of imports, more than offsetting the decline in the volume of exports resulting from the setback in world trade. The visible trade deficit consequently declined to £3,204 million while that on non-oil goods was almost eliminated.

In the period 1963-68, there was a deficit for official financing of £3,778 million (including a gold subscription of £44 million to the IMF) financed mainly by official borrowing totalling £3,134 million, but also by transfers to the reserves of the dollar portfolio totalling £520 million; and a reduction of £124 million in the reserves. In 1969 there was a reversal of this deficit and a rapidly increasing surplus for official financing which in 1971 reached £3,146 million. During this period almost all short- and medium-term official borrowing was repaid, and there was a substantial increase in the reserves. There was a net deficit of £1,479 million in 1975.

There was a net inflow in 1975 on identified investment and other capital transactions of some £188 million. Overseas investment in the private sector fell in 1975 to about £1,760 million. Private investment overseas, at about

TABLE 34: Current Account 1973-75

	<i>£ million</i>		
	1973	1974	1975
Visible trade:			
Exports (<i>f.o.b.</i>)	11,772	15,899	18,768
Imports (<i>f.o.b.</i>)	14,106	21,119	21,972
Visible balance	- 2,334	- 5,220	- 3,204
Invisibles—services (net):			
Government	- 438	- 559	- 646
Private ^a	+ 1,103	+ 1,451	+ 1,695
Interest, profits and dividends (net):			
Public sector	- 208	- 363	- 545
Private sector	+ 1,591	+ 1,755	+ 1,494
Transfers (net):			
Government	- 359	- 320	- 379
Private ^a	- 91	- 91	- 88
Invisible balance	+ 1,598	+ 1,873	+ 1,531
Current balance	- 736	- 3,347	- 1,673

Source: *United Kingdom Balance of Payments 1965-75*

^a Including public corporations.

£1,405 million, was higher than in 1974 when sizeable net disinvestment from portfolio holdings of foreign securities had taken place. Direct investment

overseas includes a substantial element of reinvested profits. In 1973 it also included a number of large acquisitions of overseas companies by British ones. Direct investment overseas declined in 1975 as the number and level of acquisitions fell.

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. 197) is being enhanced. Britain participates in the IMF oil facility and the Organisation for Economic Co-operation and Development (OECD) Financial Support Fund.

Britain has also taken part since 1961 in the international network of reciprocal credit (swap) facilities arranged between central banks. Under these arrangements each central bank is able to exchange on request, for a limited period, its own currency for the currency of another country up to an agreed maximum. It agrees to reverse the transaction at a specified date at the same rate of exchange. The currencies so obtained can be added to the reserves or used in exchange operations.

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. The inventory for the end of 1975 shows that Britain had a net creditor position estimated at some £1,155 million.

External Assets

Britain's assets arising from private investment overseas are estimated to have been £23,555 million at the end of 1975. This compares with a figure of £8,070 million at the end of 1962. Direct investment, including oil, accounted for £16,930 million of the total figure for end-1975, the balance consisting of £6,625 million of portfolio investment.

United Kingdom banking and commercial claims at the end of 1975 totalled £6,592 million.² Within this total banking claims were £3,568 million; suppliers' export credit to unrelated firms was £2,575 million. With the increase in recent years in British aid to developing countries, inter-governmental loans of £1,227 million form the largest item among official external assets, which at the end of 1975 were £3,688 million including refinanced export credit. The latter figure, together with official reserves of £2,683 million, £6,592 million in banking and commercial claims and private investment overseas of £23,555 million, resulted in aggregate identified external assets at the end of 1975 of some £36,520 million.

¹ Figures for the end of 1975 and for earlier years are published in the *United Kingdom Balance of Payments 1965-75* produced by the Central Statistical Office (see Bibliography, p. 469).

² See footnote 1, p. 382.

**External
Liabilities**

Identified external liabilities at the end of 1975 are estimated to have been some £35,365 million. All official short- and medium-term liabilities to the IMF and other monetary authorities were repaid in 1972 but foreign currency borrowing by the Government since late in 1974 totalled £1,235 million (\$2,500 million) at the end of 1975. Foreign currency borrowing by the public sector under the exchange cover schemes commenced in 1969 became substantial in 1973 and 1974 and totalled £3,174 million at the end of 1975. Inter-governmental loans to Britain and other official liabilities, mainly a consequence of the second world war and its aftermath, totalled £2,021 million at the end of 1975 of which £1,564 million was owed to the United States and £393 million to Canada.

TABLE 35: Analysis of Capital Flows and Official Financing 1973-75

£ million

	1973	1974	1975
Current balance	-736	-3,347	-1,673
Capital transfers ^a	-59	-75	—
Investment and other capital flows:			
<i>Official long-term capital</i>	-254	-276	-288
<i>Overseas investment in UK public sector^b</i>	+170	+250	+45
<i>Overseas investment in UK private sector</i>	+1,595	+2,235	+1,760
<i>UK private investment overseas</i>	-1,855	-1,169	-1,405
Overseas currency borrowing or lending (net) by UK banks ^{b, c, d} :			
<i>Borrowing to finance UK investment overseas</i>	+595	+270	+210
<i>Other borrowing or lending (net)</i>	-60	-569	+25
Exchange reserves in sterling ^e :			
<i>British government stocks</i>	+74	-124	+7
<i>Banking and money market liabilities</i>	+87	+1,534	-622
Other external banking and money market liabilities in sterling	-7	+148	+550
Import credit ^f	+326	+162	+234
Export credit ^f	-552	-809	-644
Other short-term flows	-158	-38	+316
Total investment and other capital flows	-39	+1,614	+188
Balancing item	+45	+136	+6
Balance for official financing	-789	-1,672	-1,479
Foreign currency borrowing:			
<i>By the British Government^g</i>	—	+644	+423
<i>By the public sector under the exchange cover schemes</i>	+999	+1,107	+387
Drawings on (+)/ addition to (-) official reserves ^h	-210	-79	+669
Total official financing	+789	+1,672	+1,479

Source: *United Kingdom Balance of Payments 1965-75*^a Payments under the Sterling Agreements of 1968, as renewed in 1971 and unilaterally renewed in 1973.^b Excluding foreign currency borrowing by the public sector under the exchange cover schemes.^c Including certain other financial institutions.^d Excluding changes in levels resulting from changes in sterling valuation.^e Sterling reserves of overseas countries and international organisations, other than the IMF, reported by banks etc. in Britain.^f Excluding trade credit between related firms; after deducting advance and progress payments to suppliers.^g Borrowing on the \$2,500 million Euro-dollar facility.^h Valued in sterling at transactions rates of exchange.

Other public sector liabilities of £4,006 million comprised overseas holdings of British government and public corporations' sterling securities, holdings of Treasury bills and notes, local authorities' securities and mortgages and borrowings by British public corporations and local authorities other than under the exchange cover schemes. British banking and commercial liabilities, including liabilities in sterling and in foreign currencies, totalled £10,098 million.¹ Liabilities in the form of overseas investment in Britain's private sector totalled £14,480 million.

Foreign holdings in Britain of sterling in the form of British government securities (where these were held by central monetary institutions and international organisations other than the IMF), bank deposits, deposits with local authorities and hire purchase companies, and Treasury bills totalled £7,254 million at the end of March 1976. Of this, £3,096 million was held by residents of oil exporting countries, £921 million by residents of other member countries of the European Community and £3,237 million by other holders. The total of these liabilities (excluding the counterpart of borrowing) remained broadly constant between the end of 1945 and 1970 but rose sharply during 1971 and 1972 and again during 1974, changing relatively little during 1975. They reflect the international trading and reserve role of sterling and in part the financial services of the City.

Inward Private Investment

Overseas liabilities arising from investment in the private sector of the British economy rose from £3,165 million in 1962 to £14,480 million at the end of 1975.

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 1975 the inflow of direct, portfolio and other private investment, including oil, amounted to £1,760 million.²

The value of overseas investment in the private sector at the end of 1975 comprised: the book value of direct investment in Britain by companies incorporated abroad—£5,735 million (excluding oil, banking, and insurance); portfolio holdings of British securities—£2,955 million; the book value of the net assets in Britain of overseas oil companies—£4,100 million; and the balance of £1,690 million which included borrowing by British companies overseas.

About two-thirds of the direct investment of £5,735 million originally came from North America and about one-fifth from Western Europe. Of the £797 million inflow of direct investment into Britain in 1974 £432 million originated from North America and £70 million from 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.

Outward Private Investment

Approval is readily obtained for financing direct investment projects by borrowing abroad on appropriate terms. There is also scope for the investment of retained profits of subsidiary companies overseas. In recent years a considerable proportion of net direct investment outflow has been financed in this way.

¹ This sector covers the London banks' operations in the Euro-currency markets in which very large non-sterling currency liabilities are broadly matched by non-sterling assets. Only net liabilities of £2,547 million are included in the external liabilities figure; they represent the difference between assets of £58,155 million and liabilities of £60,702 million.

² Direct investment refers mainly to the establishment of subsidiary companies and banks, while portfolio investment refers to investment in company securities.

Sterling finance is available in certain cases when projects promise early and substantial benefits to Britain's balance of payments.

Direct investment outflow, excluding oil, was £1,124 million in 1975 compared with £1,595 million in 1974. The latest available area analysis indicates that of the 1974 figure £224 million was placed in developing countries, £367 million in other member countries of the European Community and £488 million in North America. With the inclusion of oil, portfolio and other investment, aggregate private investment outflows totalled £1,405 million in 1975 compared with £1,169 million in 1973, while portfolio disinvestment of £755 million in 1974 changed, in 1975, to net investment of £41 million.

**BRITISH
GOVERNMENT
AID TO
DEVELOPING
COUNTRIES**

Britain's aid programme to the developing countries, which is the responsibility of the Ministry of Overseas Development, consists of loans and grants for economic and social development, technical co-operation, budget support and contributions to multilateral agencies providing financial aid and technical co-operation to these countries. To complement the official programme private investment is encouraged by the provision of government insurance to private investors by the ECGD. In addition an important contribution is made to economic development by private voluntary organisations engaged in relief, development and educational work.

Since 1945 total official aid disbursements have amounted to nearly £4,761 million. The average gross annual disbursement over the four years 1972-75 was about £365 million. In 1975 official aid flows totalled some £445.6 million, of which £431.9 million represented official development assistance (see Table 36) and £13.7 million other official flows. Of the overall total, bilateral aid accounted for £308.1 million including technical co-operation funds of £96.3 million; assistance provided through multilateral agencies was £137.5 million. Repayments of capital and payments of interest during the year on loans made previously came to £47.7 million and £41.2 million respectively. In recognition of the special importance of the role of official development assistance, the strategy for the Second UN Development Decade, adopted in 1970, included a recommendation 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) to them by the middle of the decade. Britain has now accepted in principle the 0.7 per cent GNP target and will seek in the years ahead to move towards it. The speed at which it can do so, however, must be subject to the pace of Britain's own economic recovery and to other calls on its resources. 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. In 1975, in a major policy statement, contained in a report entitled *The Changing Emphasis in British Aid Policies—More Help for the Poorest* (see p. 469), the British Government outlined its intention to adapt its aid policies to meet the needs of the poorest countries and the poorest communities within these countries, with particular emphasis being placed on rural development.

In 1975 gross disbursements of British official flows were £445.6 million; net of amortisation receipts, these amounted to £397.9 million (0.39 per cent of GNP): net disbursements of official development assistance within this were £388.3 million (0.38 per cent of GNP). Public expenditure plans for the aid programme are published annually in the report on public expenditure, the most recent of which covers the years up to 1979-80 (see Bibliography, p. 469).

Under this method of aid determination, introduced in 1971, totals at constant prices, net of amortisation, are agreed by ministers for five years ahead. The gross total, which is used for allocating funds to various aid programmes, is arrived at by adding the estimated amortisation receipts to the net figure. It is expected that the overall aid programme will continue to rise in cash terms.

Bilateral Financial Aid

Bilateral financial aid in 1975 totalled £216.1 million; over 33 per cent was in grants and the rest in loans. Budgetary aid, £9.3 million in 1975, is provided in the form of grants. Development aid is in grants or loans, depending on the economic and constitutional circumstances of the recipient countries; the greater part of it has been in loans, but this will now change following the decision taken in June 1975 to provide future aid to the poorest developing countries (which include India, Bangladesh, Sri Lanka and many African countries) in the form of grants. The terms of new development loans from Britain have been progressively softened since 1958 and a policy of making interest-free loans to lighten the repayment burdens of the poorer developing countries was introduced in June 1965. In 1975 the total value of bilateral loan commitments entered into by the British Government, excluding investments by the Commonwealth Development Corporation (see p. 385), was £38 million and of this over 88 per cent was on interest-free terms. The recipients included India, Bangladesh, Peru, Ecuador, Ghana and Swaziland.

Where loans bear interest it is at fixed concessionary rates ranging from 3 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 1975 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 (OECD) on easing the terms of financial aid.

TABLE 36: Official Development Assistance (ODA) to Developing Countries 1972-75

	£ million			
	1972	1973	1974	1975
Bilateral	254.3	221.5	261.3	298.4
Commonwealth countries (including dependent territories)	211.1	183.1	211.2	233.3
<i>Grants</i>	66.8	39.2	40.2	57.7
<i>Technical co-operation (grants)</i>	48.5	57.2	57.5	70.0
<i>Loans</i>	95.7	86.7	113.5	105.5
Other countries	43.1	38.3	50.1	65.2
<i>Grants</i>	2.3	3.2	7.5	11.2
<i>Technical co-operation (grants)</i>	12.9	15.4	18.9	26.2
<i>Loans</i>	27.9	19.6	23.7	27.7
Contributions to multilateral agencies	51.1	65.7	91.0	133.5
Total	305.4	287.2	352.3	431.9
Total net of amortisation (as used for calculation of the 0.7 per cent target)	243.3	245.9	308.6	388.3
Interest receipts	27.9	34.8	40.1	38.5

Source: *British Aid Statistics*

Discrepancies between totals and their constituent parts are due to rounding.

Loans and grants are 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. Loans committed after 1st October 1975, however, will be untied, if the recipient agrees, to the extent that goods can be purchased from the poorest developing countries as well as from Britain. Between 1958 and the end of 1975, 443 loans were negotiated involving a commitment of £1,479 million, of which £1,324 million has been disbursed. The recipients of the largest amounts have been India and Pakistan. During the same period bilateral grant commitments amounted to around £1,706 million.

Commonwealth Countries

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 1975 £233.3 million (78.2 per cent) of the bilateral programme was disbursed to Commonwealth countries and dependencies.

In the past, development aid to the dependent territories was given under the Colonial Development and Welfare (CD & W) Acts, largely in the form of grants. Expenditure on economic and social development up to the termination of the Acts on 31st March 1970 amounted to some £450 million. The aid requirements of the few remaining dependencies are now provided under the authority of the Overseas Aid Act 1966. In 1975 the territories received £30.4 million in bilateral financial aid and technical co-operation funds.

An important role in development assistance is played by the Commonwealth Development Corporation (CDC), set up by the British Government 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 the approval of the Minister of Overseas Development, to other countries. By the end of 1975 some £217.6 million had been invested out of a total commitment of £267.5 million. Of the latter, £53.7 million was in East Asia and the Pacific Islands, £52.6 million in the Caribbean and virtually all of the remainder in Africa. New commitments approved in 1975 totalled over £22.1 million.

Technical Co-operation

Expenditure on bilateral technical co-operation (the provision of skilled personnel, advice and training) has increased in recent years and was £96.2 million, 31 per cent of total bilateral aid, in 1975. The largest component of expenditure (£43.1 million in 1975) was on sending or maintaining experts, including volunteers; the next largest was for students and trainees in Britain (£15.4 million).

Under the Overseas Service Aid Scheme (OSAS) and associated schemes Britain meets the additional costs of employing experienced expatriate British personnel in the public services of developing countries. The schemes cost £21.9 million in 1975.

During 1975, of the 9,832 British persons other than volunteers who were working in developing countries and financed by the British Government, some 4,566 were engaged in the field of education, 1,246 in public works and communications, 2,894 in public administration, 1,147 in agriculture and allied fields, 585 in health services, and 660 in industrial posts.

In addition, under the British Volunteer Programme in 1975 there were 1,915 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; 75 per cent (increased to 80 per cent from April 1976) of the British costs (£0.9 million in 1975) were met by the British Government.

Britain receives large numbers of students and trainees from developing countries. Over 14,700 were financed in Britain in 1975 under regional programmes of technical co-operation, by awards under the Commonwealth Education Co-operation Scholarships and Education Fellowship Schemes, and under the various schemes of the British Council.

Multilateral Contributions

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 IDA in the three years 1971–73 (The Third Replenishment) was nearly £141 million; the contribution to the Fourth Replenishment, which became effective in January 1975, is over £206 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 Bank. Britain has contributed £99 million to the United Nations Development Programme since its inception in 1950 and has provided more experts and training places under multilateral schemes than any other country. Many British nationals were serving in developing countries under the United Nations and its specialised agencies in 1975. Other contributions include those to the United Nations Relief and Works Agency for Palestine Refugees (UNRWA), the United Nations High Commissioner for Refugees (UNHCR), the World Food Programme and the United Nations Children's Fund (UNICEF).

An increasing proportion of British development assistance is being channelled through the European Community's aid programme. Community financial aid takes the form principally of assistance from the European Development Fund (EDF) to those countries which have a special relationship with the Community under the Convention of Lomé (see p. 374). The EDF for 1975–80 amounts to some £1,900 million, including expenditure on a new export-earnings stabilisation scheme. Assistance to a number of Mediterranean countries linked to the Community by trade agreements, is being extended.

The Community's contribution to the United Nations emergency measures to assist developing countries most seriously affected by increased prices of oil and other commodities amounted in 1975–76 to over £34.5 million. Britain's share of this total, together with its bilateral contributions to the emergency measures, was about £4.7 million. It also contributes fully to the Community's food aid programme.

Britain is playing a leading part in developing a new Community aid and development policy based on the criterion of need and applicable on a world-wide basis. This, which would involve all the instruments of Community development policy, would place greater emphasis on giving help to 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.

19 Promotion of the Sciences

The Government is the main source of funds for scientific research and development as a whole though private industry contributes a larger proportion of funds for civil research and development. Funds are also provided by public corporations, independent trusts and foundations, and learned societies. The Government keeps under review facilities for training scientists and ensures that adequate research is directed to matters of national interest.

The sessional Select Committee of the House of Commons on Science and Technology is one of the specialist committees established to give back-bench members the opportunity to investigate the policies and administration of the Government and to participate in the formation of policy (see p. 36). The members of the committee (not more than 15 in number) are nominated by the House. The committee has power to call witnesses, generally takes evidence in public, and reports its findings to the House from time to time.

The Parliamentary and Scientific Committee provides for a regular exchange of information between members of Parliament and scientists. Membership is open to members of Parliament of any party in both Houses, and also to nominated representatives of such non-profit-making scientific and technological organisations as may be affiliated under its constitution.

The Pattern of Expenditure

Total expenditure in Britain on scientific research and development in 1972-73 is estimated at £1,310 million compared with £658 million in 1961-62. The proportion this represented of the gross national product remained fairly steady throughout the 1960s at about 2.7 per cent, but fell slightly around the turn of the decade to reach about 2.5 per cent in 1972-73. There were also divergent trends in some of the components. The share of defence almost halved during the period whereas that for civil purposes rose until the end of the decade when it too fell back. Civil research and development financed from non-government funds represented an increased share of the total claim on resources in 1966-67 compared with earlier years, but has fallen steadily since. In 1972-73 private industry spent about £739 million of which £471 million was privately funded and £268 million came from Government.

The Government continues to finance just over half the research and development but carries out only one-fifth in its own establishments compared with a quarter in the 1960s.

THE GOVERNMENT AND SCIENTIFIC RESEARCH

Central responsibility for basic civil science rests with the Secretary of State for Education and Science, who is advised by the Advisory Board for the Research Councils (see p. 388). 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).

The Lord Privy Seal is responsible for ensuring that there is adequate co-operation and co-ordination between departments in science and technology. An Advisory Council for Applied Research and Development has been established under the Lord Privy Seal's chairmanship to provide a central forum of external advice.

The Department of Education and Science

The Department of Education and Science (see also p. 47) discharges its responsibilities for basic and applied civil science mainly through the five research councils: The Agricultural Research Council, the Medical Research Council, the Natural Environment Research Council, the Science Research Council and the Social Science Research Council and provides financial grants to the British Museum (Natural History) and to the Royal Society (see p. 399). On all these it spent about £228.3 million in 1975-76 of which about £191.4 million came from the department's science budget and about £36.9 million was transferred from other departments under the customer-contractor principle. The department is also responsible for some aspects of international scientific relations (see p. 403) and helps to co-ordinate government policy regarding scientific and technical information.

The Advisory Board for the Research Councils

The Advisory Board for the Research Councils advises the Secretary of State on responsibilities for civil science with special reference to the research council 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 five research councils, the chairman of the University Grants Committee, senior scientists from departments with a major interest in the work of the research councils, and independent members drawn from the universities, industry and the Royal Society of London.

Agricultural Research Council

The Agricultural Research Council (ARC), established in 1931 under Royal Charter (since amended), consists of a chairman and 18-21 other members. It is supported in part by grant-in-aid provided by Parliament through the Secretary of State for Education and Science; over half its expenditure is for work commissioned by the Ministry of Agriculture, Fisheries and Food.

The ARC is responsible for 14 independent state-aided agricultural research institutes and also has eight institutes under its direct control and 10 units which it has established under distinguished scientists associated with universities. Also there are 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 also makes special research grants to support promising new lines of work in university departments. It makes a limited number of post-graduate training awards.

Medical Research Council

The Medical Research Council (MRC) was established under Royal Charter in 1920, as successor to a Medical Research Committee first appointed in 1913. The Council, which now consists of a chairman, deputy chairman and 14-18

other members, was granted a new Charter in 1966 (since further amended). It is supported mainly by a grant-in-aid provided by Parliament through the Secretary of State for Education and Science and also receives funds from the health departments and Department of Employment for the support of commissioned research.

The MRC's principal objectives are: to advance knowledge that will improve physical and mental health; and to develop the biomedical sciences as such, to maintain a fundamental capacity for research and to support higher education. 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. The Council is also advised by an Environmental Medicine (Research Policy) Committee on policy for the support of research on environmental, occupational problems and problems of social medicine that often extends beyond the responsibility of its advisory boards. 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 groups'); and research training awards (fellowships and studentships) tenable both at home and overseas. The research undertaken ranges from basic biological research at the molecular level and the extensive laboratory work that forms the scientific basis of the practice of medicine to the study of patients and relevant epidemiological and population surveys.

The MRC's main research establishments are the National Institute for Medical Research at Mill Hill, London, 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, which are mostly located in university departments, medical schools and hospitals in Britain.

The MRC also undertakes work overseas and, with additional support from the Ministry of Overseas Development (see p. 404), maintains laboratories in The Gambia and in Jamaica.

Other Medical Research

Besides financing the Medical Research Council, the Government also supports medical research through block grants to universities distributed through the Department of Education and Science and the University Grants Committee, and through the research and development programme of the Department of Health and Social Security (see p. 397). Certain government-financed research for defence purposes, for example, at the Microbiological Establishment at Porton, Wiltshire, has civil applications related to medical science.

Important contributions to the support of research in particular subjects are made by industry, especially the pharmaceutical industry and by private charities or voluntary organisations, such as the Nuffield Foundation and the Cancer Research Campaign.

The Natural Environment Research Council

The Natural Environment Research Council (NERC) was established by Royal Charter in 1965 with responsibility to encourage, plan and execute research in sciences, physical and biological, relating to man's natural environment and its resources. Such investigations seek to provide a better understanding not only of the nature and processes of the environment in which we

live and on whose resources we depend, but also of their influence on man's activities and, of growing importance today, of man's influence on them.

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—wild-life 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.

The council carries out research and training through its own institutes, grant-aided institutes, and by grants, fellowships and other postgraduate awards to universities and other institutes of higher education.

The council's research institutes are: the British Antarctic Survey, the Experimental Cartography Unit, 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, and the Unit of Invertebrate Virology. The council also maintains a research vessel base to service and operate its research vessels.

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 smaller units attached to universities.

The statutory council consists of a chairman and up to 18 members. The council is financed by a grant-in-aid from Parliament, received through the Department of Education and Science, and by commissioned research under the customer-contractor principle (see p. 387).

Science Research Council

The Science Research Council (SRC), comprising a chairman and 14–18 other members, was established under Royal Charter in 1965 and is supported by parliamentary grants-in-aid through the Secretary of State for Education and Science. The council supports basic research in astronomy, the biological sciences, chemistry, engineering, mathematics and physics in furthering its primary purpose of sustaining standards of education and research in the universities. The council devotes most of its resources to: helping university staff to carry out basic research either in their university or in one of the council's research establishments, or elsewhere; and 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 council maintains five research establishments: the Appleton Laboratory, Daresbury Laboratory, Royal Greenwich Observatory, The Royal Observatory, Edinburgh and Rutherford Laboratory. These establishments are each centres of specialised research but are also used for the development of new research equipment beyond the resources of a university (for example, the new high-power laser facility being assembled at the Rutherford Laboratory). They provide support for university 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), the 150-inch Anglo-Australian Telescope, and the high-flux neutron source at the Institute Laue-Langevin (ILL).

The council provides national contributions to the CERN, the civil science programme of the North Atlantic Treaty Organisation (NATO), the European

Incoherent Scatter Project (EISCAT) and part of the European Space Agency (ESA) contribution. It also contributes to, and shares with its French and German partners, the control of the ILL reactor at Grenoble. The council awards studentships for training in methods of research or advanced courses of study; and fellowships to promising young scientists or engineers to enable them to carry out an independent research programme that they themselves have put forward.

High Energy Physics

The provision of facilities for research in high energy physics is the function of the SRC. The SRC establishments concerned are the Rutherford Laboratory, Chilton, with a 7 GeV (thousand million electron volt) proton synchrotron (particle accelerator), and the Daresbury Laboratory, Warrington, with a 5 GeV electron synchrotron.

The future of these accelerators is being considered in the light of the SRC's reduced budget. Experiments at higher energies are carried out at the European Organisation for Nuclear Research (CERN) to which Britain contributes through the SRC.

Astronomy

Astronomy uses both ground-based techniques, such as optical and radio telescopes, and space-based methods (see p. 406). Optical astronomy is carried out in university departments and in the Royal Greenwich Observatory and the Royal Observatory, Edinburgh, under the SRC. The 98-in (2.5 m) Isaac Newton Telescope at the Royal Greenwich Observatory is operated as a national facility. A 150-in (3.8 m) telescope has been inaugurated at Siding Spring Mountain in Australia as a joint Anglo-Australian project, while a British 48-in (1.2 m) Schmidt Telescope is working on the same site. Optical telescopes operated by the South African Astronomical Observatory, to which the SRC contributes, are available for use by British astronomers.

Cambridge and Manchester Universities are the main centres for research in radio astronomy with substantial support from SRC. The fully steerable 250-ft (76.2 m) telescope at Jodrell Bank (University of Manchester) has been modernised. The Cambridge University group at Lord's Bridge has developed and made substantial use of the aperture synthesis technique; two arrays of telescopes with 1-mile (1.6-km) and 0.5-mile (0.8-km) baseline have been complemented by a 5-kilometre (3.1-mile) array.

The Social Science Research Council

The Social Science Research Council (SSRC) was established under Royal Charter in 1965 to encourage, support and carry out research in, and to disseminate knowledge about, the social sciences. The Council consists of a chairman and 13-19 other members, and is supported by grant-in-aid provided by Parliament through the Secretary of State for Education and Science. It provides grants for research projects at universities and other institutions, and makes training awards to postgraduate students. It has also set up five research units: the Industrial Relations Unit, the Cambridge Population Unit, the Ethnic Relations Unit, and the Survey Unit, and the Socio-legal Studies Centre. The SSRC's fields of interest include economics; political science; psychology; social anthropology; social and economic statistics; sociology and social administration; social science and government; education; management and industrial relations; human geography; linguistics; planning and various aspects of a wide range of other disciplines.

Several government departments have funds allocated for social research related to their responsibilities, including the Home Office, which has a large

research unit carrying out a wide variety of sociological studies. The Social Survey conducts sample survey inquiries at the request of government departments and from time to time also carries out studies in collaboration with universities and other independent research organisations.

The Universities and Institutions of University Status

Of total estimated university expenditure on scientific research in the academic year 1974-75 (over £166 million), the largest government contribution (over £101 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, about half 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. The cost of these awards is about £14.4 million a year. 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 £34.3 million a year. The ARC, MRC and SSRC maintain a number of research units within universities. Also 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. The contributions from sources other than the UGC amount to about a third of the total university expenditure on research.

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.

Statistics of Qualified Manpower

According to data derived from the Census of Population 1971 there were in 1971 some 448,870 persons with qualifications in engineering, technology and science in Great Britain, of whom about one-half were qualified in science and one-half in engineering and technology. Of those economically active (387,440), 47 per cent (185,470) held engineering qualifications, 1.8 per cent (7,300) were out of employment, and 40 per cent employed in manufacturing. Education employed over 21 per cent and over the years 1959 to 1971 there was an increase in the service sectors (commerce and consultancy).

The Department of Energy

The Department of Energy (see p. 47) is responsible for the United Kingdom Atomic Energy Authority; research in support of the exploitation of North Sea oil and gas; research into novel sources of energy; co-ordination of energy research within government departments; strategic oversight 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.

The department has an Energy Technology Support Unit at Harwell to assist in assessing the technological strategy options available to Britain in energy policy. An Advisory Council on Research and Development for Fuel and Power (ACORD) 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 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 United Kingdom Atomic Energy Authority (UKAEA) is the main body carrying out relevant research and development. Under an Act of 1971, the UKAEA's fuel cycle and radiochemical manufacturing activities were given full commercial form by the establishment of two statutory companies: British Nuclear Fuels Ltd., Risley, and The Radiochemical Centre Ltd., Amersham, Bucks.; under an Act of 1973 the Atomic Weapons Research Establishment was transferred to the Ministry of Defence.

As an essential part of the Government's nuclear power programme, the UKAEA carries out research and develops new types of nuclear reactors for electricity generation on a commercial scale and for this purpose it builds and operates experimental and prototype reactors (see p. 267). The authority also carries out contract research and development outside nuclear energy. Apart from a London Office, the UKAEA's establishments are: the Research Group headquarters and Atomic Energy Research Establishment (AERE) at Harwell and the Culham Laboratory, both in Oxfordshire, the Reactor Group headquarters and Risley Engineering and Materials Laboratory at Risley, near Warrington, and Safety and Reliability Directorate at Culcheth, the Reactor Fuel Element Laboratories at Springfields, Lancs., the Reactor Development Laboratory at Windscale, Cumbria, the Dounreay Experimental Reactor establishment in Highland and the Atomic Energy Establishment at Winfrith in Dorset.

Co-operation in nuclear energy between Britain and other countries takes place within the framework of intergovernmental agreements, membership of bodies such as the International Atomic Energy Agency and the Nuclear Energy Agency of OECD, through direct links on the research side between the UKAEA and equivalent organisations overseas.

Euratom

Britain became a full member of the European Atomic Energy Community (Euratom) in January 1973 (see p. 74) under the Treaty of Accession and under its terms agreed to accept the Treaty of Rome, signed in 1957, under which Euratom was set up, and rules made under it. Britain is taking part in the four-year Euratom research and training programme agreed in February 1973 and costing over £70 million. The AEA co-operates in the Community's five-year programme of research into thermonuclear fusion.

The Department of the Environment

The Department of the Environment¹ is concerned with research and development for a whole range of functions which affect the environment (see p. 48). The department's research programme is the responsibility of the Director General of Research. The department has research requirement committees, dealing with a particular policy subject for which the customer requirements are formulated. External advice on research programmes is received by the

¹ The transport functions of the Department of the Environment are being transferred to the Department of Transport (see p. 54).

department from the Planning and Transport Research Advisory Council, the Construction and Housing Research Advisory Council and a special sub-committee of the Royal Commission on Environmental Pollution.

About half the department's programme is carried out at the Building Research Establishment (see p. 242), the Transport and Road Research Laboratory (see p. 303), and the Hydraulics Research Station whose function is to predict the performance of hydraulic civil engineering works and also their effects on the environment. The other half is the subject of contracts placed with a wide range of organisations, either by the research establishments, or by the department's headquarters.

The department gives grants-in-aid to a number of research organisations which include: the Centre for Environmental Studies (see p. 168); the Operational Research Unit of the Royal Institute of Public Administration; and the Retail Planning Institute. 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 receive grants to support their co-operative research and related activities. The British Railways Board receives a grant towards railway research and the London Transport Executive one towards the cost of its programme of rapid transit research; and the Royal Society, to meet costs it incurs as British representative on the International Institute of Applied Systems Analysis.

*The Nature
Conservancy
Council*

The Nature Conservancy Council (see p. 172), funded by the Secretary of State for the Environment, may give grants to anyone (including voluntary bodies) to carry out projects including research relevant to its functions. The council also commissions research mainly from the Institute of Terrestrial Ecology, a component body of the Natural Environment Research Council (see p. 389). The council also carries out certain research.

**The Department
of Industry**

The Department of Industry (see also p. 48) is responsible for the sponsorship of individual manufacturing industries including the aerospace industry, for technical services to industry, and for industrial research and development, including the supervision of the industrial research establishments of the former Department of Trade and Industry, except for the Safety in Mines Research Establishment (see p. 397). It also sponsors marine and materials research and development; a National Maritime Institute is being set up within the department to take over work at present carried out by the Maritime Science and Ship Division of the National Physical Laboratory.

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. 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. 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's boards cover other relevant branches of technology.

The Department of Industry is responsible for five government laboratories. Of these, the National Physical Laboratory has a primary responsibility for the national system of measurement and for technical aspects of standards.

It also carries out research into novel uses of computers. The National Engineering Laboratory, the Warren Spring Laboratory, and the Computer Aided Design Centre are concerned with industrial developments in mechanical engineering, chemicals, and computing. The Laboratory of the Government Chemist provides analytical and advisory services to government departments. These establishments also undertake contract research for British industry and overseas firms.

The department also sponsors research by extra-mural contracts with industry, the universities, and by contracts with, and grants-in-aid to, research associations.

Private Industry

Expenditure on research and development carried out within or financed by private industry in 1972-73 was about £789 million of which £268 million came from government funds. Expenditure in individual industries, including funds from government sources, was as follows (in £ million): aerospace 208; electronics (including computers) 160; other electrical engineering 134; petroleum products 14; other chemical products 122; mechanical engineering 35; motor vehicles 56; scientific instruments 20; food, drink and tobacco 25; textiles 12. 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.

The Department of Prices and Consumer Protection

The Department of Prices and Consumer Protection (see p. 52) has responsibility for standards and weights and measures, for government support for the British Standards Institution (see p. 222) and for the Metrication Board set up to facilitate the transition to the metric system of weights and measures in Britain (see p. 450). It also operates the British Calibration Service which provides authenticated certification of the accuracy of measuring instruments in terms of national standards.

Agricultural Food and Fisheries Research

Agricultural research is carried out by the Agricultural Research Council (see p. 388), 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 (which supports the Marine Biological Association, the Scottish Marine Biological Association and the Freshwater Biological Association). Expenditure on research and development by the Ministry of Agriculture, Fisheries and Food was estimated to be £29.2 million in 1975-76 and £37.3 million in 1976-77.

Advice is given to the Ministry of Agriculture, Fisheries and Food, Agricultural Research Council, and the Department of Agriculture and Fisheries, Scotland, 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 Chief Scientist of the Ministry of Agriculture, Fisheries and Food is responsible for framing, commissioning work for, allocating funds to, and

keeping under review, his departments research and development programme. He is also responsible for providing general scientific advice to the minister over a broad range of ministry policy and contact is maintained with research and development in other government departments, the research councils, industry, and the universities.

*Government
Agricultural
and Food
Departments*

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, epizootiology 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 supplying of certain biological products. The laboratory is, by appointment of the World Health Organisation (WHO), the third international laboratory for biological standards. In discharging its responsibilities in regard to the plant health services (see p. 291) the Plant Pathology Laboratory at Harpenden, Herts, carries out research and development on analytical methods for detecting residues in crop products, and for assessing the ingredients in pesticide formulation. The Pest Infestation Control Laboratory at Slough, Berkshire (with stations at Tolworth and Worplesdon, Surrey), engages in research work on insects, mites and fungi affecting food storage and on harmful mammals and birds. It provides the scientific basis for advisory work on their detection and control and acts as an instruction and liaison centre for home and some overseas work, and is concerned with the clearance of pesticides for safety including hazards to wild life.

With the guidance of the Chief Scientific Adviser (Food), the Food Science Division provides 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, which has responsibilities for public health, and with other government departments. The division has a Food Science Laboratory in Norwich concerned with storage of certain foods, interaction of food additives and food components, heavy metal contamination and studies arising from food legislation and safety. There is an increasing demand for advice in connection with international work, including the European Community food legislation, and also regarding the new government policies for the support of research at the four food research associations and elsewhere.

In Scotland research work at East Craigs, Edinburgh, by the Agricultural Scientific Services of the Department of Agriculture and Fisheries is mainly concerned with the problem 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 Ministry 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 ministry 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 maintains five laboratories for marine fisheries and shellfish research, one for salmon and freshwater fisheries research, two concerned with handling and preservation of the fish catch and with studies of fish as food and one specialising in research into fish diseases. There are four sea-going research ships and several smaller vessels

for inshore and estuarine work. The Department of Agriculture and Fisheries for Scotland maintains a marine research laboratory and six 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

The Forestry Commission undertakes experimental work relating to silvicultural and allied problems (see p. 297). By means of grants, it also aids forest research work undertaken by various universities and other institutions, including the Commonwealth Forestry Institute, Oxford.

In 1974 the Commission's research establishments were reorganised. All research and development activities were amalgamated within a research and development division; and the study of hardwood trees was given more emphasis, with the concentration of work on lowland forests, amenity and landscape at Alice Holt Lodge near Farnham, Surrey, and the replacement of the Soils Research Branch by two Site Studies Branches.

Research is in progress, under the auspices of the Forestry Commission, into the fungus and its beetle carrier of the disease (commonly known as 'Dutch' elm disease) which attacks and kills elm trees, and, on an international level, into the possibility of breeding resistant strains of elm. Since the early 1960s the disease has killed about 6.5 million of the 30 million English elm trees, mainly in an area south of Chester and the Wash.

The Ministry of Defence

The Procurement Executive, Ministry of Defence, engages in research for defence purposes at its research and development establishments and through contracts placed with industry and universities it also undertakes certain research for civil purposes, including meteorology (see p. 399), civil aviation (see p. 399), medical research and space research. For defence see p. 116.

Department of Health and Social Security

The Department of Health and Social Security spent over £18 million on research and development in 1974-75 of which nearly £5 million was on biochemical research through the Medical Research Council. The department is advised by a Chief Scientist supported by a group of independent advisers covering a wide range of scientific disciplines.

Department of Employment

The Department of Employment has a Research and Planning Division to conduct and advise on its programme of research on socio-economic problems. 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.

Health and Safety Executive

The Health and Safety Executive is responsible for the Safety in Mines Research Establishment which carries out certain other research in the natural sciences and health and safety in other employment situations. It is also responsible for the British Approval Service for Electrical Equipment in Flammable Atmospheres which recommends research and development work to be financed by Department of Industry grants; and for a group of scientists concerned with research into commercial explosives, hazardous substances and flammable liquids and gases.

**Other
Government-
sponsored
Research**

Botany

The Royal Botanic Gardens, Kew (founded in 1759), together with its 400-acre estate at Wakehurst Place, Ardingly, Sussex, is administered by the Ministry of Agriculture, Fisheries and Food and has the largest collection of living plants in the world. Its research departments are: the herbarium (also the largest in the world with nearly 5 million specimens) concerned primarily with the classification and accurate determination of plants; and the Jodrell Laboratory, for the study of plant anatomy and plant physiology, cytology and genetics. There is a seed bank and seed testing unit, a biochemistry laboratory under the Agricultural Research Council and a cell physiology laboratory which has a transmission electron microscope for investigating reproductive physiology and the behaviour of certain glandular cells. A scanning electron microscope for studies of the surface structures of plants and pollen is housed in the Jodrell Laboratory. Three museums are concerned with public exhibitions and the care of reference collections of economic plant products. The library, in the same building as the herbarium, was founded in 1852; it consists of more than 100,000 botanical books, about 140,000 reprints and separately issued items and a collection of over 170,000 drawings and paintings of plants.

The Royal Botanic Garden, Edinburgh (founded in 1670), has, since 1969, been administered by the Department of Agriculture and Fisheries for Scotland. Together with the associated Logan Botanic Garden at Ardwell, near Stranraer, and the Younger Botanic Garden at Benmore, near Dunoon, it maintains large collections of living plants used for research into plant classification. Glasshouses at Edinburgh make possible the cultivation of and research into many tropical groups. The herbarium and library—the finest outside London—are used for research in taxonomy, cytology, anatomy, mycology and other subjects. A transmission electron microscope is used for the study of fine detail of plant structures. An exhibition hall was opened on the occasion of the tercentenary of the garden in 1970. The Scottish National Gallery of Modern Art is situated within the garden.

Communications

The Post Office, for which the Department of Industry is the responsible department, undertakes research and development on many aspects of the science and engineering of communications, both in its own laboratories and in close association with industry, the universities and government departments. Its new research centre at Martlesham Heath, near Ipswich, is completed and will fully replace existing stations at Dollis Hill, London, and Backwell, near Bristol.

*Environmental
Pollution*

Research into the effects of pollutants on the natural environment and on methods of controlling them is spread throughout research establishments of all kinds, sponsored by central government departments with control responsibilities (see p. 173). The Royal Commission on Environmental Pollution (see p. 173) advises on the adequacy of such research and conducts investigations.

*Radiological
Protection*

A National Radiological Protection Board (see p. 177) carries out research, makes public and occupational health assessments and provides services in connection with radiological protection. The board is financed by Parliament through the Secretary of State for Social Services and by grants from the Atomic Energy Authority and the Medical Research Council and by income from services.

Meteorology

The Ministry of Defence finances the Meteorological Office, which is responsible for research in meteorology and some aspects of geophysics, mainly for civil purposes. The headquarters of the Office and most of its research sections are at Bracknell, Berkshire. The Ministry of Defence also makes grants for fundamental meteorological research carried out under the auspices of the Royal Society or in university departments.

*Transport
Equipment*

The Procurement Executive of the Ministry of Defence undertakes research on civil aircraft, engines and equipment on behalf of the Department of Industry. The Civil Aviation Research and Development Board advises the Civil Aviation Authority on research and development work for which it is responsible.

**THE LEARNED
SOCIETIES**

Although today most research is conducted under other auspices, the learned societies 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 the country's scientific affairs and is equivalent to national academies of sciences in other countries. Election to it is regarded by scientists as a high honour. The Queen is Patron. 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 820. Election to the Fellowship, which is for life, was for many years restricted to 25 persons a year and the foreign membership to four a year but in 1965 the former was increased to 32 with the intention of awarding some of the new places to applied scientists in both the physical and biological sciences, and in 1975 was further increased to 40, with effect from the 1976 elections. The society is governed by a council of 21 members.

Its activities include the holding of scientific meetings; publication of research work, mainly in the *Philosophical Transactions* and the *Proceedings*; the presentation of medals; the giving of endowed lectures; and the award of research appointments and grants. Among its research appointments are the Foulerton, Wolfson, Henry Dale and Napier Research Professorships and 14 other research professorships supported by a parliamentary grant-in-aid. Research fellowships in human nutrition supported by the J. Sainsbury Centenary Grant were inaugurated in 1974. 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, Darwin, Buchanan, Sylvester, Hughes, Leverhulme and Mullard Medals. 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 (established 1975 for electrical science and technology). The society 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.

Although an independent private corporation, the society has always had a special relationship with the Government, which makes grants for certain of its activities. The President of the Society is consulted on scientific appoint-

ments to research councils and Fellows serve on most governmental advisory councils and committees concerned with research.

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. It also plays a leading part in international scientific programmes and promotes exchange visits of scientists with many academies throughout the world. Its international fellowship scheme to foster relations with scientists of Western Europe receives financial support from the Government and other sources.

Royal Society of Arts

The Royal Society of Arts (properly, the Royal Society for the Encouragement of Arts, Manufactures and Commerce) has a character at once scientific, artistic, technical, industrial and commercial. Since its foundation in 1754, one of the society's principal objects has been to promote the progress and application to useful ends of all departments of science. Today it fulfils this purpose chiefly by disseminating new scientific knowledge. The society regularly holds lectures, and publishes a monthly *Journal*, thus providing effective media for the exposition and assessment by leading authorities of developments which have a public as well as a 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. Its library includes many early scientific works and manuscripts.

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 an organised relationship with over 150 scientific bodies and learned societies. It has also 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.

Fellowship of Engineering

A Fellowship of Engineering, envisaged as complementary to the Royal Society and forming an independent and authoritative forum of eminent engineering opinion, was formed 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 by the Fellowship.

Major Awards

The MacRobert Award of £25,000 and a gold medal have been presented annually 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 opto-electronics 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.

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 Requirements Boards. The Department of Industry has technical links (and in most cases contractual relationships) with more than 30 such associations. In addition there are four (building 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, ships, welding, electrical manufacturing, cotton and man-made fibres, non-ferrous metals and scientific instruments. (See also Chapter 12.) The Textile Research Conference serves as a focal point for the collective interests of the various textile research associations.

Public Corporations

Some of the public corporations which run the nationalised industries have their own research organisations (see Chapter 13), in particular those concerned with energy, steel and transport. These organisations also give support to other organisations concerned with research on matters of interest to them.

OTHER RESEARCH**Zoological Gardens**

Zoological research is among the activities of the world-famous Zoological Gardens, extending over 34 acres in Regent's Park, London, which were opened by the Zoological Society of London in 1828. A natural zoo of 500 acres was opened in 1931 at Whipsnade, in Bedfordshire, by the Society. Among other well-known zoos are those at Edinburgh, Bristol, Chester, Dudley, Chessington, and Jersey (a small collection of some of the rarest animals in the world). There are also several '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 the principal centre in the Commonwealth for the general study of natural history, particularly for research into classification (taxonomy); it has 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 Geological Survey 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.

DISSEMINATION AND APPLICATION OF RESULTS OF RESEARCH

The dissemination of the results of research to other research workers and to ultimate users has become a problem of some magnitude as the volume of information has grown. The traditional method of scientific publication, in which results are written up into papers and published in journals, is still the main means of communication among scientists. The leading learned societies have for long been important agencies for communicating scientific information.

Information Services

A description of general library services which also cater for scientific needs is given on p. 419. Two constituents of the British Library (see p. 419) are concerned with science and technology—the Lending Division, and the Science Reference Library.

The Lending Division collects for loan purposes all literature which is likely to be of interest to the practising scientist and technologist, covering all branches of science and technology (including agriculture and medicine) and the social sciences.

The Science Reference Library is divided between the Holborn Division, formerly the Patent Office Library, and the Bayswater Branch which has substantial collections, especially in the life sciences and scientific literature written in Slavonic and oriental languages.

The rehousing in a new London headquarters of the world's largest library devoted to the social sciences—the British Library of Political and Economic Science, part of the London School of Economics—is planned for completion by the end of the present decade.

Aslib, representing special libraries and information units in industry, government departments, universities, colleges and other institutions, carries out research into the collection, utilisation and dissemination of information, provides consultancy and advisory services and training courses and offers members an inquiry and reference service covering all subjects.

The Department of Industry and the AEA devote considerable sums to

advisory and information services. The former has nine regional offices which make contacts with local industries to promote greater use of existing scientific and technical knowledge. Its Technology Reports Centre is a national clearing house for unpublished technical reports made available by various bodies in Britain and overseas. The industrial research associations circulate research reports and provide information services to members. Besides information services provided by its various groups, which include the Ceramics Centre and the Non-destructive Testing Centre at Harwell, the AEA has an information centre at its London headquarters, and a network of regional advisers on the use of radioisotopes.

In agriculture, the Commonwealth Agricultural Institutes and Bureaux (see p. 404) provide abstracts and an information service in various branches of agricultural science. The ARC publishes an *Index of Agricultural Research in Progress*, and gives an account of current developments in its annual reports. The advisory services of the agricultural departments bring research results directly to the farmer.

Medical research results are communicated mainly through journals and periodicals; but the MRC issues special reports and includes special articles in its annual reports.

National Research Development Corporation

The National Research Development Corporation (NRDC) is an independent public corporation supported as necessary by government loans through the Department of Industry. The NRDC's functions 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, on a joint venture basis, for the development of their own inventions and projects. Its borrowing power for government advances is £50 million. Outstanding advances total £20 million but the corporation is currently funding its annual investment in research and development from its income from licences and levies. Projects so far sponsored include the *Cephalosporin C* antibiotic, hovercraft, computers, advanced types of electric motor, diving and other oceanological equipment, packaging equipment, insecticides, micro-electronics and plastics,

INTERNATIONAL SCIENTIFIC RELATIONS

Britain is represented on the Scientific and Technical Research Committee (CREST) of the European Community, the object of which is to co-ordinate national policies on these matters and to implement joint projects of interest to the Community. Other intergovernmental organisations involved in scientific co-operation with which Britain is concerned include: European Co-operation in Science and Technology (COST); specialised agencies of the United Nations such as the United Nations Educational, Scientific and Cultural Organisation (UNESCO), the World Health Organisation (WHO), the Food and Agriculture Organisation (FAO), the International Atomic Energy Agency (IAEA), the Committee for Scientific and Technology Policy, the Nuclear Energy Agency (NEA) and the International Energy Agency (IEA) of the Organisation for Economic Co-operation and Development (OECD); the European Organisation for Nuclear Research (CERN); the European Space Agency (ESA); the European Molecular Biology Conference (EMBC); the European Molecular Biology Laboratory (EMBL); and the International Agency for Research on Cancer (IARC). Among non-governmental organisations Britain is represented in the international unions comprising the Inter-

national Council of Scientific Unions (see p. 400). The five research councils, the Royal Society and the British Academy became founding members of the European Science Foundation (ESF) set up in November 1974. In nuclear energy Britain also co-operates within the framework of international agreements; through direct links between the AEA and its counterparts; and through joint companies in, for example, nuclear fuel and radioisotope manufacture.

There are scientific counsellors in the British Embassies in France, the Federal Republic of Germany, Japan, the United States, and the Soviet Union who among other things promote scientific contacts 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, which is their major 'customer'.

The Ministry of Overseas Development

The Ministry of Overseas Development 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 three organisations forming part of the ministry, 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; the Centre for Overseas Pest Research, which is concerned with the development and application of pest control techniques relevant to tropical agriculture; and the Land Resources Division, which is concerned with all aspects of land resource appraisal. The ministry also supports the International Agricultural Research Centres under the aegis of the Consultative Group for International Agricultural Research. The ministry provides over £16 million a year for scientific activities including research for the benefit of developing countries.

Commonwealth Agricultural Bureaux

The Commonwealth Agricultural Bureaux, financed by contributions from the governments of 28 Commonwealth countries and that of the Irish Republic comprise four institutes and ten bureaux, all of which except one institute are in Britain and each of which is concerned with a particular branch of agricultural science. They act as clearing houses for the interchange of information of value to research workers in agricultural science throughout the Commonwealth and increasingly throughout the world. Some 18 abstract journals, one primary journal and an index are published periodically and have a combined annual circulation of about 30,000 copies. The institutes and bureaux also issue monographs on their own particular subjects and deal with inquiries received from research workers in all parts of the Commonwealth. Three of the institutes undertake taxonomic services for all countries of the Commonwealth and many countries outside it.

Commonwealth Science Council

The Commonwealth Science Council (CSC) consists of administrators and scientists nominated by the Governments of Commonwealth member countries and has been brought into close association with the Commonwealth Secre-

tariat. The council concentrates on the organisation of collaborative projects in science and technology to be undertaken by member countries. An executive committee of members from various geographical groups which make up membership of CSC reviews the progress of the programme of its activities between the organisation's plenary meetings which take place every two years.

The British Council

The principal aims of the British Council (see p. 159) in the sciences (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 assist in curriculum reform at school level and in the training of teachers of science and mathematics.

Overseas, 62 staff with science or science teaching qualifications assist in scientific and educational development and in scientific collaboration. Emphasis is placed on facilitating the interchange of scientists and teachers and on the provision of library and information services related to advances in science and science education in Britain. Overseas tours are arranged for British specialists to advise, run courses or discuss matters of common interest, and scientists are recruited or seconded to posts in overseas universities, teacher-training colleges, education authorities, schools or curriculum reform centres. The council invites senior overseas specialists to Britain, and makes awards to postgraduate students; it also administers the programmes of a large number of senior specialists and students who travel to Britain under the auspices of the UN specialised agencies, or under various bilateral technical assistance schemes, or as private individuals. The council is responsible for administering grants awarded under the Academic Interchange with Europe Scheme, the European Academic Links Scheme, the Younger Research Workers' Interchange Scheme and the Commonwealth University Interchange Scheme.

In Britain, advisory and information facilities are provided by specialist departments (and libraries) for education, medicine and science including science education.

SPACE ACTIVITIES

Government responsibility for space activities is undertaken by the Secretary of State for Education and Science, the Secretary of State for Defence and the Secretary of State for Industry, according to the nature of the project, while the Secretary of State for Foreign and Commonwealth Affairs is concerned with international aspects. Expenditure on space activities in 1976 was about £36 million.

The United Kingdom with other European governments has established a European Space Agency (ESA), agreement for which was reached in April 1975, when a British Director-General was appointed. The other member countries are Belgium, Denmark, France, Federal Republic of Germany, Italy, the Netherlands, Spain, Sweden and Switzerland; the Irish Republic, Austria and Norway have observer status. This new organisation has superseded the European Space Vehicle Launcher Development Organisation (ELDO) and European Space Research Organisation (ESRO) of which the United Kingdom was also a founder member. It has taken over the existing science programme, four applications satellites and *Spacelab*—a manned laboratory—in all of which Britain is actively participating. Among its main responsibilities will be the fostering of a single co-ordinated European space programme with a corresponding decrease in purely national activity.

Scientific research, notably in astronomy and geophysics, using space techniques, is supported by the SRC, which is responsible to the Secretary of

State for Education and Science. Opportunities are provided for research workers, particularly in universities, to carry out experiments in British satellites and sounding rockets in the European Space Agency's scientific satellite programme and in various collaborative sounding rocket programmes through bilateral and multilateral arrangements with other countries, including the Commonwealth collaborative programme. Britain is co-operating with the United States in a programme which includes American launching of the British *Ariel* series of scientific satellites, the incorporation of British experiments in American satellites, the analyses of lunar surface samples and reception of signals from the US *Viking* mission to Mars. The Appleton Laboratory provides support and services for the universities' space-based experiments and also operates the United States National Aeronautics and Space Administration (NASA) Spaceflight Tracking and Data Network (STDN) station at Winkfield. Optical tracking of satellites is undertaken by many individual observers in Britain; the prediction and co-ordination centre is at the Appleton Laboratory, which is also the home of one of the three World Data Centres for space research. The Space Department of the Royal Aircraft Establishment at Farnborough also undertakes long-term research and development intended to assist industry.

The Royal Society represents Britain in non-governmental international scientific groups such as the Committee on Space Research (COSPAR) of the International Council of Scientific Unions (ICSU).

Responsibility for industrial sponsorship of the space industry for Britain's space technology programme and for leading the British delegation to the European Space Agency rests with the Department of Industry. The technology programme, now known as the Domestic Space Technology Programme (DSTP) is intended to develop Britain's industrial capability in space applications systems. A series of wholly British technology proving satellites, which culminated in the launching of *Miranda* in March 1974, has been terminated following the decision to set up ESA. Work undertaken within the DSTP is managed by the Procurement Executive of the Ministry of Defence on behalf of the Department of 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. Britain and 90 other countries participate in the permanent International Telecommunications Satellite Organisation (INTELSAT) which started operating early in 1973 in place of the consortium formed in 1964. Britain is the second largest shareholder and is represented on the organisation's board of governors by the Post Office. The Post Office ground stations at Goonhilly in Cornwall are among the most successful in the world; British firms have built such stations overseas, and are currently fulfilling further export orders as members of international consortia.

20 The Arts

The promotion of literature and the arts and the preservation of Britain's cultural heritage are the concern of official and unofficial bodies. The Government and local authorities take an active part in supporting and promoting the arts and valuable help also comes from private sources, including trusts and commercial concerns.¹ Ministerial responsibility for general arts policy in Britain is borne by a Minister of State at the Department of Education and Science; the Secretaries of State for Wales, Scotland and Northern Ireland are also concerned with cultural matters. In addition, the Government is responsible through the Department of the Environment and the Scottish, Welsh and Northern Ireland Offices for the upkeep of ancient monuments and historic buildings, and grants are made towards the maintenance of privately owned historic buildings.

The main educational functions concerning the arts are carried out through the 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.

Estimated government expenditure on the arts in Great Britain is £92 million in 1976-77. Direct allocations include £37.2 million for the Arts Council of Great Britain, about £27.7 million for museums and galleries and some £15.8 million for the maintenance of historic buildings and ancient monuments in the care of government departments. The Government also finances the British Library (see p. 419), the National Library of Scotland and the National Library of Wales.

Arts Councils

Most government support for the creative 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. 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. It encourages such diverse interests as contemporary dance, photography and art films, and helps professional creative writers, musicians, composers, artists and photographers by means of bursary and award schemes. It promotes art exhibitions and tours of opera and ballet companies. Funds are provided for specialist training courses in the arts and the council also assists projects for 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 minister responsible for the arts. Advised by panels responsible for different aspects of the arts, the council itself allocates grants to the main artistic bodies in England, but a growing proportion of its funds is channelled to regional arts associations (see p. 408)

¹ A government review is being conducted into the financial situation of the arts.

which allocate funds independently. Organisations in Scotland and Wales receive their grants from the Scottish and Welsh Arts Councils; these are committees of the Arts Council of Great Britain which allocates to them a part of its funds.

In Northern Ireland there is an independent Arts Council with similar aims and functions to that of Great Britain. It receives an annual grant from the Northern Ireland Department of Education.

British Council

The Government promotes knowledge of English literature and culture overseas mainly through the British Council (see footnote, p. 159), which maintains 134 libraries in the countries in which it is represented. The British Council also sponsors overseas tours by leading British actors, producers, theatre companies, musicians, orchestras and opera and ballet companies; it promotes exhibitions and lectures overseas on the fine arts in Britain and organises British participation in international exhibitions; and it distributes overseas a wide range of specialised films, many of them on the arts.

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 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 nearly 100 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 selections of the best 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 (including cultural activities). Many authorities make contributions to regional arts associations (see below) and towards the expenses 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, has made a substantial contribution towards the cost of the new 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 provide a certain amount 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; some companies sponsor series of concerts and other cultural events.

Regional Arts

The Government encourages regional co-operation in arts patronage through regional arts associations whose aim it is to ensure that the whole range of the arts is more widely available to people throughout their areas. There are 15 of these covering most of England and Wales and they channel financial assistance

to local arts organisations and offer an advisory and promotional service for 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' committees.

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. The outstanding example is the Edinburgh Festival Society, but other festivals organised on a similar basis include those held in the City of London, Brighton, King's Lynn, Norwich and York.

Arts Centres

There are several hundred arts centres which provide opportunities for enjoyment 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 number of theatres and art galleries also provide a focal point for the community by offering facilities for other arts.

DRAMA

Britain is one of the world's major centres of theatrical activity. In London during the summer season, theatres are packed with overseas visitors, while in the provinces there is enthusiastic support for the work of local repertory companies. Less formal are the 'fringe' theatre groups, particularly in London, which present short plays often in locations other than theatres. Some of the groups are itinerant while others use regular locations.

Support for much of the development of British drama comes from growing government assistance provided through the Arts Councils of Great Britain and Northern Ireland which provide funds to drama companies registered as charities (that is, are non-profit-distributing), provided that such companies have given evidence of serious aims and of consistently high standards of practical competence. The Arts Council assists new drama by offering guarantees to managements giving the first professional production of selected new plays; and promising playwrights may be awarded bursaries. Schemes are also in operation to train stage designers, directors, technicians, actors and actresses and those wishing to take up theatre administration.

Professional Theatre

There are over 250 theatres in professional use in Britain that can accommodate more than 200 people. Some are owned or rented by non-profit-distributing companies, the majority of which are receiving Arts Council subsidies, while the remainder are operated commercially or are owned by local authorities.

The centre of theatrical activity is in London where there are some 41 principal theatres in or near the West End and another eight in the suburbs. Most of the theatres are let to producing managements on a commercial basis but four are occupied by major subsidised companies, including the National Theatre and Royal Shakespeare companies. The former, in its new building on the south bank of the Thames, stages classical and modern plays from all countries; the latter presents Shakespearean plays in Stratford-upon-Avon and a mixed repertoire in London.

Outside London there are a number of theatres which accommodate pre- and 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.) The number of these theatres has been declining and several have now been purchased 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 60 repertory companies which receive financial support from the Arts Council and the local authorities. The repertory companies employ many leading producers, designers and actors, and standards are high. Some companies have the use of their own theatres, while others rent from local authorities. Some 25 new repertory theatres have been built in the past 20 years.

All plays produced in Great Britain are subject to the provisions of the Theatres Act 1968. There is no censorship, but the Act makes it a criminal 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 in the Act for a defence against a charge of obscenity 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 most important 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. In Scotland there is the Royal Scottish Academy of Music and Drama in Glasgow. Nine universities offer major courses in drama.

Theatre for Young People

Theatre for young people has increased in importance in the past decade and annual audience attendances are estimated at about 3 million. In 1970 the Young Vic was opened as a theatre for young people and the National Youth Theatre has a permanent home in London. There are some ten 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 25 repertory companies provide programmes and engage in other types of theatre activity for young people. In Northern Ireland a company called Interplay Theatre, which is sponsored and administered by the Arts Council of Northern Ireland, works mainly in schools.

In addition it is estimated that there are some 200 amateur youth theatres in Britain, most of which 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 widespread interest in classical music is reflected in the large audiences at orchestral concerts and at performances of opera, ballet and chamber music. Through the Arts Councils of Great Britain and Northern Ireland, the Government encourages interest in the various forms of classical music and also jazz. The councils make grants to orchestras, soloists, opera and dance companies,

music societies and festivals. They also provide bursaries and commissions for British composers, musicians, designers and choreographers.

Music

Seasons of orchestral concerts are promoted every year in many of the large towns and cities of Britain. 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, and the Wigmore Hall, an important recital centre.

Orchestras

The leading British symphony orchestras are the London Philharmonic, the London Symphony, the Royal Philharmonic, the BBC Symphony, the New Philharmonia, the Royal Liverpool Philharmonic, the Hallé (Manchester), the City of Birmingham Symphony, the Bournemouth Symphony, the Ulster Orchestra and the Scottish National. The BBC runs a number of 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 Philomusica of London, the Northern Sinfonia (Newcastle upon Tyne) and the Scottish Philharmonic. Most orchestras (other than those of the BBC) receive financial aid from the Arts Councils and local authorities, and some also receive assistance from commercial television and business organisations.

Choral Societies

Among the principal choral societies in Britain are the Royal Choral Society, the Bach Choir, the Royal Liverpool Philharmonic Choir, the New Philharmonia Chorus, the Edinburgh Royal Choral Union and the Belfast Philharmonic Society. Certain of these are closely associated with famous orchestras while others combine with them in major choral works; many choral societies are affiliated to the National Federation of Music Societies.

Music Festivals

Music festivals in Britain, of which the oldest is the Three Choirs Festival held annually in Gloucester, Worcester or Hereford in rotation, have been in existence for over 250 years. The famous Edinburgh International Festival lasts three weeks; other festivals, such as that at King's Lynn, last a week or less. Among the better known are the Royal National Eisteddfod of Wales; the National Gaelic Mod, held at a different place in Scotland each year; the Cheltenham Festival, largely devoted to contemporary British music; and the Aldeburgh and Bath festivals. An annual international festival of folk song and dancing is held by the English Folk Dance and Song Society.

Amateur Interest

Interest in amateur music-making is encouraged by the work of County Music Committees (some of which are 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 groups with the cost of engaging professional soloists. Over 1,000 music societies are members of the federation, which advises them on matters concerning concert promotion.

Opera and Ballet

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 companies have a high international reputation and make overseas tours. Seasons of opera and operetta in English are given by the English National Opera which plays in the London Coliseum, and makes provincial tours. Its former home, Sadler's Wells Theatre, provides a London stage for visiting opera and dance companies from the provinces and from abroad.

Opera Groups

At Glyndebourne, in Sussex, an opera season, for which an international cast is specially assembled, is held every summer. Other opera companies include the English Music Theatre Group which specialises in the performance of works by British composers, the New Opera Company which is associated with the English National Opera, Scottish Opera and the Welsh National Opera Company. Opera in Northern Ireland is promoted by the Northern Ireland Opera Trust and the Studio Opera Group.

Dance Companies

Britain's dance companies also include London's Festival Ballet, the Ballet Rambert (Britain's oldest ballet company, which since 1966 has also become a leading modern dance company), Scottish Ballet, the London Contemporary Dance Theatre (which provides regular seasons of contemporary dance in London besides touring extensively) and the Northern Dance Theatre (which concentrates its activities in the north of England, although it makes periodic tours elsewhere). The work of the Irish Ballet Company in Northern Ireland combines traditional music, dancing and mime.

Education 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 London Opera Centre provides advanced training courses for student singers and stage managers. 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.

Young people are encouraged to take an interest in music, opera and dance. There are frequent concerts for children, and the National Youth Orchestra of Great Britain, the National Youth Orchestra of Wales, the London Schools' Symphony Orchestra and several county youth orchestras are noted for their high standard of performance. A Youth and Music organisation, affiliated to the international *Jeunesses Musicales*, encourages attendances by young people at opera, dance and concert performances. The Royal Ballet sponsors a small group, Ballet for All, to give an introduction to ballet to the public and to schools. Educational Dance Drama Theatre and Dance for Everyone receive financial support for their work with young people.

In schools, more children are learning to play musical instruments; and some 250,000 candidates a year (children and other students) take the examinations of the Associated Board of the Royal Schools of Music.

FILMS

There are about 1,600 cinemas in Great Britain and estimated attendance in 1975 amounted to 123.8 million. British films, actors and creative and technical talent have received much recognition both at home and abroad, and regularly achieve success at international film festivals and other events.

Feature Films

The feature film industry is based in the London area where all the main film studios are centred. Cinema and television films are exported to most countries in the world. The trade associations to which the majority of feature film producers belong is the Film Production Association of Great Britain.

National Film Finance Corporation

There is no state-owned film production unit in Britain, but the National Film Finance Corporation lends money for feature film production through a consortium formed by the corporation and private interests in 1972 and which operates with funds drawn from the Government and private interests.¹ The corporation also administers the National Development Fund which provides loans (£200,000 for 1976-77) for script-writing and other pre-production costs of some British films.

The Levy

There is a levy on cinema admissions which provides a fund to benefit the makers of eligible British films. Subject to the approval of the Department of Trade, grants from the levy can be made to the Children's Film Foundation, to the British Film Institute for the production of films, to the National Film School, and to the National Film Finance Corporation. The remainder of the fund is distributed by a public body (the British Film Fund Agency) in proportion to a film's takings, so that the more successful a film is at the box office, the more it receives from the fund.

Quota System

Under legislation dating from 1927 a specified proportion of British films must be shown in British cinemas each year. For main feature films the quota has remained at 30 per cent since 1950 and for supporting programmes at 25 per cent since 1948.

Cinema Licensing and Film Censorship

Local authorities are the only public authorities in Britain with 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 in respect of 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 (other than newsreels).

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 goes back to 1929, when a group of directors began making factual films of a distinctive and imaginative kind on behalf of 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 high quality factual

¹ The Government has announced its intention of implementing proposals contained in a report published in 1976 which recommended the setting up of a British Film Authority and the provision of financial assistance for the industry (see Bibliography, p. 472). An advance of £2.37 million was made available through the corporation in 1976.

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 assists in the selection of short films for British entries to international short film festivals.

The Government sponsors a wide range of films to inform audiences overseas about British life and achievements, including documentary films, television programmes and newsreels; they are produced through the Central Office of Information (COI), which commissions their production by private companies.

A large number of films are sponsored by industrial concerns and other organisations, such as the British Tourist Authority and the British Productivity Council. The best of these and industrial films from other countries are available through the COI's Central Film Library and other agencies. The Films of Scotland Committee promotes the production of Scottish films covering the industries and cultural traditions of Scotland.

British Film Institute

The development of the film as an art is promoted by the British Film Institute, founded in 1933, which is financed mainly by an Exchequer grant, and by the Scottish Council for Educational Technology which also receives a government grant. The institute offers financial and technical assistance both to 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, a library of books on the film 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 National Film Archive contains about 25,000 films, including newsreels and other miscellaneous items, besides scripts, art designs, posters and over 1 million photographic stills, selected to illustrate the history and the art of the film and as significant social and historical records.

The National Film Theatre, in London, 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 a London Film Festival. The British Film Institute has promoted the development of some 52 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 offers three-year courses for writers, directors, producers and cameramen. The school, which is financed by grants from the Government and the British Film Fund Agency, has about 75 students. Training in film production is also given at the London International Film School which has over 150 students and at some polytechnics and other institutions of further education.

Children and the Cinema

Cinemas which give children's shows require a special licence from local authorities which may impose conditions. There are about 575 children's cinema clubs which provide special programmes 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.

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 by museums and galleries, and by the activities of many institutions, societies, and private galleries and the growing number of local art 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 local education authority art education. The Government also encourages high standards of industrial design and craftsmanship through grants to the Design Council (see p. 222).

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 also maintains its own collection of contemporary British art, and organises or offers grants or guarantees towards a variety of touring and other exhibitions. The Scottish and Welsh Arts Councils maintain galleries in Edinburgh, Glasgow, and Cardiff respectively. The Arts Council of Great Britain also supports art societies and independent galleries, and provides commissions and awards for artists. 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 other antiques over 100 years old and worth more than £4,000; documentary and photographic material over 70 years old; and British archaeological material over 100 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 enable a public museum or art gallery to purchase the object at a fair price.

Museums and Art Galleries

Over 950 museums and art galleries are open to the public including the major national collections and a wide variety of municipally and independently owned institutions. The Government is advised on grants and policy towards museums by the Standing Commission on Museums and Galleries.

National Collections

Of the national museums and art galleries, those in London contain between them one of the most comprehensive collections of objects of artistic, archaeological, scientific, historical and general interest ever to exist within 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 (see p. 402).

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. In Northern Ireland there are two national museums: the Ulster Museum in Belfast and the Ulster Folk and Transport Museum, County Down.

Most of the national museums and galleries are administered by trustee bodies, but the Victoria and Albert and Science Museums are the responsibility of the Department of Education and Science, and the Royal Scottish Museum has a similar relationship with the Scottish Education Department.

Other Collections

Other important collections in London include the Armouries (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 a museum devoted to art, archaeology and natural history, usually owned by the local authority but sometimes by a local learned society 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, Glasgow, Leeds, Leicester, Liverpool, Manchester, Norwich, Reading, 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.

Co-operation

A function of the Standing Commission on Museums and Galleries is to advise the Government on the relationship between national and provincial institutions. Close relations are fostered by the eight area museum councils which cover the whole of Great Britain. They are grant-aided by the Government and offer help and advice to museums and galleries in their areas.

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 organised and sent on tour by the Arts Councils, the Victoria and Albert Museum, the Science Museum, 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. The Greater London Council periodically exhibits modern sculpture in its parks. Commercial exhibitions of works by old masters and living artists are held in the galleries of the London dealers.

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.

Finance

All national collections are financed chiefly from government funds. Besides meeting administrative and maintenance costs, the Government provides annual purchase grants (£3.4 million in 1976-77). It also provides special purchase grants. Pre-eminent works of art accepted by the Government in place of capital transfer tax are allocated to public collections.

Local museums and art galleries, which are maintained from rates or endowments, can be helped in building up their collections through the annual government grant administered by the Victoria and Albert, Science and Royal Scottish Museums. Financial help and practical assistance is also given to museums and galleries by certain trusts and voluntary bodies, particularly the National Art-Collections Fund and the Contemporary Art Society.

Art Education

Art and design education is provided in maintained colleges of art, colleges of further education 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 post-graduate 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. University art schools include the Slade School of Fine Art and Goldsmiths' College (London), the Ruskin Drawing School (Oxford), the Reading School of Art, the Department of Fine Art of the University of Newcastle upon Tyne, and the School of Art of University College, Aberystwyth.

The leading academic institutions for the teaching and study of the history of art are the Courtauld Institute of the University of London, the Department of Classical Art and Archaeology in University College, London, and the Warburg Institute, also a part of London University.

In England, Wales and Northern Ireland three-year full-time courses leading to a degree in art and design are administered by the Council for National Academic Awards (CNAA). The CNAA also awards postgraduate degrees in art and design. In Scotland each of the four schools of art awards a diploma which is roughly equivalent to the pass degree of a university, and three award associateships which are comparable with an honours degree. The Ulster College is the regional college for Northern Ireland.

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 £730,000 in 1976-77, are administered by the Crafts Advisory Committee. Set up in 1971 to advise the minister responsible for the arts on the needs of artist-craftsmen, the committee also promotes exhibitions of work and gives financial assistance to enable craftsmen to be trained and to establish or expand their businesses. Its activities include crafts associated with conservation and renovation. Scotland receives a separate government grant which is similarly administered by the Joint Crafts Committee.

Architecture

Official responsibility towards the nation's architecture is concerned with encouraging the best in new building and conserving the best that has been inherited from the past (for conservation, see p. 169).

Several government departments are concerned with architecture and help to promote good design. The Department of the Environment is responsible for the design, building and maintenance work of government departments and undertakes research and development work. It also provides advice to local authorities in England and Wales on standards of housing design through a series of *Design Bulletins* and other publications. Annual awards are made in conjunction with the Royal Institute of British Architects (see below) for good housing design in both the public and private sectors. Other government departments, for example, the Department of Education and Science and the Department of Health and Social Security, provide advice and exercise design control over such buildings as schools and hospitals. In Scotland statutory responsibility and control of standards are exercised by the Secretary of State for Scotland.

Government departments are assisted in an advisory capacity by the Royal Fine Arts Commissions for England and Wales and for Scotland, which also advise planning authorities and other public bodies on questions of public amenity or artistic importance, including new building developments.

A number of professional, advisory and other societies and institutions exist to further the interests of architecture, and the Civic Trust (see p. 166) seeks to promote high standards in architecture and civic planning and to encourage interest in the appearance and protection of town and countryside. The National Trust (see p. 165) acquires land and buildings and protects them from harmful development for the benefit of the public.

Education and Professional Associations

In Britain it is illegal for a person to practise under the title of 'architect' unless registered with the Architects' Registration Council of the United Kingdom. Most students train at a full-time school of architecture; there are 32 schools recognised for exemption from the examination in architecture of the Royal Institute of British Architects (RIBA). Some of these schools have part-time courses and there are five other schools which have courses leading to the RIBA external examination.

The Royal Institute of British Architects is the leading professional architectural institution with a membership of nearly 22,000 in Britain and almost 6,000 overseas, and over 3,400 students in Britain and overseas countries. The RIBA has 78 branches in Britain, and allied to it are 15 architectural societies in overseas countries. It is concerned with a wide range of activities covering professional practice, science, technology, statistics, architectural competitions, and professional and public relations; arranges lectures and discussions; presents exhibitions; and, through its Board of Education, exercises control over standards of architectural education. The RIBA has one of the largest and most important architectural libraries in the world. The Royal Incorporation of Architects in Scotland with over 2,000 professional members is allied to and acts for the RIBA in Scotland. Among other architectural bodies are the Incorporated Association of Architects and Surveyors, the Institute of Registered Architects, the Faculty of Architects and Surveyors, the Architectural Association, the Architecture Club, and several which cover particular aspects of architecture, such as the Modular Society.

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 a large number of private literary societies. Book reviews are featured in the press and on radio and there are numerous periodicals concerned with literature. Recognition of outstanding literary merit is given in the form of literary prizes, a number of which are awarded annually, for instance, the Queen's Gold Medal for Poetry, the Hawthornden prize for imaginative writing, and the Somerset Maugham award for young writers.

Government help is given through the Arts Councils of Great Britain and Northern Ireland which support literature in a number of ways, including grants for writers, translators, publishers, little presses and magazines. A Bill to give authors a public lending right entitling them to payment from public funds for the loan of their books through public libraries is before Parliament.

Libraries

The British Library was created in July 1973 under the British Library Act 1972 from a merger of the British Museum Library with other libraries and institutions. The Library is organised in three divisions. The Reference Division includes the Department of Printed Books holding over 8 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 over 2.5 million volumes including some 48,000 current periodicals available on loan to other libraries in Britain; 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 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 published in Britain. In addition the National Library of Scotland, the National Library of Wales, the Bodleian Library of Oxford University and the Cambridge University Library are entitled to claim copies.

The Victoria and Albert Museum and the British Museum (Natural History) in London also have large libraries and many government departments have old-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 purposes. 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. 399). 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.

Many libraries have collections of records and musical scores which are available on loan to the public. The City of Westminster houses the Central Music Library which lends to other libraries and to individuals. Another well-known music collection is the Henry Watson Music Library at the Manchester Central Library.

Libraries in Education

The ancient university libraries of Oxford and Cambridge are not matched 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 more than 2 million volumes, and the university libraries of Edinburgh, and Glasgow have over 1 million volumes each, while Birmingham, Leeds and Liverpool each has some 700,000 volumes. Many universities have succeeded in building 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 are also building collections as are the new polytechnics.

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. Schoolchildren are regularly introduced to the public library system, which they can use in addition to the school library.

Public Libraries

Britain is served by a complete network of public libraries, administered by local public library authorities. These libraries have a total stock of some 115 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 Secretary of State for Education and Science is responsible for the supervision of the public library service in England and in Wales, and is advised by two library advisory councils. Public library authorities in England and Wales have a duty to provide an efficient and (with some limitations) free lending and reference library service for books and periodicals. They maintain more than 6,500 public library service points; some areas may be served by mobile libraries, of which over 600 are in service, and domiciliary services exist for people who are unable to visit a library. In Scotland local authorities have a duty to provide library facilities, and similar duties are imposed on education and library boards in Northern Ireland.

In addition to lending books, about a half of the library authorities now lend gramophone records of various kinds and a growing number are adding loan collections of works of art, either originals or reproductions. Nearly all library authorities 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 library authorities possess a significant collection of books and documents on the history of their localities.

The public library is often a centre for local cultural activities. Film shows, lectures, adult education classes, book-week exhibitions, drama groups, gramophone recitals and children's story hours are among the many activities provided by or based upon the local library.

Library Co-operation

A voluntary system of library co-operation in England and Wales has grown up since the first quarter of this century. The eight regional library bureaux in England and Wales (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. They organise co-operation among themselves and through the British Library, which is responsible for inter-library lending at national and international level.

There is a growing number of local schemes for the exchange of specialist books and periodicals and information. These involve industrial, commercial and sometimes university libraries and are normally centred on a major public or technical college library.

The National Library of Scotland carries 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 Queen's University and New University of Ulster libraries.

Library Associations

The principal professional organisation is the Library Association, which has a membership of nearly 24,000, including over 2,000 from overseas. 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 (see p. 402) and the Standing Conference of National and University Libraries.

Books

In 1975 British publishers issued 35,608 separate titles: 27,247 new ones, and 8,361 reprints and new editions. An increasing proportion of books—including a wide range of specialised non-fiction—is now sold in paper-back form. Book clubs make available hard-backed 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 over 60 countries, its programme of book exhibitions (274 exhibitions were mounted in 1975-76) 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 1975, see p. 239). 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.

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.

A number of societies sponsor poetry readings and recitals; the Poetry Society and the Apollo Society are among the best known. Poetry also plays an important part in various annual festivals, including the Royal National Eisteddfod—the bardic festival held in Wales—the Stratford-upon-Avon Festival of Poetry, the Cheltenham Festival of Literature, and the annual poetry festival organised by the Poetry Book Society in London.

Among the specialist societies are the Early English Text Society, the Bibliographical Society, the Harleian Society, the Saltire Society, and several societies devoted to particular authors of which the largest is the Dickens Fellowship. There are a number of clubs and societies, such as the Book Society and the Poetry Book Society, which exist to distribute selected new books to their members.

21 The Press

The British press caters for a variety of political views, different levels of education and a wide range of interests. It is not subject to state control or censorship.

More daily newspapers, national and regional, are sold per head of population in Britain than in almost any other European country, and, although there are relatively few national newspapers, some of them have circulations comparable with the greatest in any other part of the world; individual audited circulation figures range from nearly 177,000 to some 3.8 million.

The national daily and Sunday newspapers are conventionally described as either 'popular' (often using a tabloid format) or 'quality' (in broadsheet format). There has been a slight long-term decline in newspaper circulation; but this trend conceals the experiences of individual newspapers and the fact that, while the circulation of the popular press as a whole has declined fairly steadily over the years, that of the quality press has generally increased. Prices of newspapers range from £0.05 to £0.12 for dailies and from £0.09 to £0.18 for Sundays. Separate sections or pages on finance, business, industry, education, the arts, social services and sport are common, and some papers carry special supplements on particular subjects, with related advertising. The quality Sunday newspapers have separate sections for literature and the arts, business and industry, as well as colour magazine supplements. Free colour magazine supplements are published by the *Sunday Telegraph*, *The Sunday Times* and *The Observer*.

According to the 1976 edition of *The Newspaper Press Directory* 134 daily and Sunday newspapers and 1,091 weekly newspapers are published in Britain. These figures include certain specialised papers, the circulation of which is 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 35 per cent of the costs of popular papers and 28 per cent of that of qualities. Three-quarters of Britain's requirements, about one million tonnes annually, are imported while the rest is made mainly from imported raw materials.

Ownership

Newspaper ownership in Britain, as it affects the national daily and Sunday, London evening and regional daily newspapers, is concentrated mainly in the hands of a comparatively small number of large press publishing groups.

Although most enterprises are organised as limited liability companies, individual and partner proprietorship survives. The seven major newspaper and periodical publishers are: Reed Publishing Holdings Ltd. (part of Reed International); Associated Newspapers Ltd.; Beaverbrook Newspapers Ltd.; the Thomson Organisation Ltd.; News International Ltd.; United Newspapers Ltd.; and Pearson Longman Ltd.

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.



Anti-pollution

'Komara Miniskimmer', developed for dealing with oil spills in harbours, ports and estuaries. A larger version for use at sea is seen loaded on the lorry.

Training Opportunities

Underwater Training Centre, Loch Linnhe, Scotland, provides training for deep-sea divers working at offshore oil installations.





Young people under tuition in (above) a wood workshop and (below) a pre-school playgroup. Day-release courses are available for further education.



Sport

The centenary of the Wimbledon Lawn Tennis Championships takes place in 1977.

Although pronounced views may be expressed in some newspapers and their political leanings may be obvious, they are financially independent of any political party and are not obliged to follow any specific party line. (The one exception is the *Morning Star* which is owned by a co-operative society and expresses the views of the Communist Party of Great Britain.) 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 intended to ensure the authority and independence of editors.

Safeguards against the risks inherent in undue concentration of the means of communication are provided in certain Acts of Parliament, for instance, in the Independent Broadcasting Authority Act 1973, which stipulates that, if it appears to the Independent Broadcasting Authority at any time that newspaper shareholdings in television programme companies have led or are leading to results which are contrary to the public interest, the authority may, with the consent of the Home Secretary, notify the companies that their programmes may cease to be transmitted. The Act makes a similar stipulation for local independent radio and provides that if a local newspaper has a monopoly in the area, it should not be allowed to have a controlling interest in the local radio station. In addition, the Fair Trading Act 1973 makes unlawful any transfer of a newspaper or newspaper assets to a newspaper 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 Secretary of State for Prices and Consumer Protection gives written consent. Except in certain limited cases, which include transfers of very small newspapers, consent may be given only after the Secretary of State has referred the matter to the Monopolies and Mergers Commission and received its report.

Royal Commission

A Royal Commission on the press is inquiring into factors affecting the maintenance of the independence, diversity and editorial standards of newspapers and periodicals, and the choice of newspapers and periodicals available to the public nationally, regionally and locally. The commission is expected to publish its final report early in 1977, but an interim report on the financial problems facing the national newspaper industry was published in March 1976 (see Bibliography, p. 473). This concluded that there was no immediate prospect of increasing newspapers' revenue and that the only adequate means of cost-saving would be to secure higher productivity through reductions in manpower and the introduction of new technology in production methods. The Government has accepted this conclusion and has agreed with the commission's view that a general subsidy to enable the press to carry out such measures would be inappropriate.

The 'National' Press

Nine morning papers are 'national' in the sense of circulating throughout the British Isles, and there are seven national Sunday papers (see Table 37). All the national dailies are produced in London, but five also print northern editions in Manchester. The *Scottish Daily Express* and the *Scottish Sunday Express* are printed in Manchester. The leading Scottish quality papers (*The Scotsman* and *The Glasgow Herald*) have a considerable circulation outside Scotland. Each of the (two) London evening papers has ownership affiliations with a national daily, but both have their distinctive style and draw their readership very largely from people living in and around London.

English Regional Newspapers

The regional newspapers of England (outside London, 87 morning or evening dailies and Sundays and 707 newspapers appearing once or twice a week) provide mainly regional and local news. Some of the daily newspapers also give coverage to national affairs, and a number co-operate to provide their own foreign news service. The leading regional newspapers have wide regional circulations; a few have nation-wide reputations.

TABLE 37: 'National' Newspapers and London Evenings

Title and foundation date	Controlled by	Circulation ¹ average Jan.-June 1976
Dailies:		
<i>Daily Express</i> (1900)	Beaverbrook Newspapers Ltd.	2,607,785
<i>Daily Mail</i> (1896)	Associated Newspapers Ltd.	1,738,632
<i>Daily Mirror</i> (1903)	Reed Publishing Holdings Ltd.	3,837,091
<i>The Daily Telegraph</i> (1855)	Daily Telegraph Ltd.	1,315,473
<i>Financial Times</i> (1888)	Pearson Longman Ltd.	176,649
<i>The Guardian</i> (1821)	Guardian and Manchester Evening News Ltd.	308,700
<i>Morning Star</i> (1966)*	People's Press Printing Society Ltd.	40,796
<i>The Sun</i> (1969)	News International Ltd.	3,638,479
<i>The Times</i> (1785)	The Thomson Organisation Ltd.	312,379
London Evenings:		
<i>Evening News</i> (1881) Monday-Friday Saturday	Associated Newspapers Ltd.	574,077 558,048
<i>Evening Standard</i> (1827) Monday-Friday	Beaverbrook Newspapers Ltd.	431,094
Sundays:		
<i>News of the World</i> (1843)	News International Ltd.	5,162,136
<i>The Observer</i> (1791)	The Observer Trust	677,504
<i>The Sunday People</i> (1881)	Reed Publishing Holdings Ltd.	4,076,634
<i>Sunday Express</i> (1918)	Beaverbrook Newspapers Ltd.	3,436,209
<i>Sunday Mirror</i> (1963)	Reed Publishing Holdings Ltd.	4,078,259
<i>Sunday Telegraph</i> (1961)	Daily Telegraph Ltd.	733,225
<i>The Sunday Times</i> (1822)	The Thomson Organisation Ltd.	1,374,759

¹ Unless asterisked, 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.

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.

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 150,000. Individual circulation figures of regional evening papers start at about 18,000; most are in the 30,000–10,000 range, although the *Manchester Evening News* has a circulation of over 300,000. 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 is also a growing number of free distribution advertising newspapers (mostly weekly), some of which are published by orthodox newspaper publishers.

London Suburban Papers

The London local weeklies (120) 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 95,000 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 19,000 and 126,000. 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*.

The weekly press (74 papers) 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 90,000 and 660,000, are *The Scotsman*, published in Edinburgh; *The Glasgow Herald* and the *Daily Record*, published in Glasgow; the *Courier and Advertiser*, published in Dundee; the *Press and Journal* of Aberdeen; and the *Scottish Daily Express*. The evening papers have circulations in the range of 17,000 to 216,000 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*.

Weekly and local newspapers published in Scotland number 129, of which the *Hamilton Advertiser* and the *Falkirk Herald* have the largest circulations.

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 170,000. They are *The News-Letter* (Unionist) and the *Irish News* (Nationalist), the evening *Belfast Telegraph* and the *Sunday News*.

There are 42 weekly newspapers in Northern Ireland of which the majority are published by individual companies.

Channel Islands and Isle of Man

The Channel Islands have two daily (evening) papers (one in Guernsey and one in Jersey) and two weeklies, which also circulate in Alderney and Sark.

In the Isle of Man there are 5 weekly newspapers of which the *Isle of Man Examiner* has the largest circulation.

The Periodical Press

There are over 4,300 periodical publications in Britain, classified as 'general', 'specialised', 'trade', 'technical' and 'professional'. There are also about 635 'house magazines' produced by industrial undertakings, business houses or public services for the benefit of their employees and/or clients.

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 in Britain are: *Radio Times*; *TV Times*; *Woman's Weekly*; *Woman's Own*; *Woman*; *Weekend*; and *Woman's Realm*. 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 left-wing of the Labour Party; *New Society*, which covers the sociological aspects of current affairs; and *New Scientist*, which reports on the progress of science and technology in terms which the non-specialist can understand. *Punch*, traditionally the leading humorous periodical, also devotes attention to public affairs.

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.

Periodicals published in England circulate throughout the United Kingdom. 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.

New Technology New techniques are available in all the stages of newspaper production, but the national newspapers published in Britain are generally proposing to concentrate investment in the composing and plate-making processes. The introduction of new technology in these departments involves computerised photocomposition in place of linotype machine composition, and substitutes electronic and chemical methods of plate-making for manual.

These methods allow savings to be made with newspapers' labour costs and have so far been adopted mainly by the provincial press where composing represents a very high proportion of total costs. Most national newspaper publishers, however, are now preparing to introduce systems drawing on all techniques available, and the *Daily Mirror*, the *Financial Times*, *The Daily Telegraph*, *The Guardian* and *The Times* have announced plans.

News Agencies

There are three principal British news agencies: Reuters Ltd.; the Press Association Ltd.; and the Exchange Telegraph Company Ltd.

Reuters Ltd. is a world news organisation. It has four shareholders—the Newspaper Publishers Association, the Press Association, the Australian Associated Press and the New Zealand Press Association, which are parties to a trust agreement to safeguard the independence and integrity of the news service. Founded in Aachen in 1850 and transferred to London in 1851, Reuters now has about 1,100 correspondents in 183 countries and territories, and links with 120 national or private news agencies, which give it access to coverage by many thousands of local reporters. Some 700,000 words of general news, sports, and economic reports are received in London every day and are retransmitted to 153 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 business houses 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 Fleet Street 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. All profits are used to develop the service.

The Exchange Telegraph Company Ltd. (Extel), an independent news agency founded in 1872, is a wholly owned subsidiary of The Exchange Telegraph Company (Holdings) Ltd., a public company. It supplies financial and sporting news to newspapers and broadcasting organisations. In conjunction with the Press Association Ltd., racing services are also supplied by teleprinter and telephone to subscribers in London and the provinces from offices in all important cities and towns.

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 Printing and Publishing Industry Training Board (PPITB) is responsible for training in the printing, publishing and professional photography industries. Its work includes the formulation of training schemes, the establishment of standards, ensuring that adequate facilities exist, and the provision of a regional advisory service.

The National Council for the Training of Journalists (NCTJ), composed of the major representative organisations in journalism and the press, works in partnership with the PPITB. Its functions include superintending activities concerning entry into journalism, setting and conducting examinations; and organising short training courses and seminars for journalists.

There are two normal methods of entry to newspaper journalism: (1) by selection for a place on a full-time pre-entry course lasting for one academic year and (2) by direct recruitment to a regional or local newspaper. Under collective agreements between the employers' associations in publishing, the National Union of Journalists and the Institute of Journalists, systematic training under NCTJ arrangements is obligatory for all entrants to the regional and local newspaper publishing sector under the age of 31. The scheme consists of on-the-job training, and block-release courses for those who have not attended a pre-entry course. A similar syllabus covering practical journalism, use of language, law, public administration and current affairs is used at both kinds of course.

Both the PPITB and the NCTJ have given attention to the development of comparable arrangements for entrants to periodical publishing. NCTJ accredited courses (including pre-entry) are available in central London (where the greater part of the periodical publishing sector is situated) and the PPITB has drawn up a recommendation on systematic training for the editorial staff of periodicals to facilitate the preparation of in-company schemes which now exist in most major groups.

While most training in journalism in Britain takes place at below university level and there are no courses offering degrees in journalism, the Centre for Journalism Studies at the University College, Cardiff, has a one-year post-graduate diploma course in journalism which is available to any holder of a degree from a British university or a recognised equivalent. In addition a wide range of training courses, covering circulation, advertising, industrial relations and supervisory management are provided for the regional newspaper industry by the Newspaper Society Training Service and for the national newspapers by the Newspaper Publishers Association. Short general management courses are also run in conjunction with the University of Aston in Birmingham.

Under the Commonwealth Press Union Harry Brittain Memorial Fellowship Scheme for the training and education of young journalists throughout the Commonwealth, about eight journalists from overseas spend three months in the United Kingdom each year, partly in the offices of newspapers or periodicals and partly acquiring a general idea of life in Britain. A limited number of travelling scholarships are also awarded to British journalists to enable them to visit Commonwealth countries overseas.

The Thomson Foundation offers scholarships and organises training courses for journalists from all over the world at its Editorial Studies Centre in Cardiff, and provides consultants and tutors for courses for journalists overseas.

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), founded in 1884, and the National Union of Journalists (NUJ), founded in 1907. All practising journalists (including those engaged in radio, television, public relations and freelance journalism) are eligible for membership of either of these organisations. The NUJ has 29,500 members and the IOJ about 2,300.

The main aims of the Guild of British Newspaper Editors are to maintain the professional status and independence of editors, defend the freedom of the press, and improve the education and training of journalists: the guild, which is not a trade union, has about 400 members. The British Association of Industrial Editors is the professional organisation to which most editors of house journals belong.

The Press Council

The Press Council, established in 1953 and reconstituted in 1963, has a lay chairman and 30 members. Its aims are: to preserve the established freedom of the British press; to maintain the character of the British 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; to report on developments in the British 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 British 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 in Britain has the same freedom as the individual to do and say what it likes provided it does not transgress the law; in general, it is at liberty 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 clauses which apply, in particular or incidentally, to the press. These relate to such matters as the extent of newspaper ownership in television and radio companies; the transfer of newspaper assets; the drawing up between employers and unions of 'closed shop' membership agreements,¹ restrictions on the reporting of

¹ In order to safeguard the interests of journalists, contributors and others involved in writing newspaper articles, the Trade Union and Labour Relations (Amendment) Act 1976 provides for the drawing up of a charter containing practical guidance on matters affecting the freedom of the press. If the industry does not present such a charter within a specified time, the Secretary of State for Employment is empowered to produce one, after consultation with the industry and subject to the approval of Parliament.

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) divorce and domestic 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 work of the press are the laws on defamation 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 Acts. Newspapers are also liable to proceedings for seditious libel and incitement to disaffection.

Legal proceedings against the press are comparatively infrequent; the majority of actions that do take place are libel actions brought by private individuals. In such cases, the editor, proprietor, publisher, printer and distributor of the newspaper, as well as the author of the article, may all be held responsible.

22 Broadcasting

Broadcasting by television and radio in Britain is regulated by the Home Secretary under the Wireless Telegraphy Acts 1949 and 1967, which prohibit the sending or receiving of wireless communications, except under licence.

Two public bodies—the British Broadcasting Corporation (BBC) and the Independent Broadcasting Authority (IBA)—are licensed to provide television and radio broadcasting services. The BBC, which was established by Royal Charter in 1927, operates two national television services, four national radio services and 20 local radio stations; it also broadcasts to countries abroad through its external services division. The IBA, originally established in 1954 as the Independent Television Authority, controls the operation of the single independent television service and has similar responsibility for the independent local radio stations (see p. 435).

The BBC and the IBA are independent authorities in the day-to-day operations of broadcasting, including programmes and administration. The Government retains ultimate control, and the Home Secretary is answerable to Parliament on broad questions of policy and may issue directions to the BBC and IBA on a number of technical and other subjects. The intention has always been, however, to maintain as far as possible the independence of the broadcasting authorities while ensuring that they retain a balanced approach to their responsibilities. Periodic committees of inquiry, which have reported either on particular aspects of broadcasting or on the subject as a whole, have reflected the need for constant review of the role of the broadcasting authorities and for change in response to new developments. A committee of inquiry appointed by the Government in 1974, is looking into the future of broadcasting.

Users of television sets must obtain a receiving licence each year from the Post Office. Licences for sets receiving black and white pictures cost £8 a year, and for those receiving colour pictures £18 a year. There were nearly 17.9 million receiving licences current in Britain in June 1976 of which approximately equal numbers were for black and white and for colour television.

Broadcasting Authorities

Both the BBC and the IBA are constitutionally required to provide a 'public service' with the purpose of disseminating information, education and entertainment. The constitution and finances of the BBC are governed by the new Royal Charter granted in 1964 and by the Licence and Agreement of 1969, and those of the IBA by the Independent Broadcasting Authority Acts 1973 and 1974 and its 1973 Licence. Both organisations are required to publish annual reports and accounts.

The British Broadcasting Corporation

The Corporation consists of 12 governors (including a chairman, a vice-chairman and separate national governors for Scotland, Wales and Northern Ireland), each appointed for a period of not more than five years by the Queen on the advice of the Government. The governors are constitutionally responsible for the conduct of the whole broadcasting operation, including the production and presentation of the programmes on television and radio, and the provision and working of the necessary installations and equipment. A number of committees advise them on such matters as the social effects of television, religious broad-

casting, 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 chief executive officer of the BBC—the Director General—with whom they discuss all major matters of policy and finance. He 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 an annual grant voted by Parliament (£212 million in 1975–76) which is the income from the sale of television receiving licences less certain deductions for collection and other expenses. This is supplemented by profits from trading activities, including domestic sales of records, books, magazines and other publications connected with BBC radio and television programmes, and overseas sales of programmes. 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 have assisted in the making of educational programmes.

The BBC's external services are financed by a grant determined each year by the Government; in 1975–76 this amounted to over £27 million.

The Independent Broadcasting Authority

The Independent Broadcasting Authority consists of a chairman, a deputy chairman and nine other members (three of whom have responsibility for Scotland, Wales and Northern Ireland) appointed by the Home Secretary. The IBA does not itself produce programmes; these are provided by commercial programme companies. The authority's four main functions are to appoint the programme companies, to supervise the programme arrangements, to control the advertising and to build, own and operate the transmitting stations for independent television and independent local radio.

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 is the Director General. There are also two deputy directors general, and a headquarters and regional office staff covering all technical and administrative services.

The IBA receives no payments from licence revenue. The finance for its operations is drawn from annual rental payments made to it by the television and radio programme companies which amounted to about £14.9 million in the year ended March 1975. The television programme companies also pay to the IBA, for transfer to the Government, a further sum known as the levy which is related to their profits.

The Programme Companies

Fifteen television programme companies hold contracts to provide television programmes in the 14 independent television regions of Britain (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 their areas. (Independent television serves a population of some 11.5 million people in the London area compared with some 107,000 people in the Channel Islands.)

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) produce a larger proportion of their own programmes and 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 broadcasting by independent radio stations has been introduced by the IBA. The companies providing programmes are under contract to the IBA, operate under its control and are financed by advertising revenue.

Control by the IBA

When a company, on the basis of negotiations with the other companies, has decided on a programme schedule for its area, it is required to submit this to the IBA for approval. The authority has wide-ranging powers to control and regulate the content and quality of programmes; for example, it ensures that a 'proper balance' of views is expressed and has drawn up a code on violence which includes special precautions to be taken when children are likely to be viewing. 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 certain circumstances local newspapers have a right to a share in the control of local radio companies.

Domestic Television and Radio

Television viewing has become by far the most popular leisure activity in Britain and some 95 per cent of the population have television in their own homes. Average viewing time per head of population in the first three months of 1976 was over 19 hours a week. There are three television channels: BBC-1 and ITV which broadcast 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 more than 95 per cent within range of uhf transmissions. A majority of people possess uhf receivers, and when most of the old vhf-only receivers have been replaced the vhf broadcasts of BBC-1 and ITV will cease. Colour programmes were first introduced on BBC-2 in 1967 and were extended to BBC-1 and ITV in 1969 when they began uhf broadcasts. A high proportion of programmes on the three uhf services is transmitted in colour, though they can also be received in black and white.

The Government has accepted in principle the recommendation of a report on broadcasting coverage (see Bibliography, p. 473) that a fourth television channel in Wales should be allotted to a separate service in which Welsh-language programmes would be given priority.

Radio attracts its largest audiences during the mornings. In the first three months of 1976 radio listening averaged almost 8.5 hours a week per head of population.

BBC Television

Apart from a break during the war years the BBC has been providing regular television broadcasts since 1936. Since 1964 it has operated two services—BBC-1 and BBC-2. All BBC-2 programmes and the majority of those on BBC-1 are broadcast on the national network. Although many nationally networked programmes are produced in London, some originate from regional studios in Scotland, Wales, Northern Ireland and eight regional centres in England. In 1974-75 some 4,997 hours were broadcast on the BBC-1 national network including 786 hours of programmes produced by regional organisations for network transmission; similar figures for BBC-2 were 3,494 hours including 381 hours of regional productions. Regional studios also originate programmes of news and local interest intended for regional transmission only; these varied from 684 hours in Wales (of which 350 were in the Welsh language) to an average of over 170 hours in each of the eight English regions.

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, children's programmes and outside broadcasts, while BBC-2 places greater emphasis on minority interests, providing a larger element of news, documentaries, serious drama and music. Programmes successful on BBC-2 are frequently repeated on BBC-1. Both channels provide a wide range of education programmes; in 1974-75 nearly 11 per cent of BBC-1 transmissions were devoted to schools and further education broadcasts and over 23 per cent of BBC-2 transmissions to Open University programmes (see p. 154).

During 1974-75 BBC television programmes won ten international awards. In the financial year 1975-76, some 9,000 hours of programmes were sold to 80 countries, the most popular being *David Copperfield* which was screened in 27 countries.

Independent Television

The first regular independent television broadcasts began in London in 1955. ITV transmissions are provided on a regional basis by 15 programme companies. In 1974-75 over 9,300 hours of different programmes were shown over the independent television network: 7,500 hours were produced in the companies' own studios of which two-thirds were programmes designed for regional audiences (including news and magazine programmes) and the remainder were networked throughout the country.

ITV programmes cover the whole range of television output, and more than one-third of viewing time is devoted to serious programmes such as news and news magazines, current affairs and documentaries, religion and education. The remainder includes a high proportion of drama (often in serial form), light entertainment, music, sport and feature films. There are about three short advertising intervals an hour, during and between programmes.

During 1974-75 programmes produced by independent television companies won 16 international awards. Of the individual companies, ATV Network Ltd., for instance, sold some £12 million worth of programmes overseas, and London Weekend Television Ltd. gained over £750,000 from overseas sales.

BBC Radio

BBC Radio provides listeners with four separate national channels, each of which has a distinct character. Radio 1 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 of the BBC; in addition it presents a wide range of drama, music, talks and entertainment programmes as well as broadcasts to schools.

Local radio was started by the BBC as an experiment in eight towns in 1967 and there are now 20 stations. Broadcasting on vhf and the medium waveband, the stations provide an average of 9 hours of locally produced programmes each day, normally during the early morning, lunch-time and early evening periods. During the rest of the day they transmit programmes from the BBC's national networks. Local broadcasts provide a comprehensive service of local news and information, besides covering local arts and sports activities and offering residents opportunities to air their views on subjects of local interest.

Independent Radio

Much of the output of the independent local radio stations comprises entertainment programmes but they are also expected to provide a national and local news service, information, and programmes on local affairs and community activities. The first two began broadcasting in London in October 1973; Capital Radio provides a general entertainment service while a specialist news and information service is broadcast by the London Broadcasting Company whose associated company, Independent Radio News, supplies national and international news to the other independent stations. Altogether 19 stations were on the air by September 1976.

External Services

The BBC broadcasts to most countries overseas. The main objectives of BBC external broadcasts are to give unbiased news, to reflect British opinion and to project British life and culture. The BBC broadcasts in 39 languages (including English) for a total of some 705 hours a week. News bulletins, current affairs programmes, political commentaries and topical magazine programmes form the main part of the output. A full service of sports commentaries and results, all kinds of music, drama, and a wide range of general entertainment programmes 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 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.

The foreign language services are divided into areas, namely, 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 26 other languages, and recorded lessons are supplied to some 280 stations in 90 countries. English by Television programmes are shown in more than 60 countries.

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 some 110 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 from nearly 700 transmitters, and its external services from some 49 transmitters sited in Britain and 14 overseas. Most of the circuits used to link studios and transmitters are rented from the Post Office. For its domestic radio programmes, the BBC uses 101 studios in London and the regions, and for its external services 52 in London. In addition, there are semi-automatic studios which can be operated by programme officials without engineering staff. Each BBC local radio station 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 from fully equipped regional studio centres at Belfast, Birmingham, Bristol, Cardiff, Glasgow and Manchester. There are also television studios at Aberdeen, Bangor, Edinburgh, Leeds, Newcastle, Norwich, Plymouth and Southampton. Outside broadcasting is covered by a number of mobile units.

The IBA is responsible for a total of more than 300 television and sound radio transmitting stations throughout Britain, programme links being rented from the Post Office. Independent television programmes are produced at studio centres in Aberdeen, Belfast, Birmingham, Bristol, Cardiff, Carlisle, Dover, Dundee, Edinburgh, Glasgow, Leeds, London, Manchester, Newcastle, Norwich, Plymouth, St. Helier and Southampton. The establishment of these studios is the direct result of the IBA's policy of encouraging the development of regional television, and the programmes are designed for either local broadcasting or for transmission on the national network. All companies have facilities for colour transmission.

Advertising

The BBC avoids giving 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 nor, without the consent of the Home Secretary, broadcast any matter for payment.

Advertisements are broadcast on independent television and independent local radio subject to the relevant provisions in the Independent Broadcasting Authority Act 1973, in particular that there should be no sponsoring of programmes by advertisers, that all advertisements should be clearly distinguishable as such and recognisably separate from the programme, and that the amount of time given to advertising should 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 that with a political or religious object or on behalf of cigarettes or betting. Advertisements may not be inserted in certain types of programme, for example, in 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. The Government has no general privileged access to radio or television. Short public service television features on safety, health and welfare schemes are also produced for free transmission by the BBC and the independent television companies.

Political Broadcasting

Broadcasts on political issues include a daily factual and impartial account of proceedings in Parliament, transmitted on BBC's Radio 4 when Parliament is in session, and there is 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 rules agreed between the major political parties, the BBC and the IBA. Both Houses of Parliament decided in 1976 in favour of permanent radio broadcasting of their proceedings.

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-synchs' 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). The first unit was taken into operational service by Independent Television News in 1973, and in 1974 a 'two-way DICE' was developed which allows conversation in both directions.

Both the BBC and IBA have produced systems which allow the broadcasting of written and simple graphical information to ordinary television receivers fitted with special adaptors. In 1974 the Home Secretary approved a two-year experimental period of broadcasting using the systems, known as CEEFAX (BBC) and ORACLE (IBA).

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 union 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 a large

amount of 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 134 television organisations in 94 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 radio and television training for overseas students in Britain and largely finances the British Council (see p. 159), 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.

23 Sport and Recreation

There is widespread interest in sport in Britain; large crowds attend such occasions 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, and millions more watch them on television. It is, however, the enthusiasm for active participation in sport and recreation that has grown considerably in recent decades and there is now a large variety of opportunities and facilities available. Physical recreation (as distinct from such leisure pursuits as reading, theatre-going or watching television) tends to be of an informal and non-competitive nature and may include, for example, climbing, rambling, riding, and boating and other water-based 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 Minister of State in the Department of the Environment has responsibility for the co-ordination 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 countries.

The Government's policy, outlined in the report *Sport and Recreation* (see Bibliography, p. 473), is to stimulate the provision of facilities and encourage their use to the fullest capacity. To this end it provides financial help and other assistance through a number of official bodies. Some of these, such as the Sports Councils (see below) and the Countryside Commission (see p. 170), 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 (see p. 297), the British Waterways Board (see p. 310), the Nature Conservancy Council (see p. 172) and the regional water authorities (see p. 273), 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 1976–77 amounting to some £13.5 million). They award grants and loans for sports development, coaching and administration to the governing bodies of sport and to other national organisations; they pay grants to voluntary organisations to assist in the provision of sports facilities; they assist British representatives at international sports meetings; they encourage links with international and

overseas organisations; and they administer national sports centres. 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 sports councils (to be replaced by regional councils for sport and recreation) in England on which are represented local authorities and sports 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.

The Sports Council for Northern Ireland acts in an advisory capacity and can assist voluntary bodies by financial contributions towards the cost of providing equipment, coaching and instruction and in organising international or other events. It may also provide and run national sports and recreation centres.

A bibliographic service about sport is provided by the National Documentation Centre which has been set up by the Sports Council and is based at the University of Birmingham; the council itself has an information centre providing data on a wide range of sports topics at its headquarters. A similar service is provided by the Sports Council for Wales and the Scottish Sports Council.

Voluntary 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 Trust (see p. 165), provide 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.

Among the national voluntary bodies most closely connected with the general development of sport and recreation are the British Olympic Association, the National Playing Fields Association and the British Sports Association for the Disabled.

The British Olympic Association

The British Olympic Association, founded in 1905, organises the participation of British teams in the Olympic Games. The association's council is composed of the British members of the International Olympic Committee, representatives of the controlling bodies of some 25 sports, representatives of the armed services' sports organisations and of certain other affiliated bodies concerned with sporting activities, and a few co-opted members. 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. A total of 368 British competitors and officials went to the 1976 Montreal Olympics.

The National Playing Fields Association

The National Playing Fields Association (NPFA) aims to stimulate the provision of playing fields, playgrounds and local recreation centres by publicity and technical and financial assistance. Since its inception in 1925 it has distributed over £2.25 million in the form of grants for such centres, and over £1 million in the form of loans. It assists more than 400 schemes a year. The NPFA gives advice on the provision and layout of sports facilities, including local recreation centres, on matters relating to the recreational needs of children,

on the play and recreational needs of the handicapped, and on the establishment of playgrounds and play leadership schemes. It is a national charity established by royal charter and derives its funds mainly from voluntary contributions (although it also receives a small Sports Council grant towards administrative costs). It has branches in Scotland and Northern Ireland and in nearly every English and Welsh county.

The British Sports Association for the Disabled

The British Sports Association for the Disabled, founded in 1961, encourages sporting activities 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 and regional games throughout the country. At Stoke Mandeville Hospital the first sports stadium in the world designed for disabled people was opened in 1969, and annual games are arranged there by the British Paraplegic Sports Society.

Private Sponsorship

Increasing numbers of sporting activities receive financial sponsorship from commercial concerns. 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 been set up with responsibility for raising and distributing funds from industry, commerce and private sponsors in order to assist the training of individual sportsmen and sportswomen. The foundation makes grants on the recommendation of the governing bodies of sport. Among the first to benefit from the scheme were members of Britain's team for the 1976 Olympic Games.

PROVISION OF FACILITIES

Local authorities are the main providers of land and large-scale facilities for community recreation and their total capital expenditure on sport and outdoor recreation in England and Wales amounted to some £56 million in 1972-73, the last year for which full information is available. (Expenditure during 1973-74 is estimated to have been about £60 million.) In Scotland and Northern Ireland, total capital investment in sports and recreation facilities by local authorities in 1973-74 was about £11.5 million and £1.5 million respectively. The facilities provided include parks, playing fields, gymnasia, tennis courts, golf courses, boating lakes, swimming baths and multiple-use sports centres catering for a wide range of indoor and outdoor activities. The sports councils in Great Britain have powers to support local authority projects and in 1974-75 they made grants towards capital expenditure totalling nearly £2.1 million.

All publicly maintained schools in Britain 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 an increasing number of 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 a government working party is examining the possibility of developing 'centres of sporting excellence' at universities and other colleges which would enable

selected young athletes to develop their talents and also provide for their educational needs.

Opportunities for outdoor recreation in national parks, nature reserves and on waterways are provided by public bodies (see p. 171). The British Waterways Board, the water authorities, and some new town development corporations are all, for example, concerned with different aspects of water recreation on canals, rivers, lakes and reservoirs. Research into the extent of provision for water-based recreation is being conducted by the Water Space Amenity Commission (see p. 273) which estimates that such activities are catered for in about 40 of the 111 country parks set up in England and Wales by local authorities with the approval of the Countryside Commission.

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, 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, have become more numerous in recent years: there are, for instance, tenpin bowling centres, ice and roller skating rinks, squash courts, golf driving ranges and riding stables.

Sports Centres

The policy of establishing sports centres, bringing together people of all ages and different recreational interests, is an important part of the provision for physical recreation.

National 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 national sports centres are used extensively by local clubs and the community generally.

There are seven national centres in England and Wales. Combined facilities for ranges 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, a teaching pool and a gallery for 2,000 spectators, an indoor cricket school, practice rooms for all indoor activities, a hostel for 140 residents and staff housing. 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 Mountaineering Centre in north Wales, the 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. In addition there is a National Sports Centre for Wales in Cardiff which is supported by local authorities, as well as by grants from the Welsh Sports Council.

The Scottish Sports Council operates three national sports training centres: Glenmore Lodge near Aviemore for outdoor activities, Inverclyde at Largs for general sports activities, and a national water sports centre in Great Cumbrae Isle on the Firth of Clyde.

As well as the national sports centres, other centres (such as the Meadow-

bank Sports Centre administered by Edinburgh Council) cater for a wide range of recreational activities and often attract more than purely local interest. Some 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, which was the first sports centre of its kind in the world.

In Northern Ireland there are five indoor sports centres provided by district councils and a Mountain Centre at Tollymore, County Down, provided by the Sports Council for Northern Ireland.

POPULAR SPORTS Some of the major sports in Britain are described below. Sportsmen may be professionals (paid players) or amateurs. Some sports, for example 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

Perhaps 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 360 clubs are registered with the English Football Association (FA) and some 37,000 clubs are affiliated to regional or district associations.

The principal games are controlled in England and Wales by the Football League which comprises 92 professional clubs, and in Scotland by 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 30 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 each other annually and take part in European competitions, the World Cup competition and other international matches.

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 (BAAB) 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 BAAB 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 the 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 was 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 Test Matches played between England and a touring team from Australia, New Zealand, India, Pakistan or the West Indies. The matches last five days and crowds of up to 25,000 watch them in addition to the millions who follow the progress of the games on television and radio. A team representing England tours one or more of these countries in December–March. In addition to the Test Matches there is a 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.

Field Sports

The British Field Sports Society looks after the interests of the most popular field sports (hunting, game shooting and fishing) which have a long history and play a considerable part in the life of the countryside.

Fox hunting on horseback with a pack of hounds is the most important British hunting sport but there is also stag hunting (in Devon and Somerset), hunting the hare, and otter hunting along river banks. The fox hunting season lasts from early November to April and is preceded by the hunting of young foxes when young hounds are trained. There are about 200 packs of hounds in Britain and hunts are financed mainly by subscriptions of their members and by steeplechase point-to-points which take place at the end of the season and which attract large crowds.

Game shooting as an organised country sport probably originated in the early part of the nineteenth century. Game consists of grouse, partridge, pheasant, snipe and woodcock, and these species are protected by law during a close season when they are allowed to breed in security on numerous estates supervised by privately employed game-keepers. It is necessary to have a licence to kill game, and a certificate must be obtained from the local police by anyone who possesses, purchases 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 wild-fowling which takes place on marshes and fenlands, and deer stalking.

The most popular country sport is fishing, there being about 3 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 (NFA) and many clubs organise angling competitions. A national championship is organised by the NFA which also enters a team in the International Angling Competition. 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 now played throughout Britain and there are golf courses in the vicinity of most towns, some of which are 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; these draw large crowds, the grounds at the All-England Club accommodating over 30,000 spectators. Another important tournament is the British Hard Court Championships. There are also county championships and national competitions

for boys' and girls' schools. International events include the Davis 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 is motor racing; the governing body is the Royal Automobile Club (RAC) and the motor clubs registered with it organise annual sporting events. The RAC issues competition licences covering all events from hill climbs to full international race meetings. In addition the RAC 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 contest of the year is the Isle of Man Tourist Trophy. 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 (for colts and fillies) run at Epsom in early June is the outstanding event in the flat racing calendar. Other classic races are: the Two Thousand Guineas (for colts and fillies) and the One Thousand Guineas (for fillies only), both run at Newmarket; the Oaks (for fillies) run at Epsom; and the St. Leger (for colts and fillies) run at Doncaster. The most important steeplechase and hurdle race meeting is the National Hunt Festival Meeting at Cheltenham in March. The Grand National, run at Aintree near Liverpool, is the best known single steeplechase.

The Jockey Club controls all horse racing in Britain and its rules are the basis of universal turf procedure; it also licenses 62 racecourses in Great Britain. Over 900 days' racing are held each year and 11,000 horses are in training in Great Britain.

The racing of greyhounds after a mechanical hare takes place at about 110 tracks licensed by local authorities; meetings are usually held two or three times a week at each track. Rules for the sport are drawn up by the National Greyhound Racing Club which also licenses track officials and trainers and promotes veterinary research. Racing can only be conducted at a licensed track and for 130 racing days in a licensing year (1st July–30th June). Some 10,000 registered greyhounds are in training under the National Greyhound Racing Club Rules.

Riding

The authority responsible for equestrian activities (other than racing) in Great Britain is the British Equestrian Federation which co-ordinates the work of the British Horse Society and the British Show Jumping Association, and runs the National Equestrian Centre at Stoneleigh, Warwickshire.

The British Horse Society promotes the interests of horse and pony breeding and furthers the art of riding. It provides tests, lectures, publications, a film library, courses and examinations and, together with riding schools approved by it, helps to promote horsemastership. With over 22,000 members, the society is also the parent body of the Pony Club and the Riding Club movement. Pony Clubs and Riding Clubs hold their own rallies, meetings and competitions, culminating in annual national championships at the National Equestrian Centre.

Horse trials are held during the spring and summer under the auspices of the society. The three-day events held each year—in April at Badminton,

Avon, in May at Tidworth, Hampshire, and in September at Burghley House, Lincolnshire—include dressage, cross-country riding and show jumping.

Show jumping is promoted by the British Show Jumping Association which draws up rules for judging competitions and prescribes the general standards and height of obstacles for show jumping. The association keeps a register of horses and ponies taking part in affiliated shows and seeks to improve the standard of jumping and to provide for the representation of Great Britain in international competitions. It has over 14,000 members and 900 shows are affiliated to it. The two major show jumping events each year are the Royal International Horse Show and the Horse of the Year Show.

Rugby Football

Rugby football is played according to two different sets of rules: Rugby Union football, in which there are 15 players in a team, is played by amateurs while Rugby League football (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 Rugby League Challenge Cup Final is the major match of the season and 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 1,500 clubs and about 40,000 members. It manages, with the Sports Council, the National Sailing Centre at Cowes in the Isle of Wight where instructors are coached and tested; and selects the British Olympic team. 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 in many places by qualified teachers who hold certificates awarded by the Amateur Swimming Association (ASA), to which over 1,600 clubs are affiliated. The ASA also draws up and enforces regulations for amateur swimming, diving and water polo championships and competitions in England.

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 25,000 active members and more than 800 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. The governing bodies' functions 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
Aerospports:	
Private Flying	Aircraft Owners and Pilots Association
Gliding	British Gliding Association
Hang Gliding	British Hang Gliding Association
Parachuting	British Parachuting Association
Archery	Grand National Archery Society
Badminton	Badminton Association of England
Basket Ball	English Basket Ball Association
Billiards and Snooker	Billiards and Snooker Control Council
Bowls	English Bowling Association
Canoeing	British Canoe Union
Croquet	Croquet Association
Cycling:	
Cycle Racing	British Cycling Federation
Touring	Cyclists' Touring Club
Fencing	Amateur Fencing Association
Gymnastics	British Amateur Gymnastics Association
Hockey	Hockey Association (men)
	All England Women's Hockey Association
Judo	British Judo Association
Karate	British Karate Control Commission
Lacrosse	All England Women's Lacrosse Association
Mountaineering	British Mountaineering Council
Netball	All England Netball Association
Orienteering	British Orienteering Federation
Polo	Hurlingham Polo Association
Rowing	Amateur Rowing Association
Shooting (Target)	National Rifle Association
	National Small-Bore Rifle Association
	Clay Pigeon Shooting 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

BETTING AND GAMBLING

Various forms of betting and commercial gambling are permitted under strict regulations, and estimated total turnover in Great Britain in 1975 was about £3,000 million (although consumer expenditure represented only a small proportion of this figure).

The gambling turnover included that at casinos, on gaming machines and on licensed bingo which is thought to be played by about 6 million people on a fairly regular basis. Betting takes place mainly on horse and greyhound racing, and on football matches (especially through football pools). The turnover on such betting in 1975 was about £2,200 million. Racing bets may

be made at racecourses and greyhound tracks, or through some 14,000 licensed off-course betting offices (which take about 92 per cent of the turnover). A form of pool betting (totalisator betting) is organised on, and off, course by the Horserace Totalisator Board (HTB). Bookmakers and the HTB have to contribute a 'betting levy' to the Horserace Betting Levy Board which promotes the advancement of veterinary science and the improvement of horseracing and breeds of horses.

There is no national lottery in Britain, although recent legislation permits local authorities to hold lotteries.

A Royal Commission on Gambling is inquiring into the law relating to betting, gaming, lotteries and prize competitions. In particular it is considering the contribution made from the proceeds of gambling towards the support of other activities, including sport.

Kilo-grammes	Av. Pounds					Metric Quintals per Hectare		Hundred-weight per Acre			
		Litres	Pints	Litres	Gallons						
0.454	1	2.205	0.568	1	1.760	4.546	1	0.220	1.255	1	0.797
0.907	2	4.409	1.136	2	3.520	9.092	2	0.440	2.511	2	1.593
1.361	3	6.614	1.705	3	5.279	13.638	3	0.660	3.766	3	2.390
1.814	4	8.818	2.273	4	7.039	18.184	4	0.880	5.021	4	3.186
2.268	5	11.023	2.841	5	8.799	22.730	5	1.100	6.277	5	3.983
2.722	6	13.228	3.409	6	10.559	27.276	6	1.320	7.532	6	4.780
3.175	7	15.432	3.978	7	12.319	31.822	7	1.540	8.787	7	5.576
3.629	8	17.637	4.546	8	14.078	35.368	8	1.760	10.043	8	6.373
4.082	9	19.842	5.114	9	15.838	40.914	9	1.980	11.298	9	7.169
4.536	10	22.046	5.682	10	17.598	45.460	10	2.200	12.553	10	7.966

Thermometrical Table

0° Centigrade = 32° Fahrenheit.

100° Centigrade = 212° Fahrenheit.

To convert °Fahrenheit into °Centigrade: subtract 32, then multiply by $\frac{5}{9}$; °Centigrade into °Fahrenheit: multiply by $\frac{9}{5}$, then add 32.

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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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Teeling-Smith, George. You and the National Health Service <i>Arrow Books</i>	0 09 910410 5	1975	0.60
Topliss, Eda. Provision for the Disabled <i>Basil Blackwell and Martin Robertson</i>	0 631 16510 X	1975	2.25
Zander, Michael. Social Workers, their Clients and the Law <i>Sweet and Maxwell</i>	0 421 19060 4	1974	1.40
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Hiro, Dilip. Black British, White British. Rev. edn. <i>Penguin</i>	0 14 021639 1	1973	0-60
Smith, David J. The Facts of Racial Disadvantage: a National Survey <i>Political and Economic Planning</i>		1976	5-80
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Immigration into Britain. (Reference Paper R.5976/74) COI		1974	*
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—For the Committee of Vice-Chancellors and Principals of the Universities of the United Kingdom. The Compendium of Entrance Requirements for First Degree Courses in the United Kingdom <i>The Association</i>			Annual
—Scholarships Guide for Commonwealth Postgraduate Students <i>The Association</i>			Biennial
Association of Teachers in Colleges and Departments of Education. Handbook for Colleges and Departments of Education <i>Lund Humphries</i>			Annual
Boyle, Edward and Crosland, Anthony. The Politics of Education <i>Penguin</i>	0 14 080607 5	1971	0-35
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Burgess, Tyrell. A Guide to English Schools <i>Penguin</i>	0 14 020690 6	1972	0-35
Cantor, Leonard M. and Roberts, I. F. Further Education in England and Wales. 2nd edn. <i>Routledge & Kegan Paul</i>	0 7100 7359 3	1972	2-50
Council for National Academic Awards. Compendium of Degree Courses <i>CNAA</i>			free
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Dempster, J. J. B. What's Happening in Primary Schools? <i>David and Charles</i>	0 7153 6347 6	1974	2-75
Dent, H. C. The Educational System of England and Wales <i>University of London Press</i>	0 340 15465 9	1975	1-75
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Findlay, Ian R. Education in Scotland <i>David & Charles</i>	0 7153 5744 1	1973	3-50
Furneaux, Barbara. The Special Child: The Education of Mentally Handicapped Children <i>Penguin</i>	0 14 080092 1	1973	0-55

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Peers, R. <i>Adult Education. A Comparative Study</i> <i>Routledge and Kegan Paul</i>	0 7100 3372 9	1973	7.50
Robinson, Eric E. <i>The New Polytechnics</i> <i>Penguin</i>	0 14 080041 7	1968	0.30
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Van der Eyken, William, Editor. <i>Education, the</i> <i>Child and Society: A Documentary History 1900-1973</i> <i>Penguin</i>	0 14 080341 6	1973	1.20
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Blackie, John. <i>Inside the Primary School.</i> <i>HMSO</i>	0 11 270048 9	1969	0.28
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<i>Adult Education: A Plan for Development [Russell Report].</i> <i>HMSO</i>	0 11 270336 4	1973	1.90
<i>Children and their Primary Schools. Report of the Central</i> <i>Advisory Council for Education (England) [Plowden Report].</i>		1967	1.25
<i>Vol. I. Report.</i> <i>HMSO</i>		1967	1.62½
<i>Vol. II. Research and Surveys.</i> <i>HMSO</i>			
<i>Education in Britain. (COI Reference Pamphlet R.4751/74)</i> <i>No. 7.</i> <i>HMSO</i>	0 11 700673 4	1974	1.10
<i>Education: Report of the Select Committee on Race</i> <i>Relations and Immigration. Session 1972-73</i>			
<i>Vol. 1. Report.</i> <i>HMSO</i>	0 10 289873 1	1973	0.68
<i>Educational Television and Radio in Britain. (Reference Paper</i> <i>R.5781/74)</i> <i>COI</i>		1974	*
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<i>Public Education in Scotland.</i> <i>HMSO</i>	0 11 490787 0	1972	0.47
<i>The School Health Service 1908-1974. Report of the</i> <i>Chief Medical Officer of the Department of</i> <i>Education and Science.</i> <i>HMSO</i>	0 11 270409 3	1976	1.00
<i>Teacher Education and Training [James Report].</i> <i>HMSO</i>	0 11 270236 8	1972	0.85
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<i>Education in Northern Ireland.</i> <i>Belfast, HMSO</i>			
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Thomas, Michael and Perry, Jane. National Voluntary Youth Organisations. PEP Broadsheet No. 550 <i>Political and Economic Planning</i>	0 85374 132 8	1975	2.20
The Youth Service and Similar Provision for Young People. <i>HMSO</i>	0 11 700128 7	1972	3.00

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Cullingworth, J. B. Town and Country Planning in Britain. 5th edn. <i>Allen & Unwin</i>	0 04 352054 5	1974	2.95
Hall, Peter. Urban and Regional Planning <i>Penguin</i>	0 14 021725 8	1975	1.25
Holliday, John, Editor. City Centre Redevelopment <i>Charles Knight</i>	0 85314 140 1	1974	7.50
Ryan, Peter, Editor. The National Trust and the National Trust for Scotland <i>Dent</i>	0 460 04223 3	1974	6.50
Schaffer, Frank. The New Town Story <i>Paladin</i>	0 586 08067 8	1972	0.75
Taylor, Ray, Cox, Margaret and Dickens, Ian, <i>Editors.</i> Britain's Planning Heritage <i>Croom Helm</i>	0 85664 192 8	1975	5.75
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An Outline of Planning in the United Kingdom. <i>HMSO</i>	0 11 750902 7	1976	2.00
Development Control Policy Notes (England and Wales) <i>HMSO</i>			various
The New Towns of Britain. (COI Reference Pamphlet R.4506/74) No. 44. <i>HMSO</i>	0 11 700675 0	1974	0.65
Planning in the United Kingdom <i>Department of the Environment</i>		1976	10.00
Report of the National Park Policies Review Committee <i>HMSO</i>	0 11 750993 0	1976	0.28
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Royal Commission on Environmental Pollution First Report. Cmnd 4585 <i>HMSO</i>	0 10 145840 9	1971	0.45
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Third Report: Pollution in some British Estuaries and Coastal Waters. Cmnd 5054 <i>HMSO</i>	0 10 150540 X	1972	0.85
Fourth Report: Pollution Control: Progress and Problems. Cmnd 5780 <i>HMSO</i>	0 10 157800 8	1974	1.10
Fifth Report: Air Pollution Control: An Integrated Approach. Cmnd. 6371 <i>HMSO</i>	0 10 163710 1	1976	1.75
Town and Country Planning in Britain. (COI Reference Pamphlet R.5355/75) No. 9. <i>HMSO</i> .	0 11 700762 5	1975	0.86
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Tiplady, David. Housing Welfare Law <i>Oyez</i>	0 85120 262 4	1975	3-25
Digest of Housing Statistics for Northern Ireland <i>Belfast, HMSO</i>		Quarterly	
Housing Associations. A Working Paper of the Central Housing Advisory Committee. <i>HMSO</i>	0 11 750370 3	1971	0-80
Housing Corporation Report. <i>HMSO</i>		Annual	
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Housing in Britain. (COI Reference Pamphlet R.5875/75) No. 41. <i>HMSO</i>	0 11 700659 9	1975	0-90
Housing Return for Scotland <i>Edinburgh, HMSO</i>		Quarterly	
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Baptist Union of Great Britain and Ireland. Handbook <i>Baptist Union</i>		Annual	
Catholic Directory <i>The Universe</i>		Annual	
Church and State <i>Church of England Information Office</i>		1970	0-60
Church of England. Official Yearbook. For the Church Assembly <i>Church of England Information Office</i>		Annual	
Church of Scotland. Year Book <i>Church of Scotland Department of Publications</i>			
Episcopal Church in Scotland. Year Book and Directory <i>Representative Church Council of the Episcopal Church in Scotland</i>		Annual	
The Jewish Year Book <i>Valentine Mitchell</i>		Annual	
Methodist Church. Minutes of the Annual Conference of the Methodist Church <i>Methodist Publishing House</i>		Annual	
Presbyterian Church of Wales. Year Book <i>Presbyterian Church of Wales</i>		Annual	
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Unitarian and Free Christian Churches. Handbook <i>Unitarian and Free Christian Churches</i>		Annual	
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Aldcroft, D. H. and Fearon, P. Economic Growth in Twentieth-Century Britain <i>Macmillan</i>	0 333 10595 8	1969	1-25
Brittan, S. Steering the Economy—The Role of the Treasury <i>Penguin</i>	0 14 021252 3	1971	0-60
Murphy, Brian. A History of the British Economy 1086-1970 Part I 1086-1740 <i>Longmans</i>	0 582 35033 6	1973	2-00
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The Attack on Inflation. Cmnd. 6151 <i>HMSO</i>	0 10 161510 8	1975	0.25
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—Report No. 2. Income from Companies and its Distribution. Cmnd. 6172 <i>HMSO</i>	0 10 161720 8	1975	2.45
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Statistics:			
Regional Statistics. <i>HMSO</i>			
Annual Abstract of Statistics. <i>HMSO</i>			Annual
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National Income and Expenditure. <i>HMSO</i>			Annual
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Scottish Abstract of Statistics. <i>HMSO</i>			Annual

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Brown, A. J. The Framework of Regional Economics in the United Kingdom <i>Cambridge University Press</i>	0 521 08743 0	1972	4.00
Guenault, P. H. and Jackson, J. M. The Control of Monopoly in the United Kingdom. 2nd edn. <i>Longmans</i>	0 582 44053 X	1974	3.50
Korah, Valentine, Competition Law of Britain and the Common Market <i>Elek</i>	0 236 31031 3	1975	8.00
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Rees, M. The Public Sector of the Mixed Economy <i>Batsford</i>	0 7134 1372 7	1973	1.30
An Approach to Industrial Strategy. Cmnd. 6315 <i>HMSO</i>	0 10 163150 2	1975	0.22
Northern Ireland Development Programme 1970-75. <i>Belfast. HMSO</i>	0 337 02136 8	1970	1.00
Regional Economic Planning Councils: Reports on individual regions. <i>HMSO</i>		1966 to 1976	various
Report of the Committee of Inquiry on Small Firms [Bolton Report]. Cmnd 4811 <i>HMSO</i>	0 10 148110 1	1971	2.55
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Hardie, D. W. F. and Pratt, J. D. History of the Modern British Chemical Industry <i>Pergamon</i>	0 08 011686 8	1966	2.00
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Vaizey, John. The History of British Steel <i>Weidenfeld & Nicolson</i>	0 297 76704 6	1974	4.25
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Steel. British Steel Corporation: Ten Year Development Strategy. Cmnd 5226 <i>HMSO</i>	0 10 152260 6	1973	0.13

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National Economic Development Office. Before you build: what a client needs to know about the construction industry <i>HMSO</i>	0 11 700539 8	1974	1.00
Annual Report: Building Research Establishment. <i>HMSO</i>			

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The Future Pattern of Shopping. Distributive Trades EDC <i>HMSO</i>	0 11 700548 7	1971	1.25
The Distributive Trades in the Common Market. National Economic Development Office. <i>HMSO</i>	0 11 700540 1	1973	1.00
Report on the Census of Distribution and other Services 1971 Part 1: Retail Outlets (Establishment Tables) <i>HMSO</i>	0 11 511104 2	1975	1.60
Parts 2-11: Area Tables <i>HMSO</i>		1975	various
Part 12: Area Summary Figures <i>HMSO</i>	0 11 511115 8	1975	2.00

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Energy Conservation. Cmnd 6575. <i>HMSO</i>	0 10 165750 1	1976	0.30
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United Kingdom Offshore Oil and Gas Policy. Cmnd 5696 <i>HMSO</i>	0 10 156960 2	1974	0.14
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 Statistical Review of the World Oil Industry
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Mineral Exploration and Investment Grants Act 1972
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Local Government Reform: The Water Service in Scotland. Report of the Scottish Water Advisory Committee. <i>HMSO</i>	0 11 490773 0	1972	0-31½
Water Resources in England and Wales: Vol. 1. Report. <i>HMSO</i>	0 11 780012 0	1973	3-50
Vol. 2. Appendices. <i>HMSO</i>	0 11 780013 9	1974	4-20
A Measure of Plenty. A General Survey of Water Resources in Scotland. <i>HMSO</i>	0 11 490981 4	1974	3-35

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The Agricultural Research Service <i>Agricultural Research Council</i>		1975	free
Agricultural Statistics, England and Wales. <i>HMSO</i>		Annual	
Agricultural Statistics, Scotland. <i>HMSO</i>		Annual	
Food From Our Own Resources. Cmnd 6020 <i>HMSO</i>	0 10 160200 6	1975	0-22
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The Sports Council			
<i>The Sports Council</i>			

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.

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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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BRITAIN

Legend	Légende	Legende	Verklaring
Motorways with Access Points	Autoutes - Points d'accès	Autobahn mit Einfahrt	Autogegen met toegangspunten
Motorway Service Area	Autobahn - Stations - service	Autobahn Rastplaatsen	Autogegen Service Station
Main Through Routes	Routes directes	Hoofdwegen	Hoofdwegen
Other Important Routes	Routes secondaires	Andere belangrijke routes	Andere belangrijke routes
Roads Under Construction	Routes en construction	Wegen onder constructie	Wegen onder constructie
Road Numbers	Numérotage des Routes	Wegnummers	Wegnummers
Towns with over 500,000 inhabitants	Villes de plus de 500,000 habitants	Steden met meer dan 500,000 inwoners	Steden met meer dan 500,000 inwoners
Country Boundaries	Limites frontalières nationales	Rijsgrenzen	Rijsgrenzen
County Boundaries	Limites des Comtés	Graficafsgrenzen	Graficafsgrenzen
International Boundary between the United Kingdom of Great Britain and Northern Ireland and the Irish Republic	Frontière internationale entre le Royaume-Uni de Grande-Bretagne et d'Irlande du Nord et la République irlandaise	Internationale grens tussen het Verenigd Koninkrijk van Groot-Brittannië en Noord-Ierland en de Ierse Republiek	Internationale grens tussen het Verenigd Koninkrijk van Groot-Brittannië en Noord-Ierland en de Ierse Republiek
Canals	Canaux	Kanal	Kanal
Airports	Aéroports	Luchthaven	Luchthaven
Car Ferries	Ferries Voitures	Autoferries	Autoferries
Passenger Ferries	Ferries Passagers	Passagierferries	Passagierferries
Inland Car Ferries	Bacs Intérieurs	Binnenautoferries	Binnenautoferries
National Parks and designated Areas of Outstanding Natural Beauty	Parcs Nationaux et Réserves et Régions et Sites pittoresques	Natuurschutzgebied en Gebieden van Landschapsschutz	Nationale Parken en erkende Gebieden met bijzonder natuurschoon
0 10 20 30 40 50 60 70 80 Miles	0 10 20 30 40 50 60 70 80 Kilometers	0 10 20 30 40 50 60 70 80 Miles	0 10 20 30 40 50 60 70 80 Kilometers
		Scale	Echelle
		Maafstab	Schaal
		1:1250 000	1:1250 000



