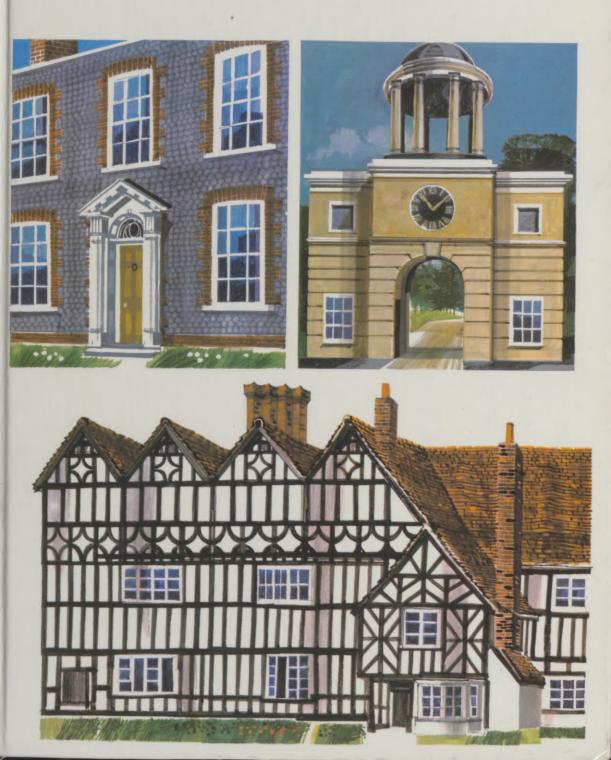
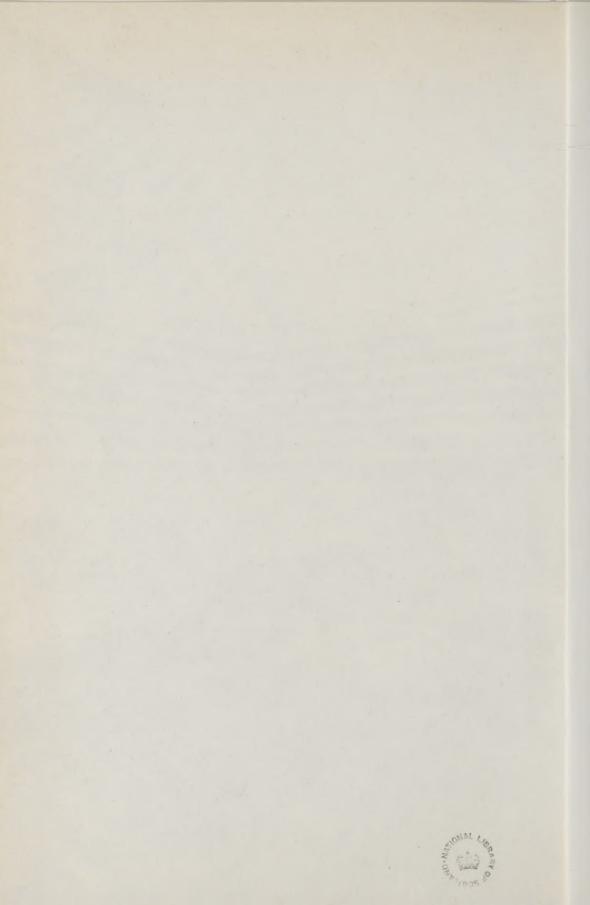
## Britain 1975









Britain 1975 An official handbook





## Britain 1975

An Official Handbook

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### Introduction

Britain 1975 is the twenty-sixth official handbook in the series prepared and revised each year by Reference Division of the Central Office of Information with the co-operation of other government departments and of many national organisations. 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 throughout the world.

This 1975 edition, which covers events up to September 1974, gives a factual account of the administration and the national economy of Britain. It describes the activities of many of the national institutions, both official and unofficial, and shows the part played by the Government in the life of

the community.

The handbook does not claim to be comprehensive, nor does it attempt to cover Britain's participation in Commonwealth or world affairs. The factual and statistical information it contains is compiled from official and other authoritative sources, and, while most sections of the book relate to Britain as a whole, facts and figures for England, Wales, Scotland, and Northern Ireland are also given separately when relevant.

Readers who require more detailed information should consult the *Annual Abstract of Statistics* and the *Monthly Digest of Statistics*, issued by the Central Statistical Office, and also other government publications and standard works of reference, some of which are listed in the biblio-

graphy towards the end of the handbook.

Introduction

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# 1 The Land and the People

#### THE PHYSICAL BACKGROUND

Britain, formally known as the United Kingdom of Great Britain and Northern Ireland, forms 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 important groups of 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.

England has a total area (including inland water) of 50,335 square miles (130,367 sq. km.); Wales has a total area of 8,016 square miles (20,763 sq. km.); Scotland, including its inhabited islands has a total area of 30,414 square miles (78,773 sq. km.); Northern Ireland has a total area of 5,452 square miles (14,120 sq. km.). Together, these countries constitute the United Kingdom of Great Britain and Northern Ireland (or Britain), with a total area of 94,217 square miles (244,021 sq. km.). The total land area of the United Kingdom (excluding inland water) is 93,026 square miles (240,936 sq. km.): England, 50,053 (129,637); Wales 7,968 (20,638); Scotland 29,799 (77,179); and Northern Ireland, 5,206 (13,483).

Care must be taken when studying British statistics to note whether they refer to England as defined above, to England and Wales (considered together for many administrative and other purposes), to Great Britain, which comprises England, Wales and Scotland, or to Britain (the United Kingdom) 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 strictly are not part of the United Kingdom but are

dependencies of the Crown.

The latitude of 50° North cuts across the southernmost part of the British mainland (the Lizard Peninsula) and latitude 60° North passes through the Shetland Islands. The northernmost point of the Scottish mainland, Dunnet Head, near John o' Groats, is in latitude 58° 40′. The prime meridian of o° passes through the old observatory at Greenwich (London), while the easternmost point of England is nearly 1° 45′ East and the westernmost point of Northern Ireland is 8° 10′ West. It is just under 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 point in Britain 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 weather 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 parts 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 (archaean 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 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

<sup>&</sup>lt;sup>1</sup> 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).

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 Cumbria coast; 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 the world-famous white cliffs of Dover or the Needles off the Isle of Wight; while other parts of the south and southeast coastline have beaches of sand or shingle. The eastern coast of England between the Humber and the Thames estuary is for the most part low-lying, and for hundreds of years 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 rivers<sup>2</sup> 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 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 m.p.h. (31 km.p.h.) in January to about 14 m.p.h. (23 km.p.h.) in August, while at Kew Observatory, on the western outskirts of London, the average speed varies from about 10 m.p.h. (16

<sup>&</sup>lt;sup>1</sup> The highest peak in Northern Ireland is Slieve Donard, 2,796 feet (852 metres).

<sup>&</sup>lt;sup>2</sup> The longest rivers in England—the Severn and the Thames—are only about 220 and 210 miles (354 and 338 km.) long respectively.

km.p.h.) in January to about 7 m.p.h. (11 km.p.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. (80°F.) in the south, but temperatures of 32°C. (90°F.) and above are infrequent. 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 lowland 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. In successive years, however, remarkably contrasting weather conditions are sometimes experienced.

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.

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 seminatural vegetation composed of indigenous grasses and flowering plants.

Farming land is divided into fields by hedges, stone walls or wire fences and, especially in the mixed farms which cover most of the country, presents a pattern of contrasting colour. 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 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 gravel pits and sewage farms. The drainage and reclamation of marshlands have diminished the natural habitat of ducks, geese and other aquatic birds, but the survival of such species is largely assured on the nature reserves and bird sanctuaries which have recently been established on an increasing scale. Nearly all British wild birds are protected; the principal exceptions are those considered injurious to agriculture and 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, where 66 species of fish have been found, conditions are now thought to be suitable for salmon to enter the river.

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 insect vectors are not common in Britain but there is some anxiety among naturalists 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 the French 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. It is significant, however, that 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.

Censuses of the people of Great Britain have been taken regularly every ten years since 1801, except that there was no census in 1941 because of the second world war. The latest full census covering Britain as a whole was taken in April 1971 when Britain's population was found to number 55,515,000. Censuses were taken throughout Great Britain (on a sample basis) and Northern Ireland in 1966.

#### Total Population

In mid-1973 the estimated home population of Britain (excluding the populations of the Isle of Man and the Channel Islands) was 55,933,400 compared with 53,553,000 in mid-1963, 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.

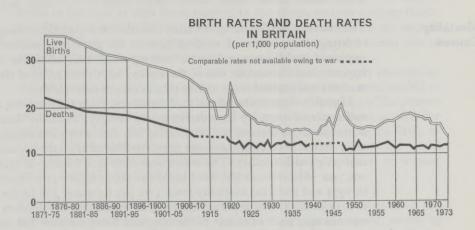
Britain's population density was approximately 594 persons per square mile (229 per sq. km.) in mid-1973, but in England there were approximately 922 persons per square mile (356 per sq. km.), and in Greater London 11,935 persons per square mile (4,608 per sq. km.).

Future Growth

Since 1971 there has been a decline in the rate of population growth. However, on the basis of mid-1973 population estimates and of present trends in birth and death rates and migration, the increase in population is expected to continue, reaching 56.6 million in 1983, 58.3 million in 1993, 59.6 million in 2003, and 61.2 million in 2013. 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 were included in the National Health Service Reorganisation Act 1973 (see p. 137). 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.

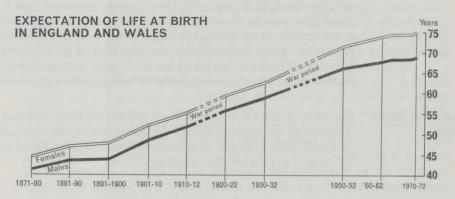
Birth and Death Rates For most of the nineteenth century the annual birth rate was over 30 per thousand of the population, and the annual death rate was just over 20 per thousand. Both birth and death rates fell over the last 20 years of the century, but natural population increase changed little.



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 68.7 years at birth for a boy born in 1970–72 and 75 for a girl.

Since 1933 the steady fall in the number of births has ceased. During the second world war the birth rate began to rise and reached a temporary postwar 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, reaching a peak of 18·8 per thousand in 1964. It has since fallen and was 13·9 per thousand population in 1973. 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 8·3 per cent in 1973.



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 17·2 in 1973 and maternal mortality from 4·71 per thousand live births in 1900–2 to 0·14 in 1973. 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.

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 nearly 106 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 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 now some 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 59 per cent in 1973, while the proportion of single persons in the population aged 15 years or over has fallen from 33·3 per cent to 22·5 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 1973 the percentage was 59·1. Earlier marriage has led to a large increase in the number of children born to women under 30 years of age and in recent years has contributed to a substantial acceleration of the total flow of births into the population.

There were 9 decrees of divorce made absolute in 1972 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 recent years is about 2·3 liveborn children.

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 placing those available for work in suitable employment and by introducing technological improvements and wider training in order to raise productivity. At the time of the 1971 census 92 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 nearly 13 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.

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, after which a small net outflow has been recorded. Scotland and Northern Ireland have throughout continued to have 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 previous legislation, provides a single system of control over Commonwealth citizens and aliens 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 mother or father born in the United Kingdom. [Others (except nationals of the European Community countries) wishing to enter Britain for employment must have work permits.] The dependants of work permit holders and European Community nationals may also be admitted.

The net emigration of United Kingdom citizens to Commonwealth countries in 1973 was 38,700 and to foreign countries 11,400. Some 21,800 work permit holders and 5,600 dependants entered Britain from overseas countries in addition to 55,000 Commonwealth citizens and foreign nationals accepted for settlement. Over the same period residence permits were granted to some 10,400 nationals of European Community countries. (For welfare of immigrants see p. 143.)

**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 or five years' Crown service, good character, a sufficient knowledge of English and the intention to reside in the United Kingdom or a colony or to remain in Crown service. 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 45,000 persons acquired citizenship by naturalisation and registration in 1973.

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 an alien. 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 citatership 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.

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 justice¹ and conduct of government business throughout Wales. In Scotland nearly 81,000 persons in 1961, mainly in Ross and

<sup>&</sup>lt;sup>1</sup> Summary trials in Wales are normally held entirely in Welsh in Welsh-speaking areas and, in the predominantly English-speaking areas, with the ordinary interpretation machinery. In the Crown Courts the provision of facilities for simultaneous translation is being improved.

Cromarty, Inverness, Argyll and Lanark, spoke the Scottish form of Gaelic, while a few families in Northern Ireland spoke the Irish form of Gaelic. The Manx and Cornish varieties of Celtic are no longer effectively living languages, although, 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. French is still the official language of Jersey, used for ceremonial and official procedure; both French and English are used in the courts. In Guernsey, however, English is now used for 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

TABLE 1: Populations 1901-73a

thousands

		1901 census	1931 census	1961 census	1971 census	1973 mid-year estimate
England	Persons	30,509	37,359	43,461	46,018	46,425
	Males	14,714	17,839	21,012	22,355	22,582
	Females	15,795	19,520	22,448	23,663	23,843
Wales	Persons	2,019	2,593	2,644	2,731	2,749
	Males	1,014	1,294	1,292	1,328	1,334
	Females	1,004	1,300	1,352	1,404	1,416
Scotland	Persons	4,472	4,843	5,179	5,229	5,212
	Males	2,174	2,326	2,483	2,515	2,504
	Females	2,298	2,517	2,697	2,714	2,708
Total Great Britain	Persons Males Females	37,000 17,902 19,098	44,795 21,459 23,337	51,284 24,787 26,497	53,979 26,198 27,781	54,386 26,420 27,966
Northern Ireland	Persons Males Females	1,237 590 647	1,243 <sup>b</sup> 601 <sup>b</sup> 642 <sup>b</sup>	1,425 694 731	1,536 755 781	1,547 766 781
Total United Kingdom	Persons Males Females	38,237 18,492 19,745	46,038 22,060 23,979	52,709 25,481 27,228	55,515 26,952 28,562	55,933 27,186 28,748
Isle of Man	Persons	55	49	48	56	56
	Males	25	22	22	26	26
	Females	29	27	26	30	30
Jersey	Persons	53	50	64	73	72
	Males	24	23	31	35	35
	Females	29	27	33	37	37
Guernsey and	Persons Males Females	43	43	47	53	53
Associated		21	21	23	25	25
Islands		22	22	24	27	27

<sup>&</sup>lt;sup>a</sup> Figures may not add up to the totals shown because of rounding.

b Estimates.

<sup>&</sup>lt;sup>1</sup> Most of the islands off the west coast of Scotland where Gaelic is spoken are included in the counties of Ross and Cromarty, Inverness and Argyll.

country, as enumerated by censuses in 1901, 1931, 1961 and 1971 (or nearest possible estimate) and estimated in 1973, is shown in Table 1, which also gives figures for the Isle of Man and the Channel Islands. The populations of England, Wales, Scotland and Northern Ireland were in every case greater in 1961 than in 1931 and in 1931 than in 1901, and they rose again between 1961 and 1973. The high rate of increase in England is partly due to migration from the other three countries.

Geography, history and economic factors have given rise to the differences between the four countries and to an uneven distribution of the population within them. Table 2 shows the areas and populations of the urban and rural areas in England and Wales, Scotland and Northern Ireland, of the eight standard regions of England and of the seven conurbations in Great Britain (areas of urban development where a number of separate towns have merged). Table 3 gives figures of Britain's larger urban populations (over 200,000). 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

TABLE 2: Population Distribution Mid-1973

	Area <sup>a</sup>		D1-4:
	square miles	square km.	Population (estimate)
Urban and Rural Districts England and Wales:	0.400.5		(thousands)
Urban areas Rural districts	8,403·7 49,946·2	21,766 129,360	38,206 10,968
Scotland: Cities and burghs Landward areas	508·1 29,906·1	1,316 77,457	3,663 1,549
Northern Ireland: Urban areas Rural districts	292·7 5,159·5	758 13,363	847 701
English Standard Regions East Anglia East Midlands North North-West South-East South-West West Midlands Yorkshire and Humberside	4,851·2 4,702·2 7,470·8 3,086·0 10,582·2 9,135·2 5,024·4 5,481·3	12,565 12,179 19,349 7,993 27,408 23,660 13,013 14,196	1,739 3,448 3,295 6,755 17,316 3,878 5,163 4,831
Conurbations Central Clydeside Greater London Merseyside South-East Lancashire Tyneside West Midlands West Yorkshire	300·8 609·8 152·2 379·5 90·6 261·8 484·6	779 1,579 394 983 235 678 1,255	1,675 7,281 1,226 2,389 788 2,359 1,736

a Areas relate to boundaries as constituted in April 1971.

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 and south-east England, some south-coast areas and some of the most 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 from the combined effect of natural increase in almost all areas and net migration towards the expanding employment opportunities of the Midlands and south and towards certain retirement areas, mainly on the south coast.

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. Table 2 shows the distribution of the people of Britain between areas classified as urban for administrative purposes and those classified as rural.

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

TABLE 3: Towns and Cities with more than 200,000 Inhabitants Mid-1973

	Area <sup>a</sup>		Population
	square miles	square km.	Mid-1973 (estimate)
Greater London Birmingham Glasgow Liverpool Manchester Sheffield Leeds Edinburgh Bristol Belfast Coventry Nottingham Bradford Leicester Kingston upon Hull Cardiff Wolverhampton Stoke-on-Trent Plymouth Derby Sunderland Newcastle upon Tyne Southampton Portsmouth	609·8 80·6 61·4 43·6 42·5 70·9 63·5 52·5 42·3 25·1 31·4 28·7 39·9 28·2 27·4 30·9 26·6 35·8 30·6 30·1 20·0 17·4 18·9 14·4	1,580 209 159 113 110 184 164 136 110 65 81 74 103 73 71 80 69 93 79 78 52 45 49	(thousands) 7,281 1,004 836 575 531 512 500 449 422 354 334 295 292 287 282 277 270 260 250 218 215 212 212 200

<sup>&</sup>lt;sup>a</sup> Areas relate to boundaries as constituted in 1971 many of which have been adjusted as a result of the reorganisation of local government in England and Wales in April 1974 (see p. 64).

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. Nearly one-third of the population lives in the seven great conurbations whose centres are the cities of London (Greater London), Manchester (South-East Lancashire), Birmingham and Wolverhampton (West Midlands), Glasgow (Central Clydeside), Leeds and Bradford (West Yorkshire), Liverpool (Merseyside) and Newcastle upon Tyne (Tyneside).

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 conurbations 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, 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.

The extent to which people in Britain move about the country for work, housing or study purposes is shown by the finding that 10.7 per cent of residents in Great Britain in 1966 had changed their address in the preceding year and 33 per cent in the previous five years; 4.2 per cent had moved between England and Scotland or Wales, or from one region to another, during 1961–66.

#### SOCIAL LIFE

This section gives some points of general interest about the structure of households and social habits in Britain as a background to the information given in later chapters of the handbook, in particular those on housing, transport and environmental planning. Leisure activities are described in Chapter 23.

Households

There were at the time of the 1971 census some 18.2 million households in Great Britain. The majority of people (some 97 per cent) live in private households (usually in families or on their own). The remainder include such people as residents in hotels, people in hospital, in the armed services and in educational or other institutions. Over the last quarter of a century there has been a marked decrease in the average size of the British household. In 1947 the most common household size was three people but by 1971 the two-person household was more usual. Of 12,000 households analysed in 1971 for the General Household Survey, 17.1 per cent consisted of one person only, 31.3 per cent of two, 19.4 per cent of three, 18 per cent of four and 14.2 per cent of five or more. The increasing number of households and their smaller average size (less than three persons) reflect a number of factors including lower birth rates, the higher proportion of married people in the population, and the increased tendency for young people, married and single, and for independent elderly people to have their own separate homes. Social factors such as the greater general availability of housing, the rehousing of slum dwellers outside city centres, and the greater readiness of people to change their place of work

Mobility

have helped to weaken the family unit and increase the dangers of loneliness, particularly for the elderly. The persisting strength of family ties is, however, reflected in the frequency of home visiting at weekends and holiday times.

**Dwellings** 

In 1972, of 19.6 million dwellings, about one-half were owner-occupied, about one-third rented from public authorities, and one-sixth privately rented. Towards the centre of large towns new housing is often provided in the form of multi-storey blocks of flats, but in the suburbs most people live in streets of semi-detached or detached two-storey houses with gardens. Altogether some 85 per cent of families in Great Britain live in houses, and about 14 per cent in flats. Standards of new housing have improved considerably in recent years and there has been an increase in the number of houses with modern conveniences. The *General Household Survey* showed that over 88 per cent of households had exclusive use of a bath or shower, that 96 per cent had sole use of a lavatory and that 34 per cent of houses were centrally heated. Some 90 per cent of all new dwellings built by local authorities in England and Wales have central heating.

Housework

The rapid increase since the 1950s in the number of women at work (over half of those of working age of whom nearly two-thirds are married) has been accompanied by a reduction in the time spent on housework. This has been made possible through the spread of labour-saving equipment and materials and the greater choice of frozen and other convenience foods requiring little preparation. Nearly nine households in ten have a vacuum cleaner, more than two in three a washing machine, three out of four a refrigerator, nearly all an electric iron and one in three an electric food mixer. An increasing, though still comparatively small, number possess a dish-washing machine. Probably less than five per cent of households employ any regular paid help, and less than half of one per cent in England and Wales 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 a mother is having her baby at home.

People in full-time work benefit, among other things, from launderettes with extended opening hours and from shops, particularly supermarkets, which

stay open late at least one evening a week.

Many households have a pet; besides cats and dogs, budgerigars and tropical fish are popular. In 1971 it was estimated that dogs numbered 5.2 million, cats 3.6 million and budgerigars 3.2 million; expenditure on pet foods is of the order of £150 million a year. Annual registrations of pedigree dogs at the Kennel Club have more than trebled since 1938—reaching a total of 183,784 in 1973; the leading breed in numbers is the Alsatian. There are 3,500 dog shows every year, of which Cruft's is the best known.

Work, Opportunities and Expenditure Most people have considerably more free time, more ways in which to spend it, greater educational opportunities and higher real incomes than had previous generations.

Agreed hours of full-time work are usually from 35 to 40 a week, although men in manual work actually work somewhat longer because of voluntary overtime working, while the hours worked by women and girls average somewhat less. Flexible working hours, which allow employees to adjust their working day provided the full number of hours is worked over a period, are being introduced by some employers. Almost all full-time employees are entitled to a paid holiday each year in addition to public holidays. The proportion receiving a minimum of three weeks has substantially increased and in mid-1973

Pets

over three-quarters of employees were entitled to three weeks or more.

Britain has fewer public holidays than nearly all other European countries. Probably more than half the working population already enjoy a five-day week —most people employed in factories and offices have Saturdays and Sundays free—and a further extension of five-day working in distributive trades offering a six-day week service is in progress.

In the last decade average earnings have risen more than prices. Women's earnings have risen rather less than men's. The principle of equal pay for equal work applies in many occupations and is being extended under legislation to come fully into force in December 1975; the average earnings of women are a little over half the average earnings of men. The real incomes of manual workers, especially unskilled workers and young people under 18 years old, have risen both in absolute terms and in relation to the incomes of non-manual workers. The weakest groups economically are retired people wholly or mainly dependent on pensions, households in which the father is dead or absent, and low wage earners with a number of young children.

A high degree of job satisfaction is recorded in the *General Household Survey*. Over 47 per cent of men and 61 per cent of women are described as 'very satisfied' with their work, while another 40 per cent of men and 31 per cent of women are 'fairly satisfied'. Job satisfaction is highest among those still working at 65 and over, nearly 70 per cent of whom are 'very satisfied'.

Illustrative of the widening opportunities for education and training is the increase in the proportion of young people benefiting from non-compulsory education. In 1971, for instance, over 43 per cent of 16-year-olds were in some form of full-time education, compared with 33 per cent in 1964. The proportion of 18-year-olds continuing full-time education in universities, colleges of education and technical colleges is also steadily increasing. A large number of undergraduates are, moreover, 'first generation' students, neither of whose parents had a university education. Although the children of professional parents are still more likely to go on to higher education than the children of manual workers, a higher proportion of the children of manual workers receive higher education than in most other European countries.

Over the last decade social differences between manual and other workers have become less pronounced. Increased prosperity and modern production and marketing methods have allowed many workers to acquire household goods and personal possessions previously beyond their means. The increased diversity of market products and greater spending power have permitted a much freer expression of individual taste for everyone. Styles in clothes, for example, vary more according to age group than according to income group or occupation.

The general level of nutrition is high. The movement towards a greater use of convenience foods, and imported foods in the 1960s, has been partly offset by a reversion to a slightly less expensive diet. Increases in meat and fish prices have resulted in greater demand for poultry. Cheese and vegetables, other than potatoes, are among the foodstuffs consumed in greater quantities than a decade ago while the consumption of bread and flour has declined. Regional differences in the consumption of certain foods occur, for example, more butter is eaten in Wales than elsewhere and the Scots eat more biscuits and cakes. Tea remains the most popular beverage, but many more people are drinking coffee, including 'instant' coffee, than before. The consumption of considerable quantities of sweets and chocolate (some 8 oz.—226·8 gr.—per person a week) remains a notable feature of British eating habits. Many more people are now interested in 'good food', both traditional English and

exotic dishes. Restaurants providing the national dishes of other countries are to be found throughout Britain; Chinese restaurants predominate but there are also many which specialise in Indian and Italian food. Interest in cooking has also widened and menus have become more imaginative, helped by cookery journalism, including television demonstrations, and a great variety of recipe books. Increased affluence and tastes acquired abroad have likewise increased the demand for wines, spirits and liqueurs—during the 1960s sales of wines nearly doubled and consumption increased by nearly 44 per cent between 1971 and 1973, from 7.8 pints per head to 11.2 pints a year. Beer remains the most popular alcoholic drink in Britain, consumption per head in 1973 being nearly 197 pints.

Expenditure on food now 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, but there have been noticeable developments such as the growing range of leisure clothes, the more adventurous styling in men's wear, and the large turnover in mass-produced fashions for young people, with frequent changes of style. In this branch of fashion, British designers have gained an inter-

national reputation.

Although more cigarettes were smoked in 1973 (some 137,400 million or about 47 a week per head of population) than ten years previously, the increase was due to a trend towards smaller cigarettes and not to an increase in cigarette tobacco consumption which has fallen since 1959. During the same period, while sales of pipe tobacco also declined, sales of cigar tobacco increased nearly threefold. In 1972, 62 per cent of men and 41 per cent of women described themselves as smokers.

The greatly increased diversification and output of consumer products have been accompanied by a growth of activity to protect and help the shopping public. Which?, the magazine of the Consumers' Association, a non-governmental organisation, publishes appraisals of selected consumer goods and has over 665,000 subscribers with an estimated readership of more than three million. Over 13/4 million people a year visit the Design Centre in London where consumer goods which meet its criteria of good design are displayed.

Private Transport

More people in Britain own cars than ever before and the number is still rising. There is an increasing number of 'two-car' families and some families have more. In mid-1973 there were about 13.5 million cars licensed on the roads in Great Britain, compared with 5.5 million in 1960. There is still a large number of motor cycles (including motor scooters)—I million in 1973—but fewer than in 1962, when the licence figure was 1.9 million. Sales of bicycles to the home market reached 712,640 in 1973 which, though lower than in 1959, was higher than in recent years.

Although the number of motor vehicles has continued to increase, the number of total casualties from road accidents has not risen proportionately. In 1973, some 7,400 persons were killed and 89,400 seriously injured, a decrease over the previous year which continued the downward trend in total casualties since 1967. The rate of deaths per 1,000 vehicles licensed has been progressively reduced from 3.2 in 1930 to 0.4 in 1973 partly through advances in medical and surgical techniques as well as in vehicle design, road construction and road safety legislation, for instance the introduction of the 'breathalyser' (a means of administering a breath test to indicate the level of alcohol in the blood).

#### The Changing Face of Britain

Increasing population and social developments are affecting the physical appearance of Britain. The spread of car ownership, which has changed the whole pattern of leisure activities, has also led to a new and more scattered distribution of houses and to different siting for factories, shops and offices. It is also one of the main reasons for the large-scale urban reconstruction and road development programmes which are being carried out. In general, towns and cities are being altered to accommodate more traffic and house more people; experiments are being tried in remodelling town centres with pedestrian precincts; by-passes help to reduce traffic in city centres. In addition to new roads and motorways, more reservoirs are needed to supply the growing demand for water and more lines to carry electric power for the growing volume of appliances.

In modern industrial society in a densely populated country there is much scope for conflict between the need for new 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 caused by the unregulated disposal of industrial and human waste, by exhaust fumes and by the rising volume of noise is reflected in the appointment by the Government of a standing Royal Commission on Environmental Pollution and an Advisory Council on Noise. Voluntary societies include the National Society for Clean Air, the Noise Abatement Society and the Council for Nature.

#### Changes in British Society

In the past 20 years the traditional pattern of life in Britain has undergone considerable change. Not only have distinctions of class and social habits become less rigid, but subjects formerly taboo in public discussion are now openly considered in books, plays and films and in ordinary conversation. A more informed tolerance of behaviour which deviates from the usual pattern is reflected, for instance, in the growing popular sympathy for the difficulties of the unmarried mother. The passing of new laws on such matters as abortion, divorce and homosexuality, although disliked by some people is nevertheless indicative of public unwillingness to penalise individuals with particular personal problems. 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 other children in trouble.

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.

Relationships between the generations are also 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.

## 2 Government

#### GENERAL SURVEY

The United Kingdom is a monarchical State. It is also one of the independent members of the Commonwealth, all of whose members recognise the Queen as head of the Commonwealth. In January 1973 it became a member nation of the European Community which includes all the major powers of Western

Europe and over 80 per cent of its population (see p. 76).

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 under a Saxon king in the ninth century; Wales eventually became part of that kingdom and Ireland was joined with it before the end of the thirteenth century; and the English and Scottish thrones were dynastically united in the person of James I and VI in 1603. In 1707 the Treaty for the Union of England and Scotland provided that the two countries 'should be forever united into one kingdom', and one Parliament (the Parliament of Great Britain) became the supreme authority in both countries.

In 1801 the Act for the Union of Great Britain and Ireland 1800, which joined the Irish Parliament to the Parliament of Great Britain, established the United Kingdom. In 1922 the 26 counties of Southern Ireland (now the Irish Republic) became a self-governing country, outside the United Kingdom. Meanwhile, the Government of Ireland Act 1920 had enacted a constitution for Northern Ireland 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' affairs. 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 and laws made by Order in Council. In 1973 a new type of constitution for Northern Ireland was established by the Northern Ireland Constitution Act which provided, among other things, for the devolution of powers to a legislative Assembly and a power-sharing Executive. These provisions came into force in January 1974, but failed to win sufficient support among all sections of the Northern Ireland community and were brought to an end 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 provides that, in the interim, the Secretary of State for Northern Ireland is to be responsible to the United Kingdom Parliament for the devolved services and that laws for Northern Ireland may be made by Order in Council on matters within the competence of the (prorogued) Assembly for one year, subject to extension or termination by the United Kingdom Parlia-

<sup>&</sup>lt;sup>1</sup> 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 and Grenada. In addition, Nauru is a special member, participating in functional activities but not in meetings of Heads of Government.

ment. Responsibility for the administration of the Northern Ireland departments rests temporarily with ministers in the Northern Ireland Office (see

p. 56).

Although one State, the United Kingdom has adopted flexible methods of government, adapted, to some extent, to the needs of the constituent countries. England and Wales, on the one hand, and Scotland on the other, continue as before the Union to have different systems of law, a different judiciary, different educational systems, different systems of local government, and, for most domestic matters, different government departments. In Scotland these departments have headquarters in Edinburgh and are grouped under the Secretary of State for Scotland, who is a member of the Cabinet.

There is also a considerable measure of devolution in the administration of Welsh affairs to the Welsh Office, under the Secretary of State for Wales who

is also a Cabinet Minister.

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.

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 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 without serious disturbance to existing organs and forms.

The organs of government in the United Kingdom constitution are readily distinguishable although their functions often intermingle and overlap. They are:

1. the legislature, which consists of the Queen in Parliament, and is the

supreme authority in the realm;

- 2. the executive, which consists of: (a) the Cabinet and other ministers of the Crown, who are responsible for initiating and directing national policy; (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; (c) local authorities, which administer and manage many services at the local level; and (d) public corporations which may be responsible for the operation of particular nationalised industries (see p. 193) 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 following pages and chapter 4 describe these three organs of government in some detail in order to show how the constitution of the United Kingdom works.

<sup>&</sup>lt;sup>1</sup> A greater devolution of central government functions to Scotland, Wales and regions of England was recommended in 1973 in reports by a Royal Commission on the Constitution (see Bibliography p. 461). A report containing proposals for Scotland and Wales was published in September 1974.

### THE MONARCHY

The monarchy is the most ancient secular institution in the United Kingdom. Its continuity has been broken only enee 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 lineage can be traced back to Cerdic, King of Wessex in the sixth century, through the Saxon king, Egbert, who united all England in the year 829; and to Alpin, King of Kintyre in the ninth century through Malcolm II, whose reign in Scotland (1005–34) was correspondingly important in that part of the realm.

According to the Royal Titles Act 1953, 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 which owe allegiance to the Crown, 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 which owe allegiance to the Crown the Queen's representative is the Governor-General, who is appointed by the Crown 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 varying executive and legislative powers, and are responsible to the United Kingdom Government for the good government of the countries concerned.

Succession

The title to the Crown derives partly from statute and partly from common law rules of descent. The Act of Settlement 1701 provided that 'the Crown . . . shall remain and continue to the said most excellent Princess Sophia<sup>1</sup> and the heirs of her body being Protestants'. Subsequent Succession to the Crown Acts have confirmed this declaration; and, although succession is not bound to continue in its present line, it cannot now be altered (under a provision of the Statute of Westminster 1931) except by common consent of the member nations of the Commonwealth which owe allegiance to the Crown. 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 may fill an important role in the life of the nation.

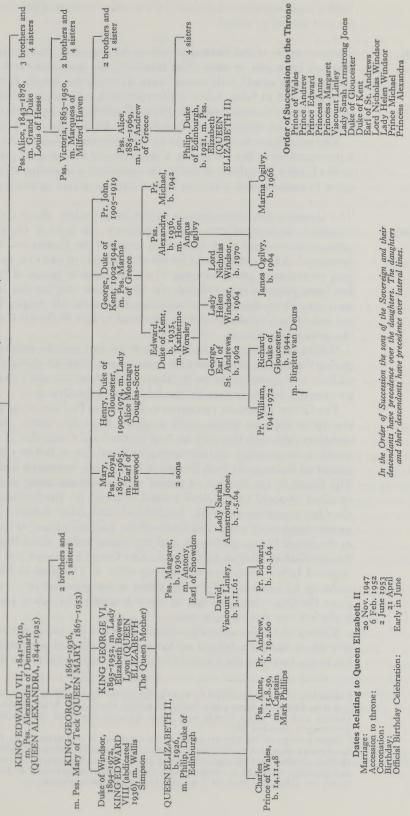
Accession

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

<sup>&</sup>lt;sup>1</sup> The Electress of Hanover, grand-daughter of James I of England.

# THE ROYAL FAMILY

From the reign of Queen Victoria up to September 1974
QUEEN VICTORIA, 1819-1901
m. Prince Albert of Saxe-Coburg and Gotha (Prince Consort)



High Commissioners in London of the member nations of the Commonwealth are also invited to attend.

### Coronation

The coronation of the Sovereign follows the accession after an interval which may last for a year or more. The ceremony has remained much the same in substance for nearly a thousand years although the details have frequently been modified to bring it into conformity with the customs of the time. The service used at the coronation of Queen Elizabeth II in 1953 was derived from that used at the coronation of King Edgar at Bath in the year 973.

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 only 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 the fact that the trend of legislation during the past hundred years has been to assign powers directly to ministers without any necessity for royal intervention, there are still important acts of government which require the participation of the Queen.

The Queen summons, prorogues and dissolves Parliament; as a general rule she opens the new session with a speech from the throne drafted by her ministers (although this may be read by the Lord Chancellor if the Queen is unable to be present); and she must give Royal Assent before a Bill which has passed all its stages in both Houses of Parliament becomes a legal enactment. The Queen is 'the fountain of justice' and as such can remit all or part of the penalties imposed on people convicted of crime. As 'the fountain of honour', the Queen confers peerages, knighthoods and other honours,¹ and makes appointment to all important State offices, including those of judges, officers in the armed forces, governors, and diplomats, and to all leading positions in the established Church of England. The Queen's consent and approval are required before a minister can take up office or a Cabinet be formed. In the realm of international affairs, by virtue of her pre-eminence as head of the State, the Queen has the power to conclude treaties, to cede or accept territory, to declare war and to make peace.

These and similar acts of government involve the use of the royal prerogative which has been defined as 'the residue of discretionary authority legally left in the hands of the Crown'. Ministerial responsibility for the exercise of

<sup>&</sup>lt;sup>1</sup> Most honours are conferred by the Sovereign on the advice of the Prime Minister; a few (the Order of Merit, the Royal Victorian Order, the Most Noble Order of the Garter, and the Most Noble and Most Ancient Order of the Thistle) are in the Sovereign's personal gift.

<sup>&</sup>lt;sup>2</sup> Other powers of the Crown relate to the creation of corporations by Royal Charter; the construction and supervision of harbours; the guardianship of infants; the administration of charities; coinage; the grant of franchises, for example, to markets, ferries and fisheries; the right to treasure trove; and the right to print, or to license others to print, the Bible, the Book of Common Prayer and State papers.

this authority is shown in three constitutional ways in which the royal will can be expressed: by Order in Council made 'by and with the advice of the Privy Council'; by Order, Commission or Warrant signed personally by the Queen and generally bearing the signature of one or more responsible ministers; or by Proclamation, Writs, Letters Patent, or other documents under the Great Seal affixed by the Lord Chancellor in obedience to a Royal Warrant countersigned by a minister.

Ministerial responsibility for the exercise of powers by the Crown does not detract from the importance of the participation of the Sovereign in the smooth working of government; for, although the Queen has no personal authority and must show complete impartiality in every field, she must be informed and consulted on every aspect of the national life. The Queen 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.

Such is the significance attached to these royal functions that provision has been made by Acts of Parliament 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 latest of these Acts—the Regency Act 1953—laid down that the first potential Regent should be the Duke of Edinburgh, 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 (generally the wife or husband of the Sovereign, and the four adult persons next in succession to the Crown¹) to whom the Sovereign may delegate by Letters Patent certain royal functions. Counsellors of State may not, however, dissolve Parliament (except on the express instructions of the Sovereign), nor create peers.

### Ceremonial and Royal Visits

Ceremonial has always been associated with British kings and queens, and, in spite of the changes that have taken place with the altered outlook of both the Sovereign and the people,<sup>2</sup> certain traditional customs and usages remain. Royal marriages, the birth of royal children 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 Sovereign is the leader of society by order of general precedence dating from the fourteenth century and sustained until the present day by royal ordinances, established custom and the public will. 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 ensures nation-wide interest and support. The Sovereign herself pays State visits, often accompanied by other members of the royal family, to foreign governments and undertakes lengthy tours in other countries of the Commonwealth. Other members of the royal family pay official and private visits overseas.

<sup>&</sup>lt;sup>1</sup> The Regency Act 1953 provided that Queen Elizabeth The Queen Mother should be added to the persons to whom royal functions may be delegated as Counsellors of State. <sup>2</sup> The whole protocol that surrounded the monarch in past centuries has been greatly simplified and informality emphasised whenever possible.

### **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 do different 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 legislate without the concurrence of all its parts (except in the case of Bills passed under the Parliament Acts 1911 and 1949).

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.

By the passing of the Parliament Act 1911 the life of a United Kingdom Parliament was fixed at five years (although it may be dissolved and a general election held before the expiry of the legal term). Because it is not subject to the type of legal restraints imposed on the legislatures of countries with formal written constitutions, it is virtually free during this period to legislate as it pleases: 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 firmly established conventions or turn a convention into binding law. If both Houses agreed, it could even prolong its own life beyond the normal period of five years without consulting the electorate. In other words, Parliament is sovereign.

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.

On 1st January 1973, when Britain acceded to the European Community, the provisions of the European Communities Act 1972 (passed by Parliament) applying the Treaty of Rome became operative (see p. 76). These provide for 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. Under the Treaty of Rome the national parliaments delegate a number of their members to sit in the European Parliament (see p. 79).

<sup>&</sup>lt;sup>1</sup> 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 Meeting of Parliament

A Parliament, in the sense of a parliamentary period, begins and ends with a proclamation made by the Sovereign on the advice of the Privy Council. Such a proclamation on the one hand dissolves an existing Parliament and, on the other, orders the issue of writs for election and announces the date on which the new Parliament is to meet. This cannot be less than 20 days after the proclamation, but it may be more.

The life of a Parliament is divided into sessions, each normally, though not necessarily, of a year's duration. Each session is terminated by prorogation—usually effected by a commission under the Great Seal, which appoints the day and place of its meeting in a new session (on rare occasions Parliament has been dissolved without prorogation). The date appointed for the new session may be brought forward or deferred by a subsequent proclamation. The effect of a prorogation is at once to terminate all proceedings pending (with certain minor exceptions). This means that a Bill not completed in one session dies and has to be reintroduced in the next, unless it is to be abandoned.

During a session either House may adjourn itself on its own motion to such date as it pleases. An adjournment does not affect uncompleted business. A reassembly of the House can be accelerated either by proclamation or on the initiative of the Government under powers specially conferred by each House on its Speaker.

The average number of sitting days for the House of Commons is about 160, divided by custom into the following periods: one from November until Christmas lasting about 40 sitting days, one from January to Easter of about 50 sitting days, one from Easter until Whitsun of some 30 sitting days, and one from Whitsun until the end of July lasting about 40–50 sitting days. Nowadays, the session is usually concluded with a short period of up to 10 sitting days in October, after the long summer adjournment. In most sessions, the House of Lords sits on about 125 days.

# The House of Lords

The House of Lords consists of the Lords Temporal and the Lords Spiritual. 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) Lords of Appeal in Ordinary who are appointed under the terms of the Appellate Jurisdiction Act 1876 to assist the House in the performance of its judicial duties and who remain members of the House after their retirement. 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.

Peerages (both hereditary and life) are conferred by the Sovereign on the advice of the Prime Minister. Hereditary peerages carry with them a right to a seat in the House of Lords, 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, either for the duration of a particular Parliament or for a single session.

Peers who frequently attend the House of Lords (the average daily attendance is about 250) 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 Palace of Westminster (provided they attend at least one-third of the number of sittings), and (with the exception of the Lord Chancellor, the Lord Chairman of Committees, the Law Lords and any member in receipt of a salary as the holder of a ministerial office) they may claim payment for expenses incurred for the purpose of attendance at 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 when they have received Royal Assent; 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-

# The House of

Arms.

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).

Elections are of two kinds: general elections held after a Parliament has been dissolved and a new one summoned by the Sovereign; and by-elections, held when a vacancy occurs in the House as a result of the death or resignation of a member, or as a result of his elevation to the House of Lords. Members are paid an annual salary of £4,500 and an allowance of £1,750 a year for secretarial and office expenses. They also have a number of other allowances, including travel allowances and, for provincial members, subsistence allowances.

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 one or 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 charged with such matters as keeping the records, endorsing Bills and signing orders, and the Serjeant-at-Arms, who attends upon the Speaker, executes the orders of the House and is generally responsible for its domestic staff arrangements.

<sup>&</sup>lt;sup>1</sup> 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), but to which, in fact, no remuneration attaches, or for a directorship by government nomination in a commercial company which is an ordinary trading concern.

Parliamentary Electoral System For electoral purposes the United Kingdom is divided into constituencies, each of which returns one member to the House of Commons. Permanent Boundary Commissions for England, Scotland, Wales and Northern Ireland undertake general reviews of constituencies at intervals of not less than ten and not more than 15 years, and report on the changes they recommend. A Commission is also empowered to submit interim reports on particular constituencies if, for instance, it is necessary to bring constituency boundaries into line with altered local government boundaries. The recommendations in the last reports of the Commissions were approved by Parliament in 1970.

The law relating to parliamentary elections is contained principally in the Representation of the People Act 1949 as amended by the Act of 1969. Under the provisions of these Acts, 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 vote1 provided that they are 18 years old or over, and are not subject to any legal incapacity to vote. Those eligible to vote in any constituency are those who are recorded on the register2 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 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 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. The plurality system of voting is used; candidates are elected if they have a majority vote over the next candidate (although not necessarily an absolute majority over all other candidates).

Anyone, male or female, who is a British subject aged 21 or over, and is not otherwise disqualified may stand as a candidate in any constituency at a parliamentary election. Those who are disqualified include members of the House of Lords, clergy of the Church of England, the Church of Scotland, the Church of Ireland and the Roman Catholic Church, undischarged bankrupts, and those expressly disqualified by the House of Commons Disqualification Act 1957—for instance, holders of judicial offices, civil servants, members of the regular armed forces and the police forces, and government-nominated directors of commercial companies which are ordinary trading concerns.

The conduct of elections, including the manner in which candidates can be nominated for election, is likewise governed for the most part by provisions of the 1949 and 1969 Acts. 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.

<sup>&</sup>lt;sup>1</sup> Voting is not compulsory, but normally over 70 per cent of the electorate vote.
<sup>2</sup> A register containing the names of all electors, prepared for each constituency and published yearly by the registration officers, who in England and Wales are the clerks of local councils and in Scotland are the land valuation assessors.

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 distribution of seats in the House of Commons resulting from the general elections of February 1974 and June 1970 is shown in Table 4, and the number and percentage of votes cast for the principal parties in Table 5.

TABLE 4: Members Elected at General Elections in 1974 and 1970

February 1974 <sup>a</sup>		June 1970	
Labour Conservative Liberal United Ulster Unionist Scottish Nationalist Plaid Cymru (Welsh Nationalist) Social Democratic and Labour (Northern Ireland) Democratic Labour Independent Labour The Speaker	301 296 14 11 7 2 1 1 1 1 635	Conservative and Associates Labour Liberal Republican Labour (Northern Ireland) Scottish Nationalist Unity (Northern Ireland) Democratic Unionist (Northern Ireland) Independents The Speaker	330 287 6 1 1 1 1 2 1

<sup>&</sup>lt;sup>a</sup> Alterations in parliamentary constituency boundaries increased the number of constituencies by five in 1974.

TABLE 5: Votes Cast at General Elections in 1974 and 1970

Party	February 1974	% of votes cast	June 1970	% of votes cast
Conservative	11,963,207	38·2	13,145,123	46·4
Labour	11,654,726	37·2	12,179,341	43·0
Liberal	6,063,470	19·3	2,117,035	7·5
Others	1,651,823	5·3	903,299	3·1

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, usually on the advice of senior ministers; 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 leader<sup>1</sup> and its own council of discussion or 'shadow Cabinet'; while the members of any other parties or any independents who have been elected may support the Government or the Opposition according to their party's or their own view of the policy being debated at any given time. On occasions no party succeeds in winning an

<sup>&</sup>lt;sup>1</sup> The Leader of the Opposition in the House of Commons receives an annual salary of £9,500 and a parliamentary allowance of £3,000; in the House of Lords the Leader of the Opposition receives £3,500 a year.

overall majority of seats in the House of Commons; then a minority government might be formed, as after the February 1974 election, or a coalition.

The effectiveness of the party system in Parliament rests to a considerable extent upon the fact that Government and Opposition alike are carried on by agreement: that is to say, the minority agrees that the majority must govern and therefore accepts its decisions; and the majority agrees that the minority should criticise and therefore sets time aside for that criticism to be heard. 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 five 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.

The Functions of Parliament

The main functions of Parliament are (1) to pass laws regulating the life of the community, (2) to take formal action, cast in legislative form, to make available finance for the needs of the community and to appropriate the funds necessary for the services of the State, and (3) to put relevant facts and issues before the electorate. By custom, Parliament is also consulted before the ratification of certain international treaties and agreements (in spite of the fact that the making of treaties is a royal prerogative exercised on the advice of the Government and, in theory, is not subject to parliamentary approval).

Parliamentary Procedure Parliamentary procedure is largely based on custom and precedent, supplemented by standing orders governing details of practice in each House. The system of debate is much the same in the two Houses: for instance, every matter is determined upon questions put from the chair or woolsack and resolved in the affirmative or negative, as the case may be; and members speak from wherever they have been sitting and not from a rostrum. The main difference is that in the House of Lords the office of Speaker carries with it no authority to check or curtail debate, such matters being decided by the general sense of the House, whereas in the Commons the Speaker has full authority to give effect, promptly and decisively, to the rules and orders of the House. He must carefully guard against abuse of procedure or any infringement of minority rights, and it is his duty 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 has power to 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. 83 and 88) the question is put in such a way that, if the votes are equal, there is no interference with the order under appeal.

The House of Commons has agreed in principle to the establishment of a compulsory 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. In any proceedings of the House or in transactions with other members or with ministers or civil servants, members must disclose any relevant pecuniary interest or benefit.

All proceedings of either House are public, except on extremely rare occasions; the minutes (in the House of Commons called Votes and Proceedings and in the House of Lords, Minutes of Proceedings) and the speeches (The Official Report of Parliamentary Debates, *Hansard*) are published daily. Records of both Houses from 1497 are available to the public in the House of Lords Record Office.

Public Bills can be introduced by any member of either House, but no Bill involving taxation or the spending of public money will proceed very far in the Commons unless the Government agrees to introduce a 'money resolution' to cover it. This has the effect of giving the Government control over a wide field of legislation. In the House of Commons certain days are set aside for debating private members' Bills¹; that is, public Bills introduced by members of the House not holding office in the Government, who have been successful in the ballot, held early in each session, of members wishing to introduce Bills. Peers can introduce private members' Bills in the House of Lords at any time during a session without notice. Also, persons and bodies outside Parliament can promote private Bills relating solely to matters of individual, corporate or local interest.

Bills may originate in either House, unless their main purpose is financial, when they must be introduced in the Commons. 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 are frequently introduced and debated in the Lords before being sent to the Commons.

The process of passing a public Bill is basically the same in the House of Lords as in the House of Commons. The Bill receives a formal first reading on introduction; it is then printed; and after a period of time (which varies

Legislation

<sup>&</sup>lt;sup>1</sup> 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', that is, the standing order which allows a brief speech proposing and another opposing the introduction of the Bill before the House decides whether or not to grant leave. If a private member's Bill secures a second reading, the Government will usually introduce any necessary money resolution.

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 merits or principles. In the Commons a non-controversial Bill may be referred to a Second Reading Committee to recommend whether or not it should be taken as read a second time. After a second reading in the Commons a Bill is referred for detailed examination either to a standing committee or, if the House so decides, to the whole House sitting in committee; in the Lords it is referred to a committee of the whole House. The committee stage is followed by the report stage, during which previous amendments may be altered and additional amendments may be suggested and incorporated. The last stage is the third reading which provides an opportunity for a Bill to be reviewed in its final form. In the Commons this stage is taken without debate unless there is a motion on the Order Paper 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 or from the Lords to the Commons (depending on its place of origin), when it enters on the same course again. Any amendments which the second House makes to the Bill must be agreed to by the first House, or a compromise reached, before the Bill can become law.

In practice, the Lords pass without amendment such financial Bills<sup>1</sup> as the Finance Bill, which authorises annual taxation and amends existing taxation, and the Appropriation Bill, which authorises expenditure on the Supply Services from the Consolidated Fund. These Bills are introduced upon resolutions in the House of Commons; they may be initiated only by a Government minister.

When Bills have passed through their various parliamentary stages, they are sent for Royal Assent, which is given by the Sovereign in Letters Patent and is declared to both Houses by their Speakers or, occasionally, by Royal Commission. The Sovereign's power to refuse assent has not been exercised since the early eighteenth century.

The majority of Bills introduced in the House of Lords pass through the Commons without difficulty because of their non-controversial nature; they are then returned to the Lords to be brought forward for Royal Assent. However, should any Lords Bill be unacceptable to the Commons, it would never reach the Statute Book, for no debating time would be allotted to it at any rate until a new government came into power, when it might be reintroduced. The Lords, on the other hand, cannot prevent a Bill insisted upon by the Commons from finally becoming law. In the normal course of events, they either accept a Bill from the Commons and return it unchanged; or they revise and improve it by amendments and return it for the consideration of members of the other House, who frequently agree to the amendments made. They can, however, delay a non-financial Commons Bill for about 12 months. These limitations on the powers of the Lords are based on the belief that the principal function of the modern House (which is a non-elected assembly) in respect of legislation is to act as a chamber of revision: in other words that its object should be to complement the House of Commons and not to rival it.

In substance, a private Bill goes through the same procedure as a public Bill but most of the work is done in committee, where proceedings follow a semi-judicial pattern: the promoters must prove the need for the powers or

<sup>&</sup>lt;sup>1</sup> Under the Parliament Act 1911 a Bill that deals only with taxation or expenditure must receive Royal Assent within one month of being sent to the House of Lords, whether or not the Lords have agreed to it, unless the House of Commons directs to the contrary.

privileges that they seek and objections on the part of opposing interests are heard. Both parties may be represented by counsel.

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.

There are two other main kinds of parliamentary committee, both of which exist to relieve their parent House of some of its more specialised and complex

work. They are:

- 1. Standing Committees, which are appointed by the House of Commons to deal with public Bills at the committee stage and, in certain cases, at the second reading and the report stages. With the exception of the Scottish Grand Committee¹ (which considers Scottish estimates and other matters relating exclusively to Scotland), and the Welsh Grand Committee² (for which parallel arrangements exist), standing committees³ consist of from 16 to 50 members nominated for each Bill by the Committee of Selection (a body normally consisting of 11 members drawn from the main parties in the House in accordance with party strengths at the beginning of each session). The procedure of a standing committee is generally similar to that of a Committee of the Whole House.
- 2. Select Committees, which are appointed to enquire into and report to the House on special matters. Select Committees are appointed by either House when the occasion for such an appointment occurs, or at the beginning of a session (some of them by standing order) to consider all aspects of a particular subject that may arise during the session. The latter type of committee is known as a 'sessional' committee and includes in the House of Commons the Committee of Public Accounts, the Expenditure Committee, the Committee of Privileges and the Committees on Public Petitions, House of Commons (Services), European Community Secondary Legislation and Nationalised Industries. In the House of Lords there are committees on the European Community, special orders, personal Bills, procedure, offices, privileges, leave of absence and the Appeal and Appellate Committees. The House of Commons also has a few specialist select committees such as those on race relations and immigration and on Scottish affairs. Other committees include the Standing Orders Committee which has duties relating to private Bills; and joint select committees of both Houses of Parliament which may be appointed at the instance of either House.

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, which consists of the back-bench membership of the party; and the Parliamentary Labour Party, which is a corporate body comprising all members of the party in both Houses.

<sup>2</sup> The Welsh Grand Committee consists of 36 members for constituencies in Wales, with up to five other nominated members.

<sup>&</sup>lt;sup>1</sup> The Scottish Grand Committee comprises all the members for the Scottish constituencies and not less than ten nor more than 15 others.

<sup>&</sup>lt;sup>3</sup> Not more than two Scottish standing committees may be appointed and each must be so constituted as to include not less than 16 members representing Scottish constituencies.

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 Ministers of the Crown, to 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 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 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 backbenchers are provided in parliamentary procedure. In the House of Commons such opportunities 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. So much parliamentary time is devoted to scheduled public business that questions are regarded as one of the best means of eliciting hitherto unpublished information about the Government's intentions, as well as an effective way of airing, and possibly securing some redress of, grievances brought to the notice of members by their constituents. (Another means available to members is by way of the Parliamentary Commissioner for Administration—see p. 38.)

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, Whitsun and the summer) there is a whole day spent discussing matters for which the Government is responsible 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

<sup>&</sup>lt;sup>1</sup> Statutory instruments ('SI') are made in accordance with the provisions of the Statutory Instruments Act 1946.

(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 practice whereby the consideration of the Estimates has ceased to be a consideration of the financial requirements of the Government and has become an occasion for the examination, initiated by the Opposition, of some aspect of the Government's administrative policy.

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 second reading debates.

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 both Houses of 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. These include the provision of Community documents and explanatory memoranda, oral ministerial statements and reports, special allocation of parliamentary time for debates and questions, and the establishment of select committees (one in each House, see p. 36) to identify important Community proposals.

Parliamentary Commissioner for Administration The Parliamentary Commissioner 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). Certain administrative actions are also outside his jurisdiction; these 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 has been appointed to consider his reports.

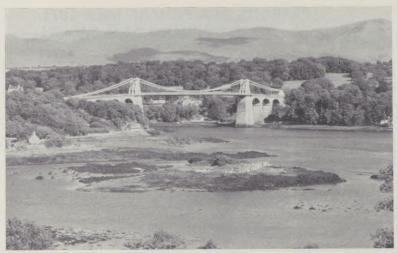
Parliamentary Privilege Each House of Parliament enjoys certain rights and immunities designed to protect the House from unnecessary obstruction in carrying out its duties. These rights apply collectively to each House and individually to each member.

In the House of Commons, the Speaker formally claims from the Crown for the Commons '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 without grant.

### PERSONS PER SQUARE MILE 1971 BY WARD AND PARISH





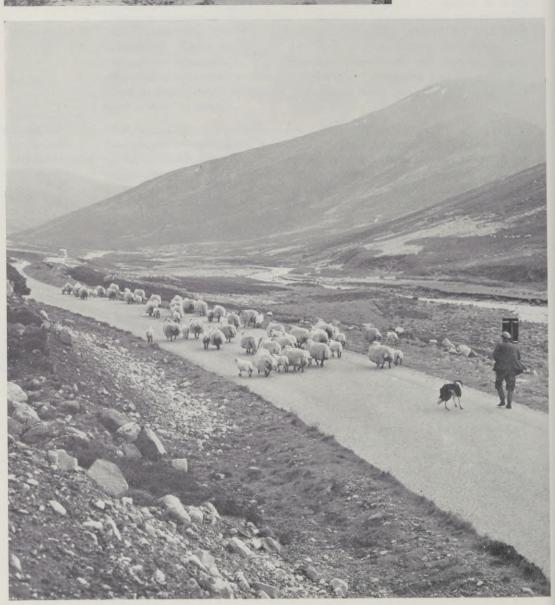
### Topography

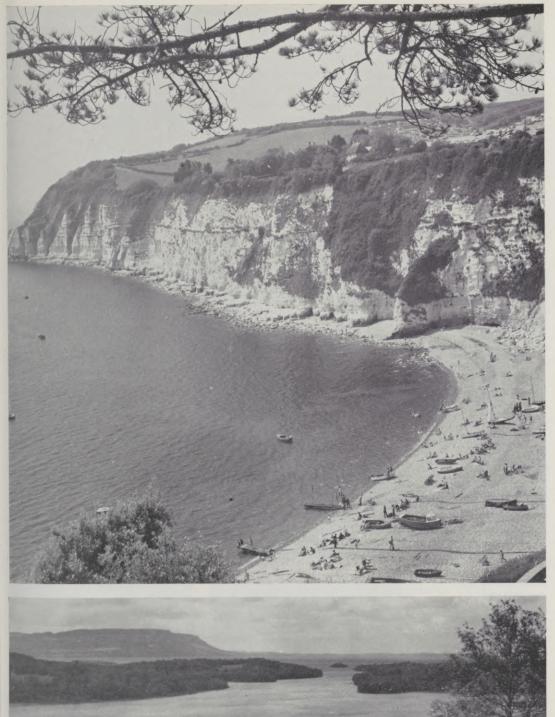
Left: Gwynedd in north Wales.

Below: Braemar area in the highlands of Scotland.

Right: The Devon coast in south-west England.

Below right: Lakeland country in Fermanagh, Northern Ireland.









# Anti-pollution measures

In a number of rivers, measures to control pollution have resulted in fish becoming more numerous.

Above: Some 66 species of fish have been found in the Thames in London.

Right: Schoolboys measuring the level of pollution in the Thames as part of specialised studies.

Far right: A student examining a pike taken from the Thames.





### THE PRIVY COUNCIL

Until the eighteenth century, the Sovereign in Council, or Privy Council, was the chief source of executive power in the State. As the system of Cabinet government developed, however, the Privy Council became less prominent. Many of its powers were transferred to the Cabinet as an inner Committee of the Privy Council, and much of its work was handed over to newly created government departments, some of which were originally committees of the Privy Council.

Nowadays the Privy Council is responsible for advising the 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 330 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 committees, which have advisory functions, may be prerogative committees, such as those which deal with legislative matters submitted by the legislatures of the Channel Islands and the Isle of Man and with applications for the grant of 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 administrative work of the Privy Council committees is carried out in the Privy Council Office under the Lord President of the Council.

The Judicial Committee of the Privy Council derives its appellate jurisdiction from the right of subjects of the Crown to appeal for redress to the Sovereign in Council if they believe that the courts of law have failed to do them justice. It is now the final court of appeal from the courts of the United Kingdom dependencies, from the courts of those independent members of the Commonwealth (including certain countries of which Her Majesty is no longer Queen) which have not elected to discontinue the appeal, from prize courts<sup>1</sup> in the

Fudicial.

Committee

<sup>&</sup>lt;sup>1</sup> Prize courts deal with matters concerning property captured in time of war which, by grace of the Crown, falls to the forces which assist in the capture.

United Kingdom and dependencies, from the courts of the Channel Islands and the Isle of Man, and from certain professional disciplinary committees. It also has jurisdiction in a limited class of English ecclesiastical appeals.

Appeals are heard by a board of the committee, whose members are usually selected from the Lord Chancellor, ex-Lord Chancellors and Lords of Appeal in Ordinary, although other members of the Privy Council who have held high judicial office (including chief justices and certain other judges from Commonwealth countries overseas) are asked to sit from time to time. In theory the Judicial Committee does not deliver judgment. It advises the Sovereign who acts on its report and approves an Order in Council to give effect thereto. Its decisions, though not binding on the English courts, are treated with great respect by them.

### HER MAJESTY'S GOVERNMENT

Her Majesty's Government is the body of ministers charged for the time being with 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 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. Functionally ministers may be classified under the following heads:

### Prime Minister

The Prime Minister, who is also First Lord of the Treasury and Minister for the Civil Service.

### Departmental Ministers

Departmental Ministers, who are in charge of government departments. The holders of these offices (most of whom are 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). There are also some ministers with the status of a minister in charge of a department not represented in the Cabinet, who are responsible, under a Secretary of State, for a particular part of the activities of the department concerned.

### Non-Departmental Ministers

Non-Departmental Ministers, who include the holders of various traditional offices—the Lord President of the Council, the Chancellor of the Duchy of Lancaster, the Lord Privy Seal, the Paymaster General—and Ministers 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.

<sup>&</sup>lt;sup>1</sup> 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.

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 who are appointed to government departments in which the work is particularly heavy and complex or where it involves frequent travelling abroad.

Junior Ministers

Junior Ministers, who 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.

Ministerial Salaries Ministerial salaries range from £20,000 a year for the Prime Minister and £13,000 for Cabinet ministers to £5,500 for junior ministers. Senior ministers not in the Cabinet and Ministers of State receive between £9,500 and £7,500. The Prime Minister and ministers in the House of Commons also have a parliamentary allowance of £3,000 and other allowances paid to all members of the House. The Lord Chancellor receives £20,000 a year, £2,000 of which is attributable to his speakership of the House of Lords.

The Prime Minister

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 Sovereign and to obtain their resignation or dismissal individually. Nowadays, 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 House of Commons on the most important topics and answers questions on its general administration in that house.

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 of counties<sup>1</sup> 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

<sup>&</sup>lt;sup>1</sup> The office of Lord Lieutenant of the county was first created in the sixteenth century. Its holder was chief among the county justices and commander of the county militia.

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, and selects the trustees of certain national museums and institutions.

A specialist unit advises the Prime Minister on domestic policy matters, and is in close contact with government departments and the Central Policy Review Staff (see p. 45).

The Cabinet

The Cabinet is composed of ministers personally selected by the Prime Minister (in September 1974 these numbered 22), 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 coordination and delimitation of the authority of government departments. The exercise of these functions is vitally affected by the fact that the Cabinet is a group of party representatives, depending for its existence upon the support of a majority in the House of Commons.

Cabinet Meetings The Cabinet meets in private and its proceedings are strictly confidential. Its members are bound by their oath as Privy Counsellors not to disclose information about its proceedings. The Official Secrets Acts forbid the publication of Cabinet as well as of other State papers (although after they have been in existence for 30 years they may be made available for inspection in the Public Record Office) and a resigning minister desiring to make a statement involving disclosure of Cabinet discussions should first obtain the permission of the Sovereign through the Prime Minister. From a practical point of view, this secrecy is essential in the interests of full and frank discussion, which can be maintained only if there is no risk of publicity for every statement made and every point conceded.

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 are called to attend its meetings when matters affecting their departments are under discussion; 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. A record is kept of the conclusions and of the main points made in discussion.

### Ministerial Responsibility

Ministerial responsibility means both the collective responsibility which ministers share for the policy and actions of the Government and the individual responsibility of ministers to Parliament for the work of their departments.

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.<sup>1</sup>

### **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 varying 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 instance, the Department of Employment, cover Great Britain (England and Wales, and Scotland, but not Northern Ireland); others, such as the Department of

<sup>&</sup>lt;sup>1</sup> A Royal Commission was established in 1974 to inquire into the standards of conduct in public life in Britain.

Education and Science and the Department of the Environment are mainly concerned with affairs in England, and there are separate departments for Scotland and Northern Ireland. 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, the National Debt Office and the Public Works Loan Board. Generally, departments receive their funds directly out of money provided by Parliament and are staffed by members of the Civil Service (see p. 58).

# 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 establishments 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 is responsible for compiling 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. Comprehensive statistical publications are produced by the CSO.

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. Some are expert committees; others 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 other 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 (as in September 1974) 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 position, 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 sections 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. Other functions are undertaken by the office from time to time.

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 co-ordinates the statistics collected by departments and produces statistics needed for central economic and social policies and management, such as the national accounts, balance of payments, financial statistics and measures of output. It is responsible for 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; it advises departments on questions of parliamentary procedure; and attends sittings (and committees) of both Houses. The counsel also 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 Paymaster General, the Chief Secretary to the Treasury and the Financial Secretary. There is also a Parliamentary Secretary to the Treasury, who 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. Work is carried out by three main groups: the Public Sector Group which has the broad function of controlling the level of public expenditure and ensuring that resources are efficiently used within the public sector; the National Economy Group which is responsible for the preparation of short-term and medium-term economic forecasts and the co-ordinated economic strategy based on these forecasts, for home financial transactions, markets and institutions generally, and for the surveillance of certain areas of economic policy administered primarily by other departments—namely, fiscal and industrial policies; and the Overseas Finance Group, which is responsible for questions affecting Britain's foreign currency reserves, international monetary policy, and overseas aid.

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, its functions include the administration, in co-operation with the Intervention Board for Agricultural Produce (see p. 47), of the agricultural support system as modified by the adoption in 1973 of the Common Agricultural Policy of the enlarged 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 the ministry 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 responsi-

bilities 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 where it already exists. The ministry 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 The Intervention Board for Agricultural Produce was set up under the European Communities Act 1972. An executive body subject to the direction and control of ministers responsible for agriculture, the board deals with 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 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 are severally responsible for each of the three Services.

The Department of Education and Science

The Department of Education and Science promotes education generally in England and Wales 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, while the minister responsible for the arts, who is also a Parliamentary Under Secretary of State,

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 cooperation with local education authorities whose duty it is to provide and run the schools and colleges in their areas. Its relations with the universities are conducted through the University Grants Committee. Activities concerning civil science are discharged through five research councils: the Medical Research Council, the Agricultural Research Council, the Natural Environment Research Council, the Social Science Research Council and the Science Research Council. On questions of scientific policy an advisory board for the research councils advises the Secretary of State.

# The Department of Employment

The Department of Employment is generally responsible for Britain's manpower policy and deals with the payment of unemployment benefit, the repayment of income tax to unemployed workers, 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.

Responsibility for the provision of a public employment service and for the promotion of industrial training has been transferred to an independent Manpower Services Commission, which discharges its duties through two bodies, the Employment Service Agency and the Training Services Agency. Supervision of the safety and health of people at work is being transferred to a new Health and Safety Commission, organised on lines similar to the Manpower Services Commission. A new Conciliation and Arbitration Service, independent of the Department of Employment, has also been established. Members of the two commissions and of the Conciliation and Arbitration Service Council are appointed by the Secretary of State for Employment.

# The Department of Energy

The Department of Energy is responsible for the development of government policies in relation to all forms of energy. It discharges governmental 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 industry. It deals with the development of offshore oil and gas resources in the British sector of the continental shelf. The department sponsors the oil industry, and deals with the international aspects of energy problems, including relations and co-operation with oil-producing countries. It is the co-ordinating body for energy conservation policy, and for encouraging the development of new sources of energy, being assisted by the Energy Technology Support Unit at Harwell, Berkshire. The Secretary of State for Energy is supported by a Minister of State and two Parliamentary Under Secretaries of State, one of whom is concerned with the development of oil from the North Sea.

# 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.

In addition to his overall strategic responsibilities as head of the department,

the Secretary of State deals directly with policy on international pollution matters and the department's research programme. He is assisted by three senior ministers:

The Minister for Transport is responsible for ports; general transport policy including transport grants to local authorities; railways; freight movement; the Channel Tunnel; road safety; and inland waterways.

The Minister for Planning and Local Government is responsible for land use and regional planning; land compensation and betterment; new towns; minerals; local government structure and finance; and countryside policy.

The Minister for Housing and Construction 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).

There are two Ministers of State: one has special responsibilities for sport and recreation, water and sewage and pollution policy; the other is responsible for special urban planning problems, historic towns, buildings and monuments and conservation. There are three Parliamentary Under Secretaries of State in the department.

The Department of the Environment is also concerned with the co-ordination of work on the prevention of environmental pollution, with special responsibility for clean air and anti-noise functions; research into roads, building, hydraulics, water pollution, fire prevention and the uses of timber; and, through the Property Services Agency, with government property management and building functions.

The Export Credits Guarantee Department which is responsible to the Secretary of State for Trade, provides protection to exporters, merchants, investors and banks against overseas credit risks by export credit insurance policies which cover exporters against the main risks of not receiving payment; by guarantees to banks financing export trade which provide an acceptable security; and by insurance which covers new investments against risks of expropriation, blocked remittances, or war.

The use of the department's services is optional, premiums being charged at rates which enable the department to be run as a self-supporting business.

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 two Ministers of State and two Parliamentary Under Secretaries of State. He is the United Kingdom representative in the Council of Ministers of the European Community.

Export Credits Guarantee Department

The Foreign and Commonwealth Office 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 payment of benefits and collection of contributions under the national insurance and industrial injuries schemes and the payment of family allowances. The department is concerned in making reciprocal 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 on the World Health Organisation.

Through its Supplementary Benefits Commission the department is responsible for determining awards of non-contributory benefits and Family Income Supplements, 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 two Ministers of State and two Parliamentary Under Secretaries of State (one of whom has special responsibilities involving provision for disabled people).

The Home Office

The Home Office deals mainly with the domestic functions in England and Wales not assigned to other 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 maintenance of the peace and the prerogative of mercy. He is assisted by two Ministers of State and a Parliamentary Under Secretary of State.

The chief matters with which the Home Office is concerned are: the administration of justice; the law relating to the conduct of parliamentary and local elections; the treatment of offenders; probation and after-care; the prison service; the police, fire and civil defence services; immigration and nationality; community relations and community and urban programmes; public morals and safety; and general questions of broadcasting policy.

Other Home Office responsibilities include: receiving and submitting addresses and petitions to the Sovereign and preparing presentations to Parliament; preparing patents of nobility for peers and formal proceedings for the bestowal of honours; requests for the extradition of criminals; scrutinising local authority by-laws; granting licences for scientific experiments on animals; the exhumation and removal of bodies; supervising the control of explosives, firearms and dangerous drugs; deciding general policies on the laws of liquor licensing and shops; and control of gambling.

The Department of Industry

The Department of Industry, under a Secretary of State, is responsible for general industrial policy, both national and regional. Particular functions include sponsorship of private industries; provision of technical services to industry as a whole; and oversight of industrial development and finance. The department exercises government policy in relation to aerospace and industrial research and development (including supervision of industrial research

establishments). It is responsible to Parliament for the Post Office Corporation.

The department's regional offices also serve the Department of Trade, the Department of Energy and the Department of 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) 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 an agency 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, estate duty 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 real property for such purposes as compensation for compulsory purchase, local rates in England and Wales, and estate duty; and it collects tithe redemption annuities.

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 Department 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 is 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 law reform, for appointing the members of the Law Commission, and for presenting the commission's

reports to Parliament. He is also concerned with court procedure.

In addition, the Lord Chancellor is a leading member of the Judicial Committee of the Privy Council; 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, the department of the Official Solicitor<sup>2</sup> and the Public Record Office (which preserves, and provides access to, the national archives).

The Department for National Savings The Department for National Savings is responsible for the administration of the National Savings Bank, National Savings Certificates, British Savings Bonds, Premium Savings Bonds, Government Bonds and stocks on the National Savings Stock register and the contractual savings scheme, SAYE. The head of the department is the Director of Savings, who is answerable to the Treasury.

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

The Ministry of Overseas Development is responsible for Britain's policy of financial and technical assistance to developing countries. Under the direction of the Minister of Overseas Development (who is assisted by a Parliamentary Secretary) it is concerned with the aid programme as a whole and for 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.

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> 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.

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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 sample members of the general public or of particular groups.

The Department of Prices and Consumer Protection

The Department of Prices and Consumer Protection, under the direction of a Secretary of State, has responsibilities for consumer affairs covering consumer protection, consumer credit, standards and weights and measures. It also supervises the work of the statutory Price Commission, and deals with prices in the shops. The department carries out government policy in relation to monopolies, mergers and restrictive practices and the Office of Fair Trading. A Minister of State and a Parliamentary Under Secretary of State assist the 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 real 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 England and Scotland).

Some government departments are wholly dependent on the Treasury Solicitor for their legal work; others 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

Her Majesty's Stationery Office (HMSO) is the central purchasing organisa-Stationery Office tion 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 general overseas trade policy, commercial relations and tariffs, including those aspects of relations with the European Community. It sponsors the work of the British Overseas Trade Board in export services and promotions, overseas finance and planning. In addition, it is responsible for matters arising from companies legislation, supervision of the insurance industry, the insolvency service and the work of the Patent Office. Other responsibilities include civil aviation, marine and shipping policy, tourism, the hotel and travel industries, the newspaper industry and the film industry. The Secretary of State for Trade is assisted by two Parliamentary Under Secretaries 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. Assisted by two Parliamentary Under Secretaries of State, he has, in addition, a general oversight of government policy in Wales, and certain responsibilities relating to the national library and the national museum. The Welsh Office maintains close and continuous working relationships with the government departments mainly concerned with economic and social planning through the Welsh Planning Board and Welsh Council. The Welsh Office is centred in Cardiff; there is also a small ministerial office in London.

### SCOTLAND

Responsibility within the United Kingdom Government for Scottish affairs rests with the Secretary of State for Scotland, a Cabinet minister. At ministerial level he is assisted by two Ministers of State and two Parliamentary Under Secretaries of State. There are also two Scottish law officers—the Lord Advocate and the Solicitor General for Scotland.

The Secretary of State discharges most of his functions through five main administrative departments (the Department of Agriculture and Fisheries for Scotland, the Scottish Development Department, the Scottish Economic Planning Department, the Scottish Education Department, and the Scottish Home and Health Department). He is advised and assisted (particularly on questions such as the allocation of resources and forward planning, with which more than one of the departments are concerned) by a management group, consisting of the five heads of departments under the chairmanship of the

Permanent Under Secretary of State, the senior official in Scottish administration. The Secretary of State is in varying degrees responsible for a number of other Scottish departments, and bears ministerial responsibility, together with other appropriate ministers, for statutory bodies whose functions extend throughout Great Britain or the United Kingdom. The day-to-day administration of departments of the Secretary of State (generally known collectively as the Scottish Office) is conducted in Edinburgh, but there are representatives in London for liaison and parliamentary duties.

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.

The Scottish Economic Planning Department

The Scottish Economic Planning Department is responsible for industrial and economic development including the Scottish aspects of regional policies in both British and European Community contexts and the development of North Sea oil resources. It is also concerned with general policy in relation to the Secretary of State's responsibilities for Highlands and Islands development, transport, electricity, tourism, new towns, and rural development.

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 in Scotland, including the financing of the Scottish Sports Council, and with the development of the arts in Scotland, having responsibility in this connection 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 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 for the administration of the teachers' and National Health Service superannuation schemes. The Home and Health Department is the central authority in Scotland for the fire service, for certain home defence and emergency services, and for legislation concerning shops, theatres, cinemas, licensed premises and land tenure matters.

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

The Law Officers and Legal Departments 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 prosecutions in the sheriff court, 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, the jurisdiction and procedure of the Scottish courts, enforcement of judgments and proposals for the reform of the law.

NORTHERN IRELAND The United Kingdom Government and Parliament are responsible in Northern Ireland for law and order (including the police, the criminal law, courts, and penal institutions); matters pertaining to elections and the franchise; and matters of national importance such as the Crown, foreign policy, defence, and certain aspects of taxation. Under the Northern Ireland Act 1974 they are also temporarily responsible for the wide range of domestic matters previously devolved to the Northern Ireland Assembly and the Northern Ireland Executive (see p. 22).

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.

## Departments

Northern Ireland The Northern Ireland departments are:

Department of Agriculture

The Department of Agriculture is responsible for the development of Northern Ireland's agricultural, forestry and fishing industries, and for the administration of legislation and schemes in Northern Ireland relating to farm improvement, crop improvement, plant health, livestock improvement, animal health, horticulture, agricultural loans, arterial drainage, water recreation, forestry and forest recreation, fisheries, and marketing and processing. The functions of the department 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.

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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, including linkage with the Local Enterprise Development Unit and the Northern Ireland Finance Corporation. 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 (including weights and measures); the registration of companies, societies, credit unions, trade unions, and insurance and unit trusts; and the administration of an industrial forensic science department.

Department of Community Relations

The Department of Community Relations is the department responsible for formulating and sponsoring policies for the improvement of community relations in Northern Ireland; for assisting in the administration of public services to this end; and for making grants to local authorities and voluntary bodies for a wide variety of social provision in urban areas of special need under the Social Needs (Grants) Act (Northern Ireland) 1970. The department is also responsible for the payment of grants to the Sports Council, district councils and voluntary organisations for sport and recreation, and for first-aid repairs to bomb damaged residential property, and it is concerned in the work of the Parliamentary Commissioner for Administration, the Commissioner for Complaints, and the Community Relations Commission.

Department of Education

The Department of Education's responsibilities include the development of primary, secondary, and further (including adult) and higher education, and the supervision of the area education and library boards which are responsible to the department for the local administration of the education, library, and youth services. The department also has functions in relation to teacher training; examinations; the payment of grant aids to the Arts Council; the administration of museums; and Armagh Observatory.

Department of the Environment

The Department of the Environment is responsible for European Community co-ordination. Its other functions are concerned with the construction and maintenance of roads and bridges; street lighting; traffic management; road safety; public service vehicle inspection; driving licences; fire services; transport; water supply; sewerage services; environmental public health; clean air; the administration of the alkali Acts; the listing and preservation of historic buildings.

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 functions of the department in connection with these responsibilities include economic and social planning and research; the compilation of statistics; the issue of Ulster savings securities; the control of borrowing; the advancement of government loans to local and public authorities; the fixing of the regional rate and the collection of the regional and district rates; and the staffing, recruitment and training of civil servants and the regulation of Civil Service conditions.

The department also has certain duties in relation to constitutional and legal policies and law reform, and to charities and charitable funds. Its other responsibilities include the provision and maintenance of public buildings, the issue of building regulations, liaison with the construction industry, property valuation, ordnance survey, public records, the registration of births, deaths and marriages, the registration of title of land, miscellaneous licensing (including licensing intoxicating liquor, bookmakers, and money lenders) and the registration of clubs.

Department of Health and Social Services The Department of Health and Social Services is responsible for the administration of social security benefits in Northern Ireland; for the health and personal social services (which include hospitals, family doctors, dentists, chemists and opticians); for child care and adoption; and for care of the elderly and physically handicapped.

Department of Housing, Local Government and Planning The Department of Housing, Local Government and Planning is responsible for housing; local government; planning (area planning and planning control); amenity lands—country parks, nature reserves and areas of natural beauty; comprehensive development (redevelopment—other than housing—of district, town or village centres); and for Northern Ireland's development officer service.

Department of Manpower Services

The Department of Manpower Services is responsible for the administration of the employment service in Northern Ireland; for the compilation of employment and unemployment statistics; for the provision of an advisory service to companies; for the sponsorship of Enterprise Ulster; and for government training centres, integrated work-force units, industrial training boards, management training, and the training-on-employers-premises scheme. The department also has functions in connection with industrial relations, including the sponsorship of the Review Body; it provides the factory inspectorate; and it 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 is paid wholly and directly out of money voted by Parliament and works in a civil capacity in a department of government. There are about 700,000¹ civil servants (one-third of them women), roughly 280,000 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 remainder is about equally divided between: central administrative and policy duties;

<sup>&</sup>lt;sup>1</sup> Including part-time staffs—two part-time officers being reckoned as equivalent to one whole-time officer.

service-wide support services, such as accommodation, printing, and information; and services which are largely self-supporting financially, for instance those provided by the Department for National Savings and the Royal Mint.

About 75 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 permanent staff.

The Development of the Modern Service

The Civil Service in its present form is a product of the past hundred years. Before then, departments were free to choose their own staffs, qualifying standards were unknown, there was no central supervision, and political jobbery was rife. Nineteenth-century reforms included the substitution of open competition for the practice of obtaining Civil Service appointments by favour or purchase, and the establishment of an independent body, the Civil Service Commission, to control recruitment. The great expansion in State activity in the first half of the twentieth century, and the consequent increase in the numbers of civil servants and the scope of their duties, led to further reorganisation, including the creation of service-wide scientific and professional classes; recruitment was adapted to a developing educational system, and co-ordination between the various departments improved. Civil servants, though they remained employees of their departments, became members of an integrated service with common conditions of employment and traditions and standards of conduct belonging, not to individual departments, but to the Civil Service as a whole.

More recently the structure and management of the Civil Service has again been under detailed internal scrutiny following the report of the Fulton committee which in 1968 assessed the structure, recruitment and management, including management training, of the service. As a result of the report, the Civil Service is engaged upon a programme of reshaping and modernisation, designed to make it more effective in carrying out its changing tasks.

Structure

The structure of the Home Civil Service, which until recently tended to reflect the assumption that specific types of work should be allocated to particular groups of civil servants on the basis of their specialist or vocational qualifications, is at present 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 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 now an open and unified structure, with three grades—permanent secretary, deputy secretary and under secretary—available for all types of post. 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 categories which are pay and grading structures and occupational groups which are groups of staff within each category, whose members have common personnel management and recruitment needs. Four new categories have so far been created, and the groups of staff that are so far members of them are shown below.

General Category

The Administration Group contains some 263,000 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 260 staff. They provide economic advice and undertake economic analysis.

The Statistician Group (some 400 staff) undertakes the collection and analysis of statistics required for government policies (see p. 44).

The Information Officer Group (some 1,300 staff) carries out a variety of specialised press, publicity, public relations and information work.

Science Category The Science Category contains the Science Group (16,000 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.

Professional and Technical Category

The Professional and Technical Group contains some 38,000 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.

Training Category Within the Training Category the Instructional Officer Group comprises nearly 5,000 staff employed on instruction in a trade, craft or subject, or on ancillary or supervisory duties connected with instruction.

The four categories already established account for some 60 per cent of the non-industrial staff; the remainder are in due course to be allocated to one of the three main categories or, where this is impossible, to additional categories to be set up for the purpose. Such staff include those in a number of 'general service' classes (that is to say, classes whose members serve in a number of departments), for instance, the medical and legal classes.

Typists

The Civil Service employs about 23,000 shorthand typists, audio typists, and copy typists, who work mainly in small groups, and about 4,000 personal secretaries who work mainly to senior civil servants.

Other Support Staff

There are about 25,000 other support staff, including paperkeepers, office cleaners and messengers. (As far as practicable, posts of messengers are reserved for ex-servicemen, although other men and women over the age of 30 may be recruited.)

Others

The Diplomatic Service

The Diplomatic Service is a separate self-contained service of the Crown, which provides the staff (comprising some 6,300 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; 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.

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 Oversea 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 in which he is to be employed.

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. For most other entries selection from among those possessing the necessary academic qualifications 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. The number of management courses run within the

Civil Service, including those provided at the Civil Service College, has increased substantially during recent years. 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 usually on one day a week ('day release' schemes) to attend appropriate courses. 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 specialist groups, at various levels up to and including that of under secretary. Subjects covered include structure and machinery of government, organisation and staff management, economics, statistics, industrial growth, social administration, operational research, computers and information systems.

The college also provides courses on European institutions and their working, and is developing links in a variety of matters, including training, 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 most of the highest positions in the service (for instance, permanent secretaries, principal establishment officers and principal finance officers) are approved by the Prime Minister, who is advised in these matters by the head of the Home Civil Service.

The consideration governing all promotion is the advancement of the efficiency of the public service—the criterion being the fitness of an officer for a more senior, responsible post. 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 redundancy payments and pension benefits.

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 such long hours as may be necessary without additional pay. The standard working week for office staffs is 41 hours in London and 42 hours in the provinces. Annual leave varies according to grade and length of service up to a maximum of six weeks (that is, 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 on medical

grounds.

## 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 members of the minor classes 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.

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, and the Prevention of Corruption Act 1906. 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

The political views of civil servants are not as a general rule a matter of official concern, but there are some civil service 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 in connection with 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.

#### LOCAL GOVERNMENT

Government on a local basis has been part of Britain's administrative system for many centuries, although the modern conception of a comprehensive system of locally elected councils to manage various services provided for the benefit of the community was first incorporated in statute law in the nineteenth century. Following the large population increase and the transformation in the range, complexity and scale of local authority functions in the twentieth century, local government was reorganised in Greater London in the 1960s and in the rest of England and Wales in 1974. A similar reorganisation is to take full effect in Scotland on 16th May 1975. Changes in the structure and functions of local government in Northern Ireland were made in October 1973.

Relationship between Central and Local Government The local government system essentially comprises a pattern of elected councils for defined areas. The councils represent their own localities and provide a local level of democracy; and they make available a wide range of services in their areas.

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 ministers of the Crown 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

<sup>&</sup>lt;sup>1</sup> Proposals have been made to modify this Act by limiting the areas in which the safeguarding of official information requires the protection of the criminal law.

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 Housing, Local Government and Planning.

Principal Types of Local Authority

The main pattern of local government organisation in England and Wales (outside the Greater London area) is a division of the country into 53 large county authorities (see map on p. 66), 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. 68). 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 283,000 to about 1.4 million (the Isle of Wight with a population of about 110,000 is an exception), and in the metropolitan counties from 1.2 to 2.8 million. District authorities within metropolitan counties have populations of between 173,000 and 1.1 million; other districts' populations average between 75,000 and 100,000 although many fall outside this range. 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 similar functions are discharged by community councils.

Greater London—an administrative area of about 610 square miles (1,580 sq km)—is administered by the councils of 32 London boroughs and the City

of London, and by the Greater London Council.

Scotland, until May 1975, is divided into counties, counties of cities, large and small burghs and districts, each with its own elected council—over 400 authorities altogether: 33 county councils (two pairs being combined for certain purposes); 201 town councils (including four for counties of cities—Aberdeen, Dundee, Edinburgh and Glasgow); and 196 district councils (two counties not being divided into districts). In May 1975 these authorities will be replaced by nine new regional authorities, divided into 53 districts, and three virtually all-purpose authorities for Orkney, Shetland and the Western Isles. Local community councils are to be 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 three Boundary Commissions—one for England, one for Wales

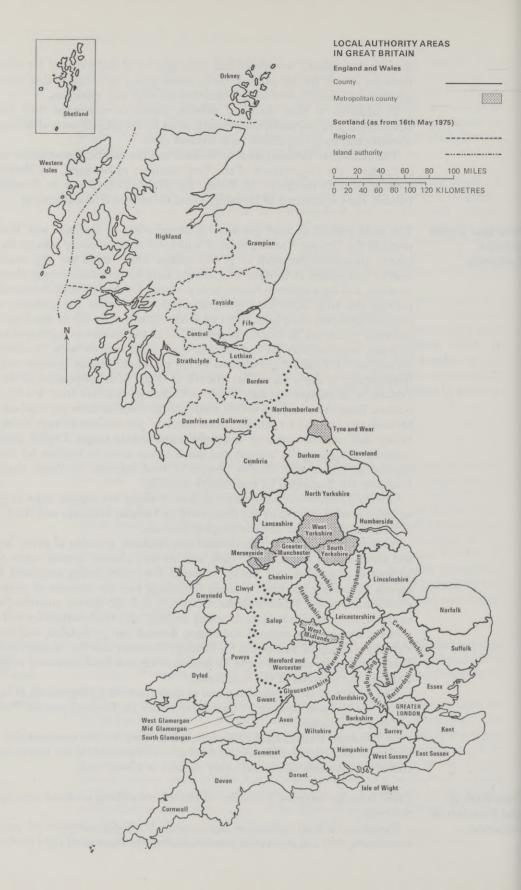
and one for Scotland.

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 councils comprise a number of elected councillors presided over by a chairman.

Members of local authorities are unpaid. With the exception of parish councillors, they can claim a 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.

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 counties the chairman is called the Convenor, and in the burghs, the Provost or Lord Provost.

The term of office of a councillor elected to any form of local government is usually four years. County and district council elections were held in England and Wales in 1973 in anticipation of the local government reorganisation in 1974; county council elections will take place in 1977 and every fourth year thereafter. From 1975, the metropolitan district elections will be 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 take place in 1978. In Scotland elections for all the new councils were held in 1974. To bring elections into an alternate region/district two-year cycle, the first two terms for district councillors will be of three years each. Elections are held every four years in Northern Ireland. Procedure at local government elections is governed by rules made for England and Wales under the Local Government Act 1972; for Scotland by rules made under the Local Government (Scotland) Act 1973; and for Northern Ireland by the Electoral Law Acts (Northern Ireland) 1962-71, the Electoral Law (Northern Ireland) Orders 1972 and 1973.

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, a person must be 18 years of age or over and must have been born in Northern Ireland or, alternatively, have resided continuously in Britain for

seven years immediately prior to the qualifying date.

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 Great Britain are divided into electoral divisions returning one or more councillors in accordance with orders made by the Home Secretary or the Secretary of State for Scotland. Districts in England, Wales and Northern Ireland are divided into electoral 'wards' and burghs in Scotland are either divided into wards or, if they are small, left as

single units. In Scotland in the new 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, 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 the purpose of elections to the Greater London Council, parliamentary constituencies form the electoral areas, with each constituency 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 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.

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 offstreet 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 in each area 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: principal roads (the main strategic road network) are a matter for the GLC, while the London boroughs look after non-principal 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 their 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, which, unlike county police forces, is directly responsible to the

Home Secretary and not to local police authorities (see p. 98).

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, be designated to 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 per-

sonal social services and national parks.

In Scotland the councils of the cities are all-purpose authorities; elsewhere the county councils, town councils and district councils share responsibilities. The new regional and district authorities will from May 1975 exercise a separate range of local government functions in a way broadly similar to that envisaged for the new authorities in England and Wales, except that Orkney, Shetland and the Western Isles, because of their isolation, will have single,

virtually all-purpose authorities.

In Northern Ireland, local environmental services are administered by the district councils, but 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 in close association with the district council and its staff. Responsibility for planning is similarly exercised by local offices of the Department of Housing, Local Government and Planning. Area boards, responsible to appropriate central departments, administer locally education, public libraries and the health and personal social services.

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 are often able to do their work efficiently in full session although they appoint committees from time to time as necessary. Many councils have rationalised their organisation by reducing substantially the number of their committees. Some have established policy advisory or coordinating committees with powers to originate policy, subject to the approval of the full council. Advice to enable the new councils to determine appropriate management principles and structures has been given in the report of an official study group (see Bibliography, p. 462).

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. 71), 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

on behalf of another, and may also supply others with a wide range of goods and services.

The public and the press are admitted to all meetings of the 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. Generally speaking, councils are free to make such appointments as they think necessary for carrying out their work. Most of the statutory controls and requirements in relation to the appointment of staff in England and Wales have been removed by the Local Government Act 1972.

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 are always made in conformity with 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. They are based on recommendations made by the Whitley Councils (see p. 62), of which the largest are the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services and the National Joint Council for Local Authorities' Services (Manual Workers). Conditions of service and salary scales for senior local government officers are determined by separate joint committees for England and Wales, and for Scotland. The local government service in Northern Ireland has its separate joint negotiating machinery at various levels.

### Local Government Finance<sup>1</sup>

Local authority expenditure in the United Kingdom (on both current and capital accounts) was nearly £11,000 million in 1973. Capital expenditure (just over a quarter of the total) is normally financed by borrowing. Housing is the major element of capital expenditure, representing about a third of the total. Current expenditure by local authorities accounts for just over a quarter of total current-account spending by public authorities. The education service represents approximately half of this expenditure, followed by the police, roads and public lighting, the personal social services, and sewerage services and refuse disposal. Local authority current account receipts derive from three principal sources: government grants (nearly a half in 1973); local rates paid by occupiers of land and buildings (almost a third); and rents from council houses, and other income (about a fifth).

Government grants are normally related directly to total local authority current expenditure and payable in aid of revenues generally (when they are known as rate support grants). Grants are also paid towards the cost of specific services (for example, the police), usually towards current expenditure, but outright grants are made towards the capital costs of certain services,

<sup>&</sup>lt;sup>1</sup> An inquiry into the finance of local government in Great Britain was started in 1974.

mainly principal roads, and annual subsidies are payable for local authority housing. In 1974-75 the estimated rate support grants in England and Wales amount to £3,000 million, while grants for specific services represent some £300 million. The grants for Scotland are £412 million and £37 million respectively.

The rate support grants are distributed between authorities in three parts: the 'needs' element which for 1974–75 takes into account total population, numbers of pupils in various types of education, the demand for various personal social services, the sparsity and the rate of decline of population where appropriate, and various regional factors; the 'resources' element which is paid to all authorities whose rateable resources per head of population are below a national standard; and the 'domestic' element which compensates rating authorities for loss of rate income resulting from reductions in rate poundage which they are required to give to householders. Grants are also made towards the cost of rate rebates for people with low incomes.

In Northern Ireland the district councils receive specific grants plus a resources element towards the (mainly local environmental) services they are to provide.

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. Disputes about rating assessments are heard by local valuation courts, each consisting of three members of an independent local valuation panel 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 councils of counties and counties of cities (from May 1975 by 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 Session. In Northern Ireland the valuation authority is the Commissioner of Valuation, whose office is part of the Department of Finance.

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. Following reorganisation in Scotland, every authority will determine a rate for its own services, but the collection of rates and the administration of rating will be 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 will be collected by the department.

Agriculture throughout Britain is 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 in Great Britain 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

Rates

rate on property they occupy for charitable purposes but may be given further reliefs by the rating authorities, which are empowered to reduce or remit the rates for a wide range of non-profit-making bodies.

Loans

Loans may be raised by local authorities to finance capital expenditure either under general powers conferred by national legislation or under special powers provided by Acts of Parliament of local application. 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 Scotland and Northern Ireland the government department responsible for the service also issues the appropriate loan approvals.

Local authorities may raise long-term loans by means of private mortgages, and by issuing stock upon the Stock Exchange and bonds which may or may not be quoted on the Stock Exchange. Although these bonds may be for any period, local authorities normally issue them for one year. 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 in England and Wales to appoint a finance committee, but they have to make proper arrangements for the administration of their financial affairs.) For the auditing of their accounts, local authorities in England and Wales can choose between the district auditor (appointed by the Secretary of State for the Environment) and an approved private auditor for the audit of some or all of their accounts. In Scotland the accounts of each authority are audited by a professional auditor appointed by the Secretary of State for Scotland and paid by the council concerned, and in Northern Ireland by local government auditors appointed by the Department of Housing, Local Government and Planning.

Local Government Complaints System

A complaints system for local government in England and Wales came into effect during 1974. The system involves independent statutory Commissions for Local Administration (one for England and one for 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. The commissioners help local authority councillors to protect the rights and interests of their constituents.

In Northern Ireland a Commissioner for Complaints deals with complaints alleging injustices suffered as a result of maladministration by certain public bodies, including all local authorities.

#### THE FIRE SERVICES

The fire services in Great Britain are organised on a local basis, subject to a measure of central control exercised by the Home Secretary (in England

and Wales) and the Secretary of State for Scotland. The fire service in Northern Ireland is controlled by the Fire Authority for Northern Ireland, which is responsible to the Northern Ireland Department of the Environment. Every part of the United Kingdom is covered by a public fire brigade.

FIRE AUTHORITIES IN GREAT BRITAIN It is the statutory duty of every fire authority to make provision for fire-fighting purposes, and in particular to maintain a brigade of sufficient strength to meet efficiently all normal requirements. In England and Wales (outside Greater London) the fire authorities are the county councils; the Greater London Council is the fire authority for London, and the Isles of Scilly have their own fire authority. In all there are 55 local authority fire brigades. In Scotland the local authorities are grouped in 11 areas each with a single brigade; with the exception of Glasgow, where the town council of the city is the responsible authority, each area is administered by a joint committee representative of the councils of the counties and large burghs in the area. Under local government reorganisation, from May 1975 there will be nine 'regional' and three 'islands' fire authorities in Scotland.

There are also fire-fighting organisations outside the local authority service, for instance, those maintained 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 that the operational efficiency of brigades is maintained. To this end these ministers have powers, under the Fire Services Acts, 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. In matters affecting the fire brigades as a whole (excluding discipline and conditions of service), each minister is advised by the appropriate 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. The National Joint Council for Local Authorities' Fire Brigades and the National Joint Council for Chief Officers of Local Authorities' Fire Brigades are the negotiating bodies on ranks, pay and conditions of service of firemen in Great Britain.

Inspectorates of fire services advise the ministers on operational and technical matters.

Establishment Schemes Each fire authority must draw up a scheme showing the establishment of officers and other ranks (both whole-time and part-time), 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, the strength of individual brigades ranging from 24 whole-time and 256 part-time men in Powys, Wales, to 4,839 whole-time men in Greater London. In the whole of England and Wales there are about 25,200 whole-time and 17,800 part-time firemen, operating more than 4,130 fire-fighting appliances (including pumps, turntable ladders, water tenders, and emergency tenders and hose-laying lorries) housed in some 1,600 fire stations. Scotland has some 3,000 whole-time and 3,000 part-time firemen, 524 fire-fighting appliances, and 355 fire stations.

Equipment

It is the duty of every fire authority to buy such appliances and equipment as may be necessary to meet efficiently all normal fire-fighting requirements in their area. Certain items of equipment are standardised so that there is complete interchangeability when a fire is attended by men and appliances from more than one brigade. The principal types of fire-fighting appliances are bought by fire authorities to requirement specifications approved by the Home Secretary and the Secretary of State for Scotland, on the advice of the respective Central Fire Brigades Advisory Councils. These specifications ensure that minimum standards are maintained, and allow sufficient freedom of design to meet special circumstances and encourage further developments.

### Operational Methods

Each fire authority must appoint a chief fire officer (firemaster in Scotland) for its fire brigade. The appointment must be approved by the Home Secretary or by the Secretary of State for Scotland.

Central control is exercised by the chief fire officer from brigade head-quarters. Divisional officers, who are in charge of the geographical divisions into which most areas are divided, are responsible for mobilising their 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.

In England and Wales, the number of fire calls in 1973 (including false alarms and special service calls—see below) was approximately 535,000. In Scotland the number was approximately 64,000.

## **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 of swimming pools and filling of water tanks.

#### Fire Losses

Estimated property losses from fire in Great Britain in 1973 amounted to about £179 million.

#### Firemen

The large cities and urban areas in Great Britain are served in the main by whole-time firemen but some 60 per cent of county fire brigade establishments is composed of part-time retained firemen who, in return for a retaining fee and call-out and attendance fee, undertake to attend fires if called upon, and volunteer firemen, who receive no remuneration. Many fire authorities employ women (about 1,056 in England and Wales and 133 in Scotland in 1973) on communications and mobilising duties, and some brigades have schemes for the employment of junior firemen between the ages of 16 and 18 years, with a view to their being enrolled as regular firemen at the age of 18.

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 which is the responsibility of the Scottish Home and Health Department. Management and command training is provided for the higher and middle ranks at the Fire Service Staff College, Wotton House, near

Dorking, Surrey, 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, Moreton-in-Marsh, Gloucestershire. Both these establishments are maintained by the Home Office and the Scottish Home and Health Department. Facilities for properly accredited officers from overseas fire services to study the organisation, current training methods, appliances and equipment of the British fire brigades are arranged by the Home Office Fire Department.

Finance

The cost of maintaining the fire service is borne by local authorities, aided by central Government through the rate support grant (see p. 71).

**Fire Prevention** 

Fire authorities are concerned with fire prevention under a wide range of statutes, including the Factories Act 1961, the Offices, Shops and Railway Premises Act 1963 and the Fire Precautions Act 1971 (which provides for a comprehensive system of fire precaution control in places of entertainment and public resort and in certain kinds of residential premises). Fire authorities are also under a statutory duty to give, when asked, advice on fire prevention, restricting the spread of fires, and means of escape in case of fire. The enforcement and advisory duties involved are mainly carried out by the fire service; nearly 9,000 fire inspections were made in England and Wales in 1973.

Courses in fire prevention are held continuously at the Fire Service Technical College and all brigades have qualified fire prevention officers. Other sources of advice on fire prevention include the various insurance companies which advise their policyholders, and the Fire Protection Association, a non-profit-making body established by the Fire Offices' Committee as an advisory centre on a nation-wide basis for industry and the general public on protection of life and property against fire. The Fire Offices' Committee is representative

of some, but not all, of the fire insurance companies in Britain.

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 of the Department of the Environment, or by private consultants.

The main organisation undertaking the study and investigation of the technical aspects of fire is the Joint Research Organisation of the Department of the Environment and the Fire Offices' Committee (with other non-member fire insurance companies) which operate from the Fire Research Station at Borehamwood, Hertfordshire. The work of the Joint Fire Research Organisation is supervised by a steering committee, the membership of which is drawn from the Department of the Environment, the Fire Offices' Committee, the

Home Office and independent sources.

FIRE SERVICE IN NORTHERN IRELAND The Fire Authority for Northern Ireland is responsible for fire cover for the whole Province. The authority, whose members include representatives of the council of the City of Belfast, and of the district councils, maintains six whole-time and 49 part-time stations throughout the area. Brigade establishment is about 1,200: 420 whole-time officers and men and 800 part-time firemen, manning 120 appliances.

# 3 Membership of the European Community

On 1st January 1973, 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. The Treaty of Accession was signed by the applicant countries and the original member states in January 1972.

The enlarged Community forms a trading area of over 250 million people and accounts for some 40 per cent of world trade.

European Communities

Act

The European Communities Act became law in October 1972 and made the legislative changes necessary to comply with Britain's obligations under the Treaty of Accession to make provision for the application of future Community decisions 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 obligations. Other Community obligations are being met under existing powers to make subordinate legislation, introduced as the measures become applicable.

Britain as a Community Member

The Treaty of Accession provides for tariffs on trade in industrial products between Britain and the original six member countries to be progressively reduced over a transitional period ending in 1977, when they will be abolished. The cumulative reduction in 1975 amounts to some 60 per cent. At the end of the transitional period 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 also be complete. In addition, Britain is progressively adopting the Community system of agricultural support, the Common Agricultural Policy (CAP), during the transitional period. Further details of Britain's participation in the Community are provided in the relevant

Proposals for changes in the terms of Britain's membership of the Community were put forward by the Government formed in March 1974. Britain's proposals, which are not expected to require amendment of the Treaty of Accession, are aimed at securing a fairer system of financing the Community budget (see p. 79); improvements in the operation of the CAP and in trade and aid arrangements with the Commonwealth and developing countries; and assurances that British regional and industrial policies are not unacceptably circumscribed by Community rules. The Government is committed when renegotiation is complete to put the results to the British people in a general election or a referendum. During the renegotiations, Britain is co-operating

fully in those areas of Community business not affected by them.

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 Community 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, and 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 an associate status with the EEC, with preferential treatment in aid and the development of trade. Some 21 members of the Commonwealth are among 44 developing countries negotiating new association agreements with the Community, which will come into effect from 1st February 1975 when present arrangements expire.

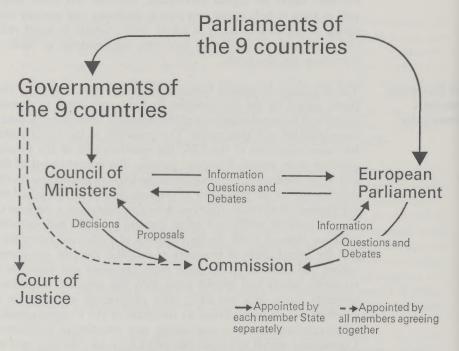
The European Atomic Energy Community The European Atomic Energy Community (Euratom) was set up by a second treaty signed in Rome in 1957 which provided for the co-ordinated development of members' atomic energy industries and of their other peaceful nuclear activities. Euratom has worked to develop a 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. Following the enlargement of the Community, agreement was reached in February 1973 on a further four-year research programme.

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 (see diagram below) 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.

## Institutions of the European Community



The Council of Ministers is the final decision-making body for all major Community questions, and is the only institution 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. Although provision is made in the Treaty of Rome for certain matters to be decided by a qualified majority, using a system of weighted voting, in practice decisions are taken on the basis of consensus. On all matters of major importance, affecting vital national interests, decisions are taken on the basis of unanimity.

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 is composed of 13 commissioners nominated by the member governments; two are from Britain. Each commissioner 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 such organisations as 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 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 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. Its powers regarding the Community's budget (presently limited to examination and approval) are to be expanded and a new Court of Auditors established. Members of the parliament may question the Council and Commission and have the power to dismiss the Commission by a two-thirds majority.

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 groups—are consulted by the Council 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 Agricultural Guidance and Guarantee Fund, the European Social Fund, the European Investment

Bank, and the European Monetary Co-operation Fund.

In addition to 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 Budget

All member countries contribute to a common budget for certain specific purposes, such as agricultural support (administered by the European Agri-

cultural Guidance and Guarantee Fund, often known by its French initials, FEOGA), the European Social Fund (used for occupational re-training and re-adaptation programmes and programmes designed to further manpower mobility), and administrative costs. Under the direct income system, which came into effect for the original members in January 1971, the Community is progressively drawing a greater proportion of the finance for 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 are handed over to the Community; in the case of customs duties, an increasing proportion is being handed over, so that from 1st January 1975 all customs revenue, less 10 per cent for collection, will go to the Community budget. The remaining proportion of the necessary income (taking into account the new members' contributions, which in Britain's case are described below) is being made up by contributions from the (six original) member states according to a fixed scale ('key'); 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 (see p. 363).

The Treaty of Accession gives 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 gross national product (GNP) of the nine countries in the enlarged Community. This represents 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.

In the context of the renegotiation of the terms of membership (see p. 76), Britain is seeking arrangements to ensure that no member country is required to bear a proportion of Community costs unreasonable in relation to its ability to pay.

# 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. Scotland has its own distinctive legal system and law courts, and although the existence of a single Parliament for Great Britain since 1707, common opinions on broader issues, and a common final court of appeal in civil matters have resulted in substantial identity on many points, differences in legal procedure and practice remain. In Northern Ireland on the other hand, legal procedure and practice have closely resembled those of England and Wales for centuries but its enacted law derives in certain spheres from a different source and may differ in substance from that which operates in England and Wales. 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, since Britain's accession to the European Community, Community law, the impact of which is essentially confined to economic matters. Legislation consists of laws made by or under the authority of Parliament and may be Acts of Parliament, or Orders in Council, 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, broadly speaking, the ancient law of the land, as deduced from custom and interpreted by the judges. 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 is mainly the directly applicable law of the European Community treaties and the instruments made under them by the Community institutions. It has not been incorporated or made identical with domestic law but operates as a separate system side by side with that law. The English and Scottish legal systems remain intact and their courts continue to operate as before. In the event of conflict, however, Community law takes precedence over domestic law. Community judgments and orders, the formal authenticity of which has been verified by the designated national authority (the Foreign and Commonwealth Secretary or one of his officials), may be registered and enforced in the United Kingdom Courts. (See also European Court of Justice,

pp. 79 and 92).

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. Broadly speaking, 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.

<sup>&</sup>lt;sup>1</sup> The Law Commissions (see p. 97) are working on the codification of certain branches of law.

CRIMINAL LAW
Criminal Courts
in England
and Wales

Magistrates'
Courts

There are two levels of criminal courts in England and Wales: magistrates' courts, which try and dispose of the great majority of criminal cases and conduct preliminary investigations into the more serious offences; and the Crown Court which takes all criminal work above the level of magistrates' courts.<sup>1</sup>

Magistrates' courts are for the most part presided over by lay magistrates ('justices of the peace'), of whom there are some 21,000, and who are part-time and unpaid. The jurisdiction of the courts is local, their areas being the counties which are divided into petty sessional divisions so that the courts are held in different places. The function of the courts, which consist of between two and seven magistrates, is to hear and determine charges against people accused of summary offences—minor offences that may legally be disposed of by the magistrates sitting together without a jury. In addition, magistrates may also try certain offences which would normally be tried on indictment—the more serious offences—if the accused consents to forgo his right to trial by jury. In fact, about 98 per cent of all criminal cases are disposed of in magistrates' courts. Magistrates also sit as 'examining justices' to conduct preliminary enquiries to determine whether there is sufficient evidence to justify the committal of the accused for trial in the Crown Court for a serious offence.

In inner London and a few large provincial cities there are, in addition to lay magistrates, stipendiary magistrates (39 in London and 11 elsewhere), who are full-time salaried lawyers, and usually sit alone. In the City of London, the courts consist of the aldermen of the City, who are magistrates *ex officio* by virtue of charters, as well as magistrates appointed individually. Benches of lay magistrates work with the help and advice of a justices' clerk (a barrister or solicitor or other person with court experience).

To hear cases involving people under the age of 17 brought before the court in care 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 who has attained the age of 17, 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 has jurisdiction throughout England and Wales. Served by High Court judges and circuit judges and, in addition, by recorders who sit on a part-time basis, it sits regularly at nearly 90 centres selected, as far as practicable, to be within daily travelling distance of the whole population.

There are three kinds of centre: first tier centres where the Crown Court is served by both High Court and circuit judges and where the High Court also takes civil business; second tier centres where, again, High Court and circuit judges sit in the Crown Court; and third tier centres, where the Crown Court is served only by circuit judges and recorders.

The jurisdiction of the Crown Court comprises trials on indictment (broadly, for the more serious offences), the sentencing of those committed for sentence from magistrates' courts, and appeals from magistrates' courts. This appellate jurisdiction includes certain civil as well as criminal appeals. In addition the court has a minor original civil jurisdiction.

A High Court judge, circuit judge or recorder presides at all trials of the Crown Court with a jury. A circuit judge or recorder sits with between two

 $<sup>^{\</sup>rm I}$  A committee is reviewing the distribution of criminal business between the Crown Court and magistrates' courts.

and four magistrates for appeals and committals for sentence from magistrates' courts, and may sit with magistrates for the less important trials on indictment. For the more important criminal trials, a High Court judge sits without any magistrates. In the City of London, where the Crown Court continues to be known as the Central Criminal Court, the Lord Mayor and aldermen are entitled to sit with any High Court judge, circuit judge or recorder in any class of work. The distribution of Crown Court business is determined by directions given by, or on behalf of, the Lord Chief Justice of England, with the concurrence of the Lord Chancellor; such directions allocate the various classes of offences to High Court judges, circuit judges and recorders.

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 by way of case stated—that is, by requesting the magistrate to 'state a case for the opinion of the High Court'. In certain cases, an appeal by case stated may lie to the High Court from the Crown Court, but normally appeals from the Crown Court, either against conviction or against sentence, are made to the Court of Appeal Criminal Division. Appeals against conviction may be brought to the court by right on any point of law, and with leave of the trial judge or the court on any question of fact or mixed fact and law. Appeals against sentence come with the leave of the court, provided that the sentence was in the discretion of the trial judge and not fixed by law. 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. In addition, 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.

# Criminal Courts in 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 court are tried under solemn procedure. Proceedings are taken under summary procedure in the less serious cases in the sheriff court, and in the justice of the peace and burgh (or police) courts.

Burgh (or Police) Courts and Justice of the Peace Courts The judges of burgh courts are town councillors who are serving (or have served) in the office of magistrate of the burgh. In Glasgow stipendiary magistrates act as judges of three of the courts. Justice of the peace courts are organised on a county (and county of city) basis, the judges being the justices of the peace for the county (or county of city). When local government in Scotland is reorganised in May 1975 (see p. 65), the burgh court will cease to exist. The form of summary criminal courts to be adopted after that date is being considered.

Sheriff Courts

Scotland is divided into sheriffdoms, each consisting of a county or combination of counties, and these sheriffdoms are further divided into sheriff court districts. A sheriffdom has a sheriff-principal and a number of sheriffs who act as the judges of the court. The sheriff courts exercise an extensive civil jurisdiction, as well as a criminal jurisdiction.

The High Court of Justiciary

The High Court of Justiciary is the supreme criminal court of first instance. 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.

## Proceedings Before Trial

Prosecutions

In the majority of cases there is no restriction on the right of a private citizen to institute criminal proceedings in England and Wales, but most prosecutions are, in practice, initiated and conducted by the police. In some cases the consent of the Attorney General or the Director of Public Prosecutions or, less frequently, a government department is required. The Director of Public Prosecutions is also concerned with prosecutions in all the more serious cases of indictable offences; in courts where a substantial number of cases with which he is concerned are tried, standing counsel are appointed by the Attorney General to appear on his behalf. At the Central Criminal Court in London, for instance, there is a panel of counsel known as Treasury Counsel, who are retained to prosecute in the Director's cases.

In Scotland the police make preliminary investigation of all cases of crime discovered by or made known to them, but it is for the Public Prosecutor concerned (the Lord Advocate in the High Court, the Procurators Fiscal in the sheriff court, and the justice of the peace fiscal and burgh prosecutor in the justice of the peace and burgh courts respectively) to decide whether or not to prosecute and, in the case of the Procurator Fiscal, to decide whether to proceed summarily or to charge the accused by petitition with a view to proceedings on indictment. There is a limited right to private prosecution by aggrieved people.

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, subject to his entering into a recognisance, with or without sureties, for a reasonable sum of money, to appear in court or at a police station at an appointed time. 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 magis-

trates, the defendant is entitled to apply to the Crown Court or the High Court, and he must be informed of this right.

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, although they do not have the force of law, nevertheless carry

very great weight.

A person detained in custody who thinks that the grounds for his detention are not lawful, may sue out a write 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. If no court is sitting the application may be made to a single judge who may, and in some cases must, direct that it should come before a divisional court. An application on behalf of anyone under 18 is always first made to a judge sitting in chambers or in private. A writ may be refused only by a divisional court.

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 the court competent to deal with his case 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.

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 prosecu-

Trial

<sup>&</sup>lt;sup>1</sup> 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.

tion 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.

Criminal trials in England and Wales are (with rare exceptions) held in open court and the rules of evidence (which are concerned with the proof of facts) are rigorously applied. For instance, although generally the evidence of one uncorroborated witness is, as a matter of English law, sufficient, where the evidence is that of an accomplice (or accomplices) the judge will warn the jury of the danger of convicting on such uncorroborated evidence and a conviction made without any such warning would not be upheld on appeal.

During the trial the defendant has the right to hear and subsequently to cross-examine (normally through his counsel) 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 counsel—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. The right to cross-examine him, even when he is so sworn, is limited by law, with the object of excluding enquiry into his character or into past offences not relevant to the particular charge on which he is being tried. 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 acquits the accused or passes sentence according to the verdict of the jury; but the jury alone decides the issue of guilt or innocence. 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 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. 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 in the affirmative, the defendant will be admitted to a hospital specified by the Home Secretary.

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 it is a case which 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 High Court for disposal.

The second 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. Fairness to the accused is ensured by the fact that, 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.

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.

CIVIL LAW

Civil Courts in England and Wales

Magistrates'
Courts

County Courts

The main civil courts in England and Wales are the county courts, which deal with a wide variety of civil cases, and the High Court, where those that cannot be decided in the county courts are heard. Magistrates' courts have limited civil jurisdiction, as does the Crown Court—mainly in connection with appeals from magistrates' courts. Most appeals in civil cases go to the Court of Appeal Civil Division and from there may go to the House of Lords.

The civil jurisdiction of magistrates' courts extends to matrimonial proceedings for separation 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 (of which there are 337) 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: actions founded upon contract and tort (except libel, slander, and some other types of case) where the amount claimed is not more than £750; equity matters, such as trusts and mortgages, 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 Act, landlord and tenant, and adoption. 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); outside London bankruptcies are dealt with in certain county courts; and complaints of racial discrimination brought by the Race Relations Board are heard in selected courts where the judge sits with assessors. Where small claims are concerned (especially those for less than £75 involving consumers), there are special facilities for arbitration and simplified procedures.

The High Court f 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 places 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.

Appellate Courts

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 and betting 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 14 Lords Justices of

Appeal.

The judges in the House of Lords are the ten 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 of Lords: judgments are given in the form of speeches to a motion, and the decision of the House is taken by a vote.

Civil Courts in Scotland The main courts of civil jurisdiction 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 nearly all actions and is 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 has universal jurisdiction, sits only in Edinburgh, and 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. 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.

Civil Proceedings In England and Wales civil proceedings are instituted by the aggrieved person; no preliminary enquiry as to the authenticity of the grievance is required. The most common form of proceedings is an action commenced 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. Other 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, solicitor's charge, court fees and other disbursements) are in the discretion of the court. Normally, the court orders the costs to be paid by the party losing the action.

In Scotland civil proceedings are initiated by the service on the defender of a writ or summons, which sets out the nature of the decree which the pursuer seeks, a statement of facts upon which the pursuer founds his claim, and a statement of the legal propositions upon which the pursuer maintains that he is entitled to the remedy which he seeks. 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 to it. In ordinary sheriff court actions 'entering appearance' is followed by the 'tabling of the cause', which involves a formal appearance in court by solicitors, or, in some cases, by the parties to the dispute. In summary and small debt actions the defender is simply given notice of the date on which the action will be heard. It is much more common in Scotland than in England and Wales to have legal debates in court as to the competency or relevancy of the written pleadings prior to the proof. In Scotland a pursuer can abandon his case,

including any matrimonial case, at any time, but, where abandonment is sought after the commencement of the proof or trial, only with leave of the court. 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.

#### NORTHERN IRELAND

The superior courts in Northern Ireland comprise the Supreme Court of Judicature (consisting of the High Court of Justice and the Court of Appeal) and the Court of Criminal Appeal. The High Court, the superior court of first instance, is divided into the Chancery Division, the Queen's Bench Division (including probate, matrimonial and Admiralty proceedings) and the circuit courts and is constituted of the Lord Chief Justice, as president, and four judges. The Court of Appeal, which is the appellate tribunal, is constituted of the Lord Chief Justice and two Lords Justices of Appeal.

The inferior courts are the county courts and courts of summary jurisdiction (petty sessions). The county courts exercise both civil and criminal jurisdiction and are presided over by county court judges, of whom there are nine (two of them having a title of recorder—of Belfast and of Londonderry). The establishment has been proposed of a central criminal court for the Belfast region, to which the original criminal jurisdiction of county courts lying within the region should be transferred. At least four sittings of the court are held annually in each division. Petty session courts are composed of one resident magistrate (who corresponds to a stipendiary magistrate in England and Wales) who normally sits alone. Juvenile courts, which deal with children or young persons between the ages of 10 and 17 unless charged jointly with an adult or committed for jury trial in the case of a more serious offence, are composed of one resident magistrate and two lay members, one of whom must be a woman.

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.

#### SPECIAL COURTS

# Coroners' Courts

Coroners' courts are common law courts convened when a person appears to have died a violent or unnatural death or a sudden death of which the cause is unknown, and in certain other circumstances. Such cases may be brought to the notice of the local coroner (who must be a barrister, a solicitor, or a legally qualified medical practitioner, of not less than five years' standing, appointed by the county council or, in London, by the Greater London Council) by medical practitioners, by the police, by various public authorities or by members of the public, and it is his duty to hold an enquiry into how, when and where the deceased died. He may hold an inquest in court for this purpose, and he must do so if he has reason to believe that the deceased has died a violent or unnatural death or has died in prison or in circumstances for which an Act of Parliament provides that an inquest must be held. If the coroner has reason to suspect that the death was due to murder, suicide, manslaughter, or infanticide, or was caused by an accident arising out of the use of a vehicle on the public highway, he must summon a jury.

In Scotland the office of coroner does not exist. The Procurator Fiscal enquires privately into all sudden and suspicious deaths in his district and may

report the result of his enquiries to the Crown Agent in order that Crown Counsel may consider what proceedings, if any, are required.

In Northern Ireland coroners must, on appointment, be either barristers-atlaw of not less than five years' standing practising in Northern Ireland or practising solicitors of the Supreme Court of Judicature in Northern Ireland of not less than five years' standing.

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 and family allowances; 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 persons so that a majority decision can be reached; members are usually 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 of tribunals hold office for a period specified in the warrant or instrument by which they are appointed.

There are also tribunals which enforce professional discipline, such as the General Medical Council and the Disciplinary Committee administered by the Solicitors Acts 1957–65, 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 lie to a specially constituted appeal tribunal, to a minister of the Crown or to an independent referee. An advisory body known as 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.

Criminal Injuries Compensation Board The Criminal Injuries Compensation Board consists of a chairman of wide legal experience and eight other legally qualified members appointed by the Home Secretary and the Secretary of State for Scotland after consultation with the Lord Chancellor. Its function is to entertain applications for *ex gratia* payments of compensation, in certain circumstances, to victims of crimes of violence in Great Britain or on a British vessel or aircraft. Compensation, which is assessed on the basis of common law damages and usually takes the form of a lump sum payment, amounted to over £4 million in 1973–74. Over

<sup>&</sup>lt;sup>1</sup> Excluding supervision of the professional disciplinary tribunals.

£19 million was awarded in compensation between August 1964 (when the scheme began) and the end of March 1974. A review of the working of the scheme is in progress.

In Northern Ireland there is statutory provision for compensation for criminal injuries and also for malicious damage to property.

#### **Courts Martial**

Courts martial have statutory jurisdiction over serving members of the armed forces and, in certain circumstances, their dependants and other civilians who accompany them outside the United Kingdom. Courts martial may not deal with certain serious offences if committed in the United Kingdom. These include: treason; murder; manslaughter; treason-felony; rape; and aiding, abetting, counselling or procuring suicide. Civil offences committed in the United Kingdom by members of the armed forces 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 cases brought under the Army and Air Force Acts (and at every trial brought under the Naval Discipline Act) to advise upon law and procedure and, in the former case, to sum up the evidence. The judge advocate in the case of the Army and the Air Force is a civilian and a barrister appointed by the Office of the Judge Advocate General. In the case of the Navy he is a legally qualified serving officer appointed by the convening authority.

Appeals lie to the Courts Martial Appeals Court, and from that court to the House of Lords if the court certifies that a point of law of general public importance is involved and it appears to the court or to the House of Lords that the point is one that ought to be considered by the House.

# **European Court** of Justice

Under the European treaties, questions of the validity and interpretation of Community law may be referred by the courts of the United Kingdom to the European Court (see p. 79), and must be so referred when there is no judicial remedy under national law, that is, when the question arises in a final court of appeal, such as the House of Lords. In a case of this kind, the European Court makes a preliminary ruling, which is binding on the national court on that particular point. However, it remains with the national court to make a substantive decision on the whole issue.

OF THE **IUDICIAL** SYSTEM

ADMINISTRATION In the United Kingdom the judiciary is independent of the executive and is therefore not subject to ministerial direction or control in regard to the judgment of the courts. Responsibility for administrative matters in England and Wales, when it does not rest with the courts themselves, lies partly with the Lord Chancellor and partly with the Home Secretary; in Scotland it lies with the Secretary of State. In England the Lord Chancellor is concerned with the composition of all courts, both criminal and civil, with parts of criminal procedure and with everything relating to civil law, and the Home Secretary with criminal law, preventing offences, apprehending offenders, part of the process of trying them, and virtually the whole of their treatment. The Prime Minister is concerned in that he is responsible for recommending to the Crown the highest judicial appointments. The Secretary of State for the Environment is responsible for providing accommodation for all the superior courts, except the Central Criminal Court which is the special responsibility of the City of London.

The administrative business of the Supreme Court of Judicature (the Court of Appeal, the High Court and the Crown Court) and the appointment of the officers of the court are in the hands of the Lord Chancellor. The Lord Chancellor is a member of the Supreme Court, the Crown Court and the Matrimonial Causes Rule Committees; and he appoints the County Court Rule Committee, and has power to alter or disallow the rules made by it.

The Lord Chancellor's responsibility for the administration of the High Court, the Crown Court and the county courts is exercised through a unified court administrative service organised on a circuit basis under a senior officer, known as a 'circuit administrator'. Two High Court judges, known as 'presiding judges', are assigned to each circuit; these judges are not concerned with administrative detail and continue their normal judicial work, but they exercise a supervisory and advisory function in the circuit, with particular responsibility for the allocation of work among all the judges. The Lord Chancellor has also appointed 18 advisory committees, consisting of lawyers, magistrates, police officers, and representatives of local authorities, the police and probation services, and the press, to advise him on such matters as he may refer to them on the running of the courts. These committees normally meet under the chairmanship of the circuit administrator.

Magistrates' courts are mainly administered by the magistrates themselves, chiefly through committees known as magistrates' courts committees (the committee of magistrates in inner London), but the local authorities, with financial assistance from the Government, are responsible for meeting their costs, and the Home Secretary, besides exercising a general oversight, has certain specific responsibilities, including the approval of boundary changes to petty sessional division areas, approval of the appointment of justices' clerks, and deciding disputes on financial matters.

In Scotland the Secretary of State appoints the staff of the High Court of Justiciary and the Court of Session and is responsible for the composition, staffing and general organisation of the sheriff courts. The Lord Advocate appoints the members of the Scottish Law Commission.

In Northern Ireland the administration of the courts is the responsibility of the United Kingdom Parliament. The Northern Ireland Office is responsible for the staffing and general organisation of the county and petty sessions courts.

# THE PERSONNEL OF THE LAW

The operation of the law requires the participation of judges, with whom, aided in certain cases by juries, the decision of disputed cases rests, and of the officers of the court, who have general or specialised functions of an administrative (and sometimes of a judicial) nature in the courts to which they are attached. Barristers (advocates in Scotland) and solicitors who are entrusted with representing the interests of the parties to a dispute are also involved because, although the law allows an individual to conduct his own case if he wishes, most people prefer to be legally represented.

# Judges

The courts of the United Kingdom are the Queen's Courts (since the Crown is the historic source of all judicial power) and the Sovereign, acting on the advice of ministers, is responsible for all appointments to the judiciary. In England and Wales appointments to the highest positions—the Lords of Appeal in Ordinary, the Lord Chief Justice, the Master of the Rolls, the President of the Family Division and the Lords Justices who are the judges of the Court of Appeal—are made on the recommendation of the Prime Minister, while the Lord Chancellor recommends the appointment of High Court

judges, circuit judges and recorders and the metropolitan and other stipendiary magistrates. Lay magistrates are appointed on behalf of the Crown by the Lord Chancellor, who is advised by local advisory committees.

In Scotland the Prime Minister makes recommendations for the appointment of the Lord Justice General and Lord President and also of the Lord Justice Clerk. Power of submission for appointment of all other judges lies with the Secretary of State for Scotland. The Secretary of State is responsible for the appointment and removal of justices of the peace.

In Northern Ireland the appointment of county court judges and magistrates

is, broadly speaking, a matter for the Lord Chancellor.

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 in power. With the exception of lay magistrates, judges are normally appointed from practising barristers, advocates or solicitors and neither their training nor their career is in any way dictated by the state. Lay magistrates 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. 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, subject to specified conditions, by the Secretary of State on a report prepared at his instance 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

A jury in England and Wales summoned to a criminal or civil court consists of 12 persons (except in county courts, where it consists of eight persons). In Scotland the jury consists of 15 persons in criminal cases, 12 persons in civil cases in the Court of Session and seven in civil cases in the sheriff court. In Northern Ireland the jury numbers 12 in ordinary criminal<sup>2</sup> and seven in civil cases. Jury service in England and Wales is determined by a qualification based on the electoral register: all citizens between the ages of 18 and 65, subject to a five-year residence qualification, are liable for jury service. However, people following certain occupations are either ineligible or entitled to claim excusal, and certain persons with criminal records are disqualified. Jury service in Scotland, for which citizens between the ages of 21 and 60 are liable, is based on a low property qualification. In Northern Ireland it is also based

<sup>&</sup>lt;sup>1</sup> Except in Lancashire, where the Chancellor of the Duchy acts on behalf of the Crown in this matter.

<sup>&</sup>lt;sup>2</sup> Under the Northern Ireland (Emergency Provisions) Act 1973, trials of 'scheduled offences' (generally speaking, offences involving terrorism) are heard by a single judge, sitting without a jury.

on a property qualification but proposals for a system similar to that in England and Wales are being considered.

A jury is completely independent of both the judiciary and the executive. In criminal cases the accused can have up to seven jurors (in Scotland, five) changed without giving reasons and both defence and prosecution can object for cause shown (for instance, lack of impartiality), but once members of the jury have been sworn, they are protected by law from interference of any kind.

At certain inquests at coroners' courts in England and Wales and Northern Ireland and at fatal accident inquiries in Scotland, a jury is required to be present to return a verdict on how, when and where a deceased person died. Juries in this instance consist of from seven to eleven jurors. In England and Wales a coroner may accept a majority verdict provided that the minority consists of not more than two. At fatal accident inquiries in Scotland a simple majority is sufficient. A jury is also required at an inquest held by a coroner in England and Wales to decide whether objects of gold or silver found in the ground are 'treasure trove'.

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 performs 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.

To become a barrister in England a student must have reached an accepted educational standard, have passed certain examinations and attended certain courses prescribed by the Council of Legal Education. He must also have become a member of one of the four Inns of Court—Lincoln's Inn, the Inner Temple, the Middle Temple and Gray's Inn—where he must keep a number of terms. He may then be called to the Bar, but is normally not allowed to practise until he has kept further terms and completed six months' pupilage with a practising barrister of at least five years' standing. Most higher judicial offices are filled from the ranks of senior barristers (known as Queen's Counsel). The Senate of the Inns of Court and the Bar, the governing body of the profession, comprises representatives of each Inn of Court and representatives elected by barristers themselves. The latter also constitute an autonomous Bar Council charged with maintaining the standards and independence of the profession and improving 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, two and a half, or five years, depending upon the educational qualifications of the student. An articled 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' pupilage 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 AND ADVICE Britain's legal aid scheme helps people of limited means and resources to meet the cost of work normally done by a lawyer. Under the scheme lawyers' costs and expenses are paid out of a state legal aid fund drawn from three sources: contributions which assisted people may be required to pay; costs and damages recovered from opposite parties in litigation; and a grant from the Exchequer.

Legal Aid in Civil Proceedings Free legal aid is available to people whose disposable income does not exceed £375 a year, and whose disposable capital is £250 or less, but, if either of these figures is exceeded the applicant must pay a contribution towards the cost of the proceedings. The qualifying limits for this contributory aid are a disposable income not exceeding £1,175 a year and a disposable capital of less than £1,200 or such larger figures as may be prescribed.¹ An assisted person is liable for a maximum contribution towards the cost of his case of a third of the sum by which his disposable income exceeds £350 a year, together with the amount by which his disposable capital exceeds £125 or such larger figures as may be prescribed.

The 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 asserting or disputing a claim. 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 the public expense. Legal aid is not available for proceedings in tribunals (except the Lands Tribunals and the Commons Commissioners), coroners' courts and cases where redress is sought for alleged defamation.

Legal 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 interest of justice and that a defendant's means are such that he requires financial help in meeting the costs

<sup>&</sup>lt;sup>1</sup> 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.

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 sentenced for the first time to a term of imprisonment, borstal training or detention in a detention centre 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.

Broadly similar arrangements exist in Scotland and Northern Ireland, but in Scotland there is in addition a duty solicitor system which enables people in custody to be represented on first appearing in court without any inquiry into

their means.

# Legal Advice and Assistance

Under provisions for legal advice and assistance, introduced in Great Britain in 1973, a person may obtain help on any matter normally within a solicitor's practice, except for taking steps in court or tribunal proceedings (for the former legal aid is available in the ways outlined on p. 96, although magistrates' courts and county courts, and sheriff courts in Scotland, have power to appoint a solicitor to represent a person appearing before them). This help includes giving advice, writing letters, drafting wills, obtaining counsel's opinion and visiting a police station or prison. A solicitor may act for a client until his costs and expenses reach a total of £25, but authority may be obtained from The Law Society 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. People with disposable capital of up to £250 who are also receiving either supplementary benefits (see p. 128) or family income supplement (see p. 122) are within the financial limits; other people are also eligible provided their disposable capital does not exceed £250 and their weekly disposable income does not exceed £24.50 (in this case a small contribution may be payable).

Similar provisions are proposed for Northern Ireland.

#### 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 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 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. The Commission submits programmes of reform to the Lord Chancellor and may recommend further examination of specified topics by itself or by some other body, such as a Royal Commission or the Law Reform Committee or Criminal Law Revision Committee. The Lord Chancellor may also ask the Commission to prepare draft Bills or to advise government departments. In the course of its work the Commission seeks information about the legal systems of other countries in so far as this may assist its work. The Scottish Law Commission has a constitution similar to that of the English body and similar functions in relation to the law of Scotland. It reports to the Lord Advocate.

## THE POLICE SERVICE

The police service of Great Britain is organised in a number of large forces linked with local government and subject to the influence and eventual control of the Home Secretary in England and Wales and the Secretary of State for Scotland in Scotland. In Northern Ireland, it is organised in a single force.

POLICE IN GREAT BRITAIN

Police Forces

There are 63 regular police forces in Great Britain: 43 in England and Wales and 20 in Scotland. Each police force is responsible for a separate police area, but there is constant co-operation between them.

In England and Wales the forces are defined according to area of responsibility: outside London most counties have their own forces, though in the interests of efficiency several have combined forces; the Metropolitan Police Force is responsible for an area within a radius of about 15 miles (24 kilometres) from Charing Cross, but excluding the City of London (for which there is a separate force). In Scotland the four burgh forces, 15 combined forces, and one county force will be replaced in May 1975 by six regional forces and two combined forces.

The strength of the regular police force in Great Britain is over 111,000, 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, there are constabularies maintained by the statutory transport and other public authorities, and by the Ministry of Defence.

Police Authorities and Chief Constables Each of the regular police forces is maintained by a police authority. In the counties of England and Wales the authority is a police committee consisting of the local councillors and magistrates in a proportion of two to one. Combined police authorities, which also consist of councillors and magistrates, contain representatives from each constituent area covered by an amalgamation scheme.

The police authority for the Metropolitan Police Force is the Home Secretary. In the City of London the Court of Common Council is the police authority, although it usually appoints a standing committee to deal with all police matters on its behalf.

In Scotland the police authority for the county is the county council; in the burghs it is the town council. From May 1975 the police authority will be the regional or island council. Where there are combined forces there is a joint

police committee.

The primary duty of the police authority is to provide an adequate and efficient police force for the area for which it is responsible. To enable it to carry out this duty, it is empowered, subject to the approval of the Home Secretary or Secretary of State for Scotland, to appoint the chief constable and the deputy and assistant chief constables of the force, and fix the authorised establishment. It may also retire the chief constable in the interests of efficiency, if the Home Secretary or the Secretary of State for Scotland agrees, and must keep itself informed of the way in which chief constables deal with complaints from the public against police officers. In addition, police authorities, with the consent of the Secretary of State, provide the buildings and equipment needed for their forces. In the Metropolitan Police area the chief officer of police and his immediate subordinates are appointed by the Crown 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 are required to submit a written annual report.

# Central Authority

The Home Secretary and the Secretary of State for Scotland, who have a general responsibility for the preservation of law and order throughout Great Britain, are concerned both in the overall organisation of the police service and in its administration and operation. In this regard, they not only approve the appointment of chief constables, but 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 as to the government, administration and conditions of service in police forces.

The police regulations cover 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 are first negotiable on the Police Council (a negotiating body on which are represented the police authorities, police staff associations and ministers); the others are discussed on representative advisory bodies together with any general questions affecting

the police service.

The Home Secretary is advised on all matters concerning police efficiency by Her Majesty's Chief Inspector of Constabulary and five Inspectors of Constabulary. The inspectors are individually responsible for the inspection of a number of forces, and must be satisfied of their continuing efficiency through formal annual inspections and by maintaining close touch on all matters with the forces for which they are responsible. The inspectors report to the Home Secretary on the condition of all the forces in England and Wales, with the exception of the Metropolitan Police Force. The Secretary of State for Scotland is similarly assisted by Her Majesty's Chief Inspector of Constabulary in Scotland and one other Inspector of Constabulary.

The income of police authorities derives from the central Government, from a police rate levied on the ratepayers of the area, and from various other local sources. The Government's contribution, which (except in the case of the City of London police, where it is  $33\frac{1}{3}$  per cent) is a 50 per cent grant of approved expenditure, is conditional on the Home Secretary or the Secretary of State for Scotland being satisfied that the force is being efficiently ad-

ministered and maintained.

## **Police Officers**

In general, entry to the regular police force is open to men between the ages of 19 and 30, and to women in England and Wales between the ages of 19 and 35, and in Scotland between 19 and 30. An individual chief constable may

approve 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. In the Metropolitan Police area the chief officer is the Commissioner of Police of the Metropolis. He 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 rest of the country. 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.

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.

Police Cadets

Police cadets are recruited from among boys and girls¹ between 16 and 18½ years of age. They have no police powers but in addition to their educational studies and physical and adventure training, are given instruction in elementary police work. During the latter part of their training they do practical police work on attachment to the local force. Cadet training is designed to prepare boys and girls for a career in the police service upon attaining the minimum age for constables.

Civilian Staff

In order to release as many police officers as possible for operational duties police authorities employ a large number of civilians (about 30,000) on administrative (pay, records, finance, and other general subjects) and other duties (fingerprint, scenes of crime and control room work). Some civilian staff are also employed on catering and domestic duties.

Traffic Wardens

Traffic wardens (of whom there are about 7,000) are extensively employed to discharge specified duties connected with road traffic and vehicles, normally undertaken by the police. In this connection they may be authorised to serve fixed penalty notices² for minor offences to which the fixed penalty system applies; to man police car-pounds (except in Scotland); to enforce the vehicle excise laws; and to obtain the name and address of people thought to have committed a traffic offence of the type with which traffic wardens are competent to deal. They may also be employed to direct traffic, to act as parking attendants at street parking places, and as school-crossing patrols, if the police agree. Traffic wardens remain under the control of the chief constable of the force to which they are attached, whatever duties they may perform.

Special Constables Each of the regular police forces 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.

**Police 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.

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.

The main departments in all police forces are the uniform department and the criminal investigation department. Many forces also have specialised departments, including traffic departments, river police (in districts which

<sup>1</sup> There are a few forces which do not recruit girls.

<sup>&</sup>lt;sup>2</sup> A fixed penalty notice in England and Wales gives the recipient the option of paying a specified sum to the clerk of the appropriate magistrates' court instead of having his case tried in the ordinary way.

include long stretches of navigable waterway), a mounted branch (for main-

taining order and safety in large crowds), and police dogs.

In all aspects of police work, the application of scientific aids has reached an advanced stage: about £20 million is spent annually on police equipment, including about £3 million on radio communications; the police have some 30,000 personal radio sets operational; and a police computer project is being developed for rationalising the keeping of records and speeding up the dissemination of information.

Co-ordination between Police Forces 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 forces themselves. The most important of these services are: training services, which in England and Wales provide training centres for recruit training and a central police college for higher training, and in Scotland a central police college with courses of recruit training and higher training; 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 enquiries in more than one police area. The Scottish Crime Squad assists police forces in Scotland in the investigation and prevention of crime and in the collection and maintenance of information concerning criminals. Arrangements are also made for everyday assistance by one force to another.

Scientific Research and Planning

There are three inter-related branches of the Home Office Police Department devoted to scientific research and medium- and long-term planning. The Police Scientific Development Branch and the Police Research Services Branch, which are staffed by senior police officers, are concerned with operational research into police methods and the development of equipment for police forces throughout Great Britain. The Police Management and Planning Group, which is composed mainly of economists and accountants, is responsible for the development of a planning-programming-budgeting system for the police, and for the planning of police resources.

Metropolitan Police Force Services Services provided by the Metropolitan Police Force for other forces include (1) the publication of the *Police Gazette*, which contains particulars of people wanted for crime and details of stolen property, and is supplied without charge to the police forces of the United Kingdom and to certain other Commonwealth and foreign forces; (2) the organisation and control of the special branch of the criminal investigation department at New Scotland Yard, whose duties include the protection of royalty, some ministers and distinguished foreign visitors; and (3) the carrying out of extradition orders made by the courts. The Metropolitan Police Force is also available, on request, to assist any other police force in England and Wales in criminal investigations. Similarly, the services of the Fraud Squad, run jointly by the Metropolitan Police Force and the City of London Police, are available throughout Great Britain for the investigation of serious company frauds. The National Central Bureau, which

<sup>&</sup>lt;sup>1</sup> The Scottish Criminal Record Office in Glasgow is responsible for the publication of the Scottish Police Gazette.

handles the business of the International Criminal Police Organisation (Interpol) on behalf of Great Britain and the British dependencies, is part of the Metropolitan Police Force. For certain of these services, the Metropolitan Police Force receives an additional Exchequer grant.

POLICE IN NORTHERN IRELAND The Royal Ulster Constabulary (RUC) operates under the direction of a chief constable who is responsible to the Police Authority for Northern Ireland.

The RUC, which has a strength of nearly 4,500 (all ranks), operates throughout the Province on a divisional basis. Ranks, conditions of service, pay and general duties follow closely on the lines of the police service in Great Britain. The Police Authority, which consists of a chairman, a vice-chairman and between 14 and 20 other members, is responsible for the maintenance of an adequate and efficient police service.

The RUC is assisted in its police duties by the Royal Ulster Constabulary Reserve, the members of which receive nominal remuneration. While on duty, they have the same powers, privileges and duties as may be exercised by, or are conferred upon, members of the regular force.

#### 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 intended to lie in the fear of detection, public trial and possibility of punishment rather than in the severity of the punishment itself. In England and Wales the Home Secretary is assisted by an Advisory Council on the Penal System, which makes recommendations on such matters relating to the prevention of crime and the treatment of offenders as the Home Secretary may refer to it. In Scotland the Scottish Council on Crime keeps under review questions relating to the prevention of crime and the treatment of offenders in Scotland, in consultation with the Secretary of State for Scotland.

**Penalties** 

Methods current in British penal practice include imprisonment and, for certain categories of young offender, other forms of custodial treatment (see p. 100). Imprisonment is increasingly being seen as the last resort in dealing with those who break the law; wherever possible and appropriate for the safety of the public and the punishment of the individual, sentencing offenders to treatment outside prison is regarded as preferable to custodial penalties. Offenders may, for example, be put on probation; ordered to perform a specified number of hours of unpaid service to the community; fined; given an absolute or (in England, Wales and Northern Ireland) conditional discharge for up to three years, or 'bound over'— that is to say, required to pledge money, with or without sureties, 'to keep the peace and be of good behaviour'. In England, Wales and Northern Ireland, they may be given a suspended sentence, which means that the sentence will not actually be served unless a further offence punishable with imprisonment is committed within a specified period (maximum two years). If a crime is committed within the period of a suspended sentence, the sentence will normally take effect and a further sentence may be imposed. An offender who is given a suspended sentence of over six months may, in England and Wales, be made subject to a supervision order for all or part of the period during which the sentence is suspended. An offender may also have his sentence deferred for up to six months with his consent (this is intended to enable a court to arrive at the most appropriate sentence, taking into account the offender's 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 certain circumstances, may order the forfeiture of property used, or intended for use, in the commission of a crime. In the case of major crimes against property the Crown Court has power to make a criminal bankruptcy order against the offender, which can form the basis of bankruptcy proceedings against him. The Crown Court also has power to disqualify from driving an offender convicted of one of the more serious crimes, 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 for manslaughter and certain other offences, including rape, robbery with violence, and arson.

Except in cases of murder (and of one or two other rarely prosecuted offences), for which the penalty is prescribed by law, the court which tries the offender has discretion to select the penalty that it considers most suitable in the light of the nature and gravity of the offence and the information available about the character and needs of the offender. In certain cases this discretion is modified by statutory provisions designed for the most part to ensure that prison sentences are kept to a minimum. In England and Wales, no offender under the age of 17 may be sentenced to imprisonment; for those aged 17 and under 21, prison sentences must be for less than six months or for more than three years except in the case of an offender who has served a sentence of borstal training or a prison sentence of not less than six months, who may be sent to prison for 18 months or more. In Scotland no offender under 21 may be sent to prison; in cases involving young people aged 16 and under 21, where neither borstal training nor detention in a detention centre is thought appropriate, detention in a young offenders' institution may be ordered. (For special sentences for young offenders, see p. 108.) In England and Wales 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 unless the court is satisfied that no other sentence will suffice. On the other hand, special sentences of somewhat longer duration (extended sentences) may be imposed on persistent offenders.

In Northern Ireland special temporary procedures are provided for dealing with people suspected of terrorism, but there are safeguards for the individual based on referral to independent legal commissioners with a further right of appeal to a tribunal.

# Administrative Authorities

In England and Wales the Home Secretary is the minister generally responsible for legislation relating to the treatment of offenders, for collecting statistical and other information about the operation of the penal system, for keeping penal methods under review, and for bringing information about these methods to the attention of the courts. He has specific responsibilities for promoting the efficiency of the probation service, and for providing, maintaining and managing prisons, borstals, detention centres, remand centres and attendance centres. Prison policy is carried out by the Prison Department of the Home Office through the agency of the prison service which operates under a director-general and includes a headquarters organisation, regional directors, the governors and staff of the penal establishments and members of particular professions, such as medical officers, chaplains and social workers.

Reports to the Home Secretary on the administration of institutions in the penal system are made by boards of visitors appointed by the Home Secretary, not less than two members of which must be magistrates (see p. 94). The other functions of these bodies include acting as the superior disciplinary authority for reports of a more serious nature against inmates and providing an independent channel of complaint for any inmates having a grievance. The boards of visitors also advise on the release on licence of the inmates of borstals. The work of boards helps to preserve local interest, and is voluntary.

The penal systems in Scotland and Northern Ireland are based on principles similar to those applied in England and Wales. In Scotland the system is the responsibility of the Secretary of State for Scotland, and in Northern Ireland

of the Northern Ireland Office.

Prisons

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 designed to lead to the prisoner's rehabilitation and reform. To this end prisoners are classified into groups, according to their record, character, potentialities and the risk they present to security, and assigned, so far as circumstances permit, to the establishment best suited to their needs. Untried prisoners are entitled to privileges not granted to convicted prisoners. As far as practicable, unconvicted prisoners are separated from convicted prisoners, and those under 21 are separated from those over that age.

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. Since 1970 there has been a downward trend in the number of people serving sentences in prison, the average figure in England and Wales in 1973 was under 37,000. There has also been a movement away from prison as a sentence—in 1972 out of every 1,000 adult males found guilty of indictable offences in England and Wales 197 were sent to prison (compared with 440 in 1953). To relieve overcrowding and to improve conditions generally, new prisons are being built and

existing establishments redeveloped and modernised.

Remission of Sentence and Parole

On reception under sentence, all prisoners, except those sentenced to imprisonment for life, are credited with remission of one-third of their sentence provided that this does not reduce their sentence below 31 days (in Scotland, 30 days). In addition, except in Northern Ireland, prisoners serving fixed sentences become eligible for consideration for release on parole after serving one-third of their sentence, subject to a minimum of one year. Each eligible prisoner is first considered by a local review committee which reports to the Home Secretary or the Secretary of State for Scotland on his suitability for parole. In some cases the minister concerned has power to grant or refuse parole, while others he refers to an officially appointed Parole Board (there is one for England and Wales and one for Scotland). Where the Parole Board recommends favourably, the decision whether or not to release a prisoner depends finally on the minister, but where the Board does not recommend release the minister has no power to grant parole. The 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. In England and Wales the practice is for cases to be referred to the local review committee at a date fixed for each case after consultation between the Paroel

Board and the Home Office. In Scotland the usual practice is to seek the views of the local review committee after the offender has served seven years. Each case is considered by the minister and forwarded to the appropriate Parole Board. The Lord Chief Justice in England or the Lord Justice General in Scotland (as the case may be) and, if he is available, the judge who presided at the trial must be consulted before any life sentence prisoner is released. In Northern Ireland, where the Northern Ireland Office is responsible for the release on licence of prisoners serving life sentences, the judiciary is similarly consulted before any such release takes place.

**Employment** 

In England and Wales prison work is controlled by the Directorate of Industries and Supply of the Prison Department of the Home Office. Technical advice and services to workshops are provided by visits from regional and headquarters staff, and industrial managers at establishments assist governors with the day-to-day running of the workshops. In Scotland there is a Supervisor of Industries and Training, who advises the Director of the Prison Service on industrial employment (including agriculture) and training. In Northern Ireland general supervision of prison work is exercised by the Northern Ireland Office in consultation with other departments.

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 requirements of the prison service itself—building and maintenance, domestic services and equipment. Goods and services are also supplied to other government departments and, on an increasing scale, to other purchasers, both inside and outside the public service. A few prisoners are employed outside prison in agriculture and on work such as archaeological excavation and the preservation of canals.

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 a progressive system of earnings, related to work done, is being gradually introduced.

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 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 in Great Britain is provided by local education authorities in close liaison with the Department of Education and Science, and in Scotland with the Scottish Education Department. Each establishment has an education officer assisted by a number of part-time teachers and, increasingly nowadays, one or more full-time teachers. Prisoners may attend evening classes and take correspondence courses when these are available; other educational facilities, such as physical training, concerts, plays, films, lectures and group discussions, are arranged where facilities allow; prisoners may also use the prison libraries, which depend largely upon the local public libraries for their stocks. Selected prisoners undertake vocational training courses, leading to an acknowledged qualification. Experiments with Open University studies, full-time education and day-release from prison work for study are being carried out. Education in prisons in Northern Ireland is the responsibility of the Northern Ireland Office. Facilities are similar to those in Great Britain.

Medical Services

Medical attention is provided by full-time and part-time medical officers

whose duties include the care of the physical and mental health of prison inmates, and the oversight of those services which affect health in prisons.

In a few prisons there are large, fully equipped hospitals where major surgery can be undertaken and treatment by visiting specialists given both to inmates and to prisoners from other establishments. The one psychiatric prison (in England and Wales) can accommodate some 350 people.

The hospital facilities of the National Health Service (see Chapter 6) are available for the treatment of prisoners in appropriate cases and arrangements may be made, where necessary, for prisoners to receive treatment after release.

Psychological Services Since the first prison psychologist was appointed in 1946 there has been a constant development of the application of psychological principles to the tasks of the penal system. The work of a prison psychologist varies from one place to another, but often includes the assessment of prisoners, management and institutional processes and staff training and selection. Several prisons have their own psychiatric clinics.

Privileges and Discipline

All prisoners, from the beginning of their sentence, have a legal right to write and receive letters and to be visited by their relations 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, who have power to order, among other penalties, forfeiture of re-

mission 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, who, in England, Wales and Northern Ireland, are 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.

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 minister of the Methodist Church are appointed to every prison. Ministers of other denominations are appointed or specially called in as needed.

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.

In England and Wales pre-release courses are conducted at all prisons. During these courses experts hold open forum with prisoners nearing their release on the domestic, social and employment problems with which they are likely to be faced. Certain categories of prisoners may be granted home leave towards the end of their sentences to enable them to preserve 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. Some categories are considered for two periods of home leave, one allowing five clear days and the other a week-end at home, and others for one period of five days at home.

# Probation and After-care

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. After-care, which includes compulsory supervision for certain categories of offenders (including prisoners released on licence and people who have been given suspended sentence of more than six months) is aimed mainly at helping former prison inmates to adjust themselves to life in a free community. In England and Wales both services are provided by probation and after-care officers employed by probation and after-care committees composed for the most part of magistrates. In Scotland the responsibility for statutory and voluntary after-care is vested in social workers from the local authority social work departments. In Northern Ireland the Northern Ireland Office has responsibility for the probation and after-care service.

Before making a probation order (which may be for not less than one and not more than 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.

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 condition 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 families in need, the handicapped, and the elderly; building adventure playgrounds; clearing sites at redevelopment areas; and nature conservation tasks.

In England, Wales and Northern Ireland, the services of probation and after-care officers are available to every criminal court. In England and Wales their appointment is the responsibility of probation and after-care committees—first appointments, except in the case of professionally trained officers, being subject to confirmation by the Home Secretary. In Northern Ireland the Northern Ireland Office appoints probation officers.

In Scotland, where there is no separate probation service, the local authority social work departments provide the services and officers required by the criminal courts in their areas. Offenders subject to probation orders or to after-care supervision following release from a penal institution are supervised by specially approved social workers from these departments. Recruitment is the responsibility of the local authority concerned, and appointments are not subject to ministerial confirmation. Unqualified staff appointed to posts in social work departments can be seconded for professional training after one year in post.

Responsibility for the promotion, and recognition of courses for the training

of social workers, including probation officers, is vested in the Central Council for Education and Training in Social Work.

#### YOUNG OFFENDERS

The Children and Young Persons Act 1969 (for England and Wales) provides for the care and treatment of juvenile offenders¹ and gives local authorities wide responsibilities for undertaking, through social workers, enquiries and consultations with parents, schools and the police, and for the care or supervision of a child or young person alleged to be an offender and in need of care or control. No child under ten years of age can be held criminally responsible in England and Wales; the minimum age for prosecution is ten years.

Nearly all children charged with offences or brought before the court as being in need of care or control are dealt with in a juvenile court (see p. 82). In Scotland the age of criminal responsibility is eight years, but 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.

The principal orders available to the juvenile courts in England and Wales in both care and criminal proceedings are: a care order, which commits the child to the care of the local authority; a supervision order (usually valid for three years or less) under which a child will normally remain at home under the supervision of the local authority or a probation officer (see p. 107); an order requiring a parent or guardian to enter into a recognisance to take proper care of the child or young person and to exercise proper control over him; and a hospital or guardianship order in accordance with the Mental Health Act 1959. In criminal proceedings the courts may also impose fines, order payment of compensation, grant a conditional or absolute discharge or make an attendance centre order. For boys aged 14 years or over, courts may make a detention centre order, and young people of 15 years and over may be committed to the Crown Court with a view to borstal training. The system of local authority community homes for young people is described on p. 142.

In Scotland a children's hearing may commit a child to supervision by a local authority subject to conditions appropriate to the child's needs for compulsory care (this may include a requirement to stay in a residential home). The treatment of young adult offenders in England and Wales (aged 17 to 20 inclusive) is under review following a report by the Home Secretary's Advisory Council on the Penal System (see Bibliography p. 464).

## Intermediate Treatment

Regional planning committees, which comprise representatives of local authorities, have a duty under the Children and Young Persons Act 1969 to draw up and keep under review schemes of intermediate treatment facilities in their regions. Facilities may be provided by local authorities, voluntary organisations or private individuals. Intermediate treatment is intended for children who have been placed by the juvenile court under the supervision of the local authority or of a probation officer. It may consist either of a stay of not more than 90 days in a residential establishment, or of attendance (not exceeding 30 days in any one year) at specified times and places for the purpose of introducing the child to activities of a recreational, educational or cultural nature or of social value, under the charge of a responsible person. This new provision is thus 'intermediate' in the sense that it makes possible new forms of treatment for all children subject to care proceedings (offenders and non-offenders)

<sup>&</sup>lt;sup>1</sup> The Act also provides for children brought before a court who are neglected, exposed to moral danger, beyond the control of parents, or playing truant from school, or are guilty of an offence.

which bridge the gap between removal from home and supervision, unsupported by specific treatment measures, while the child remains at home.

# Attendance Centres

Sixty attendance centres have been established in England and Wales for boys between the ages of 10 and 17 found guilty of offences for which older people could be sentenced to imprisonment. Boys ordered to attend must do so during their spare time on Saturday mornings or afternoons; they may be required to attend for up to three hours on any one occasion and for a total of not less than 12 hours (with certain exceptions) and not more than 24. The activities include physical training and instruction in handicrafts or some other practical subject. Efforts are made at the centres to induce the boys to join a youth club or other suitable organisation. There are two attendance centres for young men aged 17 and under 21.

In Northern Ireland there is one attendance centre; it operates on the same lines as the centres in England and Wales, but caters for boys between the ages of 12 and 17.

# Youth Treatment Centres

For children who are too severely disturbed and disruptive to be treated successfully in other existing child-care establishments but who do not need treatment in hospital, three new establishments, to be known as youth treatment centres, are being provided in England and Wales under the Children and Young Persons Act 1969. Each centre will have a director and a multidisciplinary staff, and will provide for both boys and girls. The intended general age range is from 12 to 19. Children are placed in a centre by a local authority (as opposed to being sent there by a law court).

# Detention Centres

Detention centres provide a means of training, and are intended to deter from further crime, young offenders for whom a long period of residential training does not seem necessary but who cannot be taught respect for the law by such measures as fines or probation. In England and Wales there are six junior centres for boys of not less than 14 and under 17, and 13 senior centres for young men aged 17 and under 21. In Scotland there is one senior centre. Detention centre orders in England and Wales may be for not less than three and not more than six months. Consecutive sentences may be passed on those over 17 but the total term may not exceed nine months at any one time. Remission of up to one-third of the sentence may be earned for good conduct. In Scotland the fixed period for all detention centre sentences is three months and the age ranges from 16 to 21.

The regime at detention centres provides a normal working week of 44 hours, including one hour daily devoted to physical training. Boys of compulsory school age have day-time and evening classes, and further education is provided for others in the evenings. Nearly all young offenders discharged from detention centres are subject to statutory supervision for 12 months.

# Borstal Training

The borstal training system, which is available for offenders who have reached the age of 15 but are not yet 21 (16 to 21 in Scotland and Northern Ireland), consists of different borstals specialising in different types of young offender, classified according to such criteria as age, intelligence and criminal sophistication. There are also a few borstals for special purposes, such as allocation. In England, Wales and Northern Ireland the period of training ranges from six months to two years and is followed, in England and Wales, by supervision for two years and in Northern Ireland for one year from the date of release. In Scotland, where there is no minimum period of detention,

the maximum is two years and the supervision period is for one year from the date of release. The system is essentially remedial and educational, based on personal training by a carefully selected staff. Emphasis is placed on vocational training in skilled trades; there is much freedom of movement and many borstals are open establishments.

# RESEARCH

CRIMINOLOGICAL A wide range of criminological research is carried out by the Home Office Research Unit (which also serves the Scottish Home and Health Department), by university departments and by various other research organisations; much of it is financed by the Home Office and the Scottish Home and Health Department. Studies undertaken by the Home Office Research Unit are mainly concentrated on subjects of direct interest to the home departments. Research and teaching in criminology are provided at the Institute of Criminology at Cambridge University and at Edinburgh University, at both of which postgraduate courses are available, and at the University of Oxford and the London School of Economics and Political Science. Courses of criminology are also available at the universities of Durham, Reading, Manchester, Southampton, Keele, Sheffield, Kingston upon Hull and University College, London; and at the universities of Glasgow, Edinburgh and Strathclyde in Scotland. These institutions likewise conduct research.

#### EXPENDITURE

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

f. million

	1951–52	1961–62	1971–72	1972–73
Police Prisons Legal aid Probation and after-care Parliament and law courts	73 7 — } 8	156 23 4 } 23	471 84 23 17 69	549 93 28 19 83
TOTAL of which capital expenditure	88 8	206 16	664 52	772 69

Source: Social Trends 1973

# 5 Defence

In March 1974 the Government instituted a major review of defence expenditure in implementation of its policy to maintain a modern and effective defence system while reducing its costs as a proportion of national resources; at the same time reducing the estimated 1974–75 defence budget (£3,667 million) by £55 million. The review, which will not be completed until later in the year, may have considerable implications for the commitments and programmes outlined in this chapter.

#### **POLICY**

# Europe

Britain's basic security depends on the strength of the North Atlantic Alliance, and it is to the North Atlantic Treaty Organisation (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 has played a leading 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 have worked to improve their contribution to the Alliance and to achieve a more effective collective result from the available resources. Through the European Defence Improvement Programme and additional expenditure on their national forces they have increased the effectiveness of the Alliance's conventional capabilities and strengthened their co-operation in such areas as training, logistics and the procurement of equipment (see p. 118).

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 negotiations with the Soviet Union and Eastern European countries on security and cooperation in Europe and mutual and balanced force reductions will contribute to increased stability and improved mutual relations.

# **Beyond Europe**

Britain continues to co-operate in maintaining stability outside Europe, being a member of the Central Treaty Organisation (CENTO), the South-East Asia Treaty Organisation (SEATO) and contributing, with Australia, New Zealand, Malaysia and Singapore, to 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 give extensive assistance to communities overseas, particularly in such activities as disaster assistance and development work.

# The United Nations

Britain supports the peacekeeping and other efforts of the United Nations—supplying the largest national contingent to the UN Peace-Keeping Force in Cyprus—and other international consultative authorities working to eliminate the sources of tension and conflict between nations and to promote arms control and disarmament. Britain played a leading part in the negotiations for the Non-Proliferation Treaty and the Sea-Bed Treaty, and Britain's proposal for a convention for the prohibition of biological methods of warfare led to the conclusion of a further international arms control agreement.

## PLANNING AND CONTROL

Supreme responsibility for national defence rests with the Prime Minister and the Cabinet, who are responsible to Parliament. Defence problems and their relationship with foreign and economic policy are dealt with on the Cabinet's behalf by the Committee on Defence and Oversea Policy, under the chairmanship of the Prime Minister.

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 policy control and the co-ordinated planning of the defence effort as a whole. The Ministry of Defence (see p. 47) ensures effective co-ordination on 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 Executive and the Permanent Under-Secretary of State for Defence, form the Defence Council, which deals with major 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.

#### 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 actions of all kinds is necessary. 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, providing an alternative to a nuclear response against anything but a major attack, and thereby enabling it 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.

Europe

Britain makes a major contribution to the forces required by NATO's present strategy. The British Polaris force forms the contribution to the Western 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 Naval On Call Force Mediterranean. The British Army of the Rhine (BAOR), an independent brigade in Berlin and RAF Germany are deployed in the Federal Republic of Germany. BAOR is organised as a corps of three divisions with five armoured brigades, one mechanised brigade and two artillery brigades. Its peace-time strength of around 56,000 would be more than doubled on mobilisation from Britain's reserves (see p. 117). Royal Air Force Germany is a tactical air force including strike/attack, reconnaissance, close support and air-defence aircraft. In addition, most of the air and ground combat units based in the United Kingdom have primary roles in support of NATO, to provide an important part of NATO's mobile reinforcement capability. These include the ground elements of the United Kingdom Mobile Force, the

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United Kingdom Joint Airborne Task 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 support 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 Europe** 

Forces are based in Malta, Cyprus, Singapore and in certain dependencies (for example, Hong Kong). A naval presence in the Indian Ocean and the Far East is provided by ships based both in Singapore and Hong Kong and operating in groups in the area. Ships operate the Beira Patrol, to enforce the UN embargo on the import of oil to Rhodesia, and are also stationed in the Caribbean.

#### THE ARMED FORCES

Service Organisation Britain's armed forces are organised on a tri-service basis, and 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 Command and Training and Support Commands, Royal Air Force Germany and Near East Air Force. 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 Troops Malta and Gibraltar.

The assigned British forces in Malaysia and Singapore, along with the forces of Australia and New Zealand, are under an integrated ANZUK command in

Singapore.

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 totalled 349,269 on 1st April 1974, 78,399 in the Royal Navy and Royal Marines, 171,705 in the Army and 99,225 in the Royal Air Force. Recruitment to the armed forces in 1973–74 totalled 25,800, well below that for 1972–73 due largely to the raising of the school leaving age. The total number of civilian staff employed by the Ministry of Defence on 1st April 1974 was about 315,000.

**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. In 1972 a new type of engagement was introduced for non-commissioned ranks of all three Services, under which recruits 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, for which there is an independent tribunal to assess cases. Commissions may be granted for short, medium and long terms. In all three Services there are opportunities for promotion from the ranks, and almost half of each year's officer intake is on such promotion. Entry to commissioned ranks is on the basis of educational and other qualifications (O and A levels 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 secondary educational qualifications, all three Services providing extensive facilities for the consolidation and development of Service 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.

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 (formerly the Joint Services Staff College) at Chesham 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 interallied exercises. All three Services provide training facilities for the armed forces of allied and Commonwealth countries. DEFENCE 115

#### COMBAT FORCES

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

# Nuclear Strategic Force

The British contribution to the Western 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 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, and mine countermeasure forces and support and other ships. The following section contains detail of some of the equipment of these forces.

# 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 commando ships Bulwark and Hermes and the assault ships Fearless and Intrepid. The commandhelicopter-cruisers Blake and Tiger also carry Sea King helicopters and are responsible for directing and controlling naval forces. There are also eight County class guided missile destroyers equipped with Seaslug and Seacat surface-to-air missile systems; and the first Exocet surface-to-surface guided missile system has been fitted in Norfolk. 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 new class of Type 42 Seadart destroyers, and Amazon, first of the Type 21 frigates, have recently entered service. There are also 26 Leander class and seven Tribal class general purpose frigates, three anti-aircraft frigates, four aircraft-direction frigates, 20 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 have the Wasp helicopter embarked which will in due course 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 cruiser, which will be equipped to operate Sea King helicopers and will have the optional capability of operating maritime vertical short-take-off and landing aircraft. In addition five of the new Sheffield class Type 42 Seadart destroyers and seven of the Amazon class Type 21 frigates are building. The first of a new class of frigate, Type 22, to be armed with the Seawolf surface-to-air missile system, has been ordered and work is in hand on a new class of mine counter-measure vessel in glass reinforced plastics.

Besides the four *Polaris* submarines (see above) there are eight nuclear-powered fleet submarines in service together with 22 conventional patrol submarines. A further three nuclear submarines are under construction. Tankers and store ships of the Royal Fleet Auxiliary Service provide worldwide

afloat logistic support.

# 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. 112).

# Other Army Combat Forces

This category comprises land forces stationed abroad to meet treaty commitments to Commonwealth and other countries (see p. 113).

Some of the equipment of this and the previous category is described below.

# Equipment

Armoured regiments are equipped with the *Chieftain* main battle tank and the *Swingfire* long-range anti-tank guided missile. Armoured reconnaissance regiments are now equipped with the *Scorpion*, mounting a 76-mm gun, the first member of the new tracked combat reconnaissance vehicle series to come into service. The primary tracked armoured personnel carriers used by mechanised infantry battalions is 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 *Honest John* missile and the 203-mm self-propelled howitzer. Air defence is provided by the *Thunderbird* mobile surface-to-air missile system and by the L 40/70 gun which is now being replaced by the *Rapier* low-level surface-to-air missile system.

# Royal Air Force General Purpose Forces

The Royal Air Force general purpose forces consist of aircraft for air defence, strike/attack, reconnaissance, close 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 FGI and FGR2 aircraft, Bloodhound, Tigercat and Rapier surface-to-air missiles are employed in air defence. Reporting and control is provided by the computerised Linesman system, and a number of Shackletons have been converted to provide airborne early warning over the sea. Vulcans, Buccaneers and Phantom FGR2s 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 Phantom FGR2s 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, started in 1974, the Phantom FGR2s are being gradually transferred to air defence.

#### 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 April 1974 regular reserves totalled 353,992 and volunteer reserves and auxiliary forces 71,038. Cadet forces, which make a significant contribution to recruitment to the regular forces, totalled 147,575.

# Royal Navy

The 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 active 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

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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 the individual reserves 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 callout in an emergency. There is 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.

**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 16 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, by 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 £12 million emphasis is placed on a high level 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 power 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 August 1971 following a reorganisation of the departments responsible for defence procurement and civil aerospace. The main objectives of the reorganisation have been to establish 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

The major part of research is undertaken by the Ministry of Defence's research and Development 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, 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. 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. 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 Eurogroup (see p. 111). The most important single project, the multi-role combat aircraft, is being developed by Britain, Italy and the Federal Republic of Germany. A number of Anglo-French projects—the Jaguar aircraft, the Martel air-to-surface missile, the Puma and Gazelle helicopters—are reaching completion, and the Lynx helicopter is well advanced. Britain, the Federal Republic of Germany and Italy are collaborating in the development of 155mm towed and self-propelled howitzers and an artillery rocket system, while Britain and the Federal Republic are studying the possible collaborative development of a future main battle tank. Britain and Belgium are partners in the programme for the development and production of a family of air-portable, armoured combat reconnaissance vehicles.

Britain has co-operated with Canada in the development of a surveillance drone, with Australia on the Ikara anti-submarine equipment, and is working with both these countries on a sonobuoy system.

# National Projects

A considerable number of projects, covering all the main equipment areas, are under development. They include the HSI182 jet trainer, the Blowpipe manportable air defence missile, an underwater-launched anti-ship guided missile, navigation and attack systems for aircraft, radar, sonar and communication systems, the Type 22 frigate, and a new range of logistic vehicles for battlefield

## 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 1974-75 the value of exports of British defence equipment is expected to be in excess of £,400 million.

# 6 Social Welfare

# STATE AND VOLUNTARY SERVICES

In Britain central and local government are responsible for a wide range of health and social services. Central government is responsible directly for social security, including family allowances, national insurance and financial help to those in special need. It is also responsible for all health services and the health authorities and boards which administer these services are its agents. It has a certain overall indirect responsibility for many local authority services. Local authorities are directly responsible for education (see Chapter 7) and housing (see Chapter 9) and for a variety of personal social services (all described in this chapter). They also have certain responsibilities regarding environmental health. Public authorities in Britain spent in 1973–74 £16,088 million on this range of services, that is, about £287 a year per head of the population.

The publicly provided services are supplemented by those provided by voluntary organisations and by individual voluntary workers. Voluntary organisations, especially the Churches, were the pioneers of nearly all the social services. They provided schools, hospitals, clinics, dispensaries, and social and recreational clubs before these were provided by the state. They made themselves responsible for the welfare of the very young and the very old, the homeless and the handicapped. Gradually the state accepted the primary responsibility for the major services, supplementing the voluntary services and developing a comprehensive structure that ensured a minimum

standard of living and well-being for all citizens.

State and voluntary social services are now complementary and co-operative. Both central and local authorities make grants to the voluntary social services. Public authorities plan and carry out their duties taking account of the voluntary help available and co-operating with the voluntary agencies, which have specialised in meeting particular needs, while the residential provision made by public authorities for the care of children, the chronic sick, the mentally ill or handicapped, the disabled and the aged is supplemented by voluntary homes of various types.

In England and Wales the Charity Commission, a government department, 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 adminis-

tration of a charity.

Co-ordination of government interests in voluntary social service is the responsibility of the Home Office in England and Wales and of the Scottish Office in Scotland. The Volunteer Centre, a national centre for information and research on voluntary work, was established in London in 1973 with the aid of a government grant. Its initial focus is on the health and social services.

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.

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 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, the St. John Ambulance Association and Brigade, 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 and their Scottish equivalents.

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 Crusade of Rescue, the Society of St. Vincent de Paul, 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 gives help in every kind of practical difficulty, 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 and Wales providing 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 or work among the handicapped. There are also the Scottish Council of Social Service and the Northern Ireland Council of Social Service, which perform similar functions. The Citizens' Advice Bureaux, of which there are now some 625 in Britain, are steadily increasing in number. The primary role of the bureaux is to 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.

Urban Programme A four-year urban programme providing for government-aided local authority expenditure of some £20 million-£25 million was launched at the end of 1968 to assist areas of special social need, in particular to relieve problems resulting

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from overcrowding, inadequate housing and schools, and other forms of deprivation. In 1970 the programme was extended to 1976 with total expenditure for the period 1968–76 of £60 million—£65 million at 1970 prices. Projects being undertaken include help for playgroups and the provision and improvement of nursery schools and classes, day nurseries and playgrounds, language classes for immigrants, in-service training courses for teachers, children's homes, family advice centres, housing aid services, information and advice centres, help for community centres and summer holiday schemes for deprived children. A particular aim of the programme is to support the work of voluntary bodies in areas of special social need by encouraging local authorities to grant-aid the activities of such organisations.

An experiment in community development is also being undertaken by the Government. This involves bringing together those services, both statutory and voluntary, which are concerned with relieving various forms of social handicap and encouraging the resources of self-help within the community. Local projects involving action and research teams are in progress in 12 areas, mainly situated in the inner districts of large conurbations.

#### SOCIAL SECURITY

National insurance, industrial injuries insurance, family allowances, family income supplements and supplementary benefits together with (in a special category) war pensions constitute a comprehensive system of social security in the United Kingdom.

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 independent authorities.

Although the development of public provision for social security in Britain can be traced back for several centuries (the Poor Relief Act of 1601 may be regarded as especially important in England and Wales), the modern system of comprehensive provision is a creation of the twentieth century. Noncontributory old age pensions were introduced in 1908, and the first contributory pensions for old people, widows and orphans in 1926. A contributory National Health Insurance Scheme was begun in 1912, and in the same year a scheme of unemployment insurance was introduced which in 1920 was extended to cover the great majority of employees. By the beginning of the second world war social security provision in Britain was among the best in the world, but lacked co-ordination because of its piecemeal development, and not everyone came within its scope. In the immediate post-war years a series of Acts introduced the present comprehensive system, which became fully operative in July 1948. Statutory provision for the war disabled goes back to the end of the sixteenth century, but the main lines of the present war pension provisions were laid down during the first world war with further developments during and after the second world war.

Family allowances and national insurance and industrial injuries 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 supplements, attendance allowance and war disablement pensions are not taxable.

## Reciprocity

The national insurance, industrial injuries and family allowances schemes of Great Britain and those of Northern Ireland and the Isle of Man operate as a single system. 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 or of Gibraltar. People covered by these Regulations are entitled to benefit under the social security arrangements of any Community country, including Gibraltar, where they are working or visiting, on the same basis as nationals of that country. There are also bilateral reciprocal arrangements which apply, between the United Kingdom and other member states of the European Community individually, 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, 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 also party to most of these agreements with other countries.

#### FAMILY ALLOWANCES

Family allowances are provided in Great Britain under the Family Allowances Act 1965 (which consolidated the Acts of 1945–64), and in Northern Ireland under its own legislation. They are being paid in Great Britain to about 4.4 million families with over 11.3 million children, and in Northern Ireland to some 141,000 families. The allowances 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.

The rates of the allowances are  $\pounds \circ \circ \circ \circ$  a week for families with two children below the age limits and a further  $\pounds \circ \circ \circ \circ$  a week for each additional child.

Family allowances are paid from the Exchequer and their object is to benefit the family as a whole; they belong to the mother, but may be paid either to the mother or to the father. There is no insurance qualification for title to the allowances, but there are certain residence conditions.

# FAMILY INCOME SUPPLEMENT

Family Income Supplement provides a cash benefit for families (including single parents) with small incomes where the wage-earner is in full-time work and there is at least one dependent child. It is payable when the weekly sum of a family's resources falls below a prescribed amount, fixed at £25 a week where there is one child plus £3 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 £5.50 for one- or two-child families or £7 if the family has three or more children.

#### NATIONAL INSURANCE

The National Insurance Acts apply, in general, to everyone over minimum school-leaving age living in Great Britain. There are similar schemes in Northern Ireland and the Isle of Man. (The National Insurance Act 1965 consolidated the provisions of the National Insurance Acts 1946-64.)

The national insurance scheme provides benefits in specified contingencies where contribution conditions have been fulfilled. The benefits are paid for partly by insured persons' contributions, partly by contributions of employers in respect of their employees, and partly by a contribution made by the Exchequer out of general taxation.

The original system was based on contributions varying only with the sex, age (under or over 18 years), and insurance class (see below), while benefits were at standard rates for people over 18. Additional earnings-related contributions and benefits were subsequently introduced in two stages (1961 and 1966).

In November 1970 pensions were introduced for elderly people who had been over pension age when the scheme started, and in April 1971 for widows aged between 40 and 50 when widowed or when entitlement to widowed mother's allowance ended. From September 1971 an old person's pension became payable to all other non-pensioners aged 80 and over; at the same time an invalidity pension was introduced for those who had received sickness benefit for six months, with an additional invalidity allowance for people becoming chronically sick more than five years before retirement age. An attendance allowance for severely disabled people needing attendance or supervision both night and day became payable in December 1971. This was extended during 1973 with the introduction of an allowance at a lower rate for those needing attention or supervision either by night or by day.

#### Contributors

Contributors under the national insurance scheme are divided into three classes:

Class 1. Employed people. Most of those who work for an employer under a contract of service or are paid apprentices—over 23 million.

Class 2. Self-employed people. Those in business on their own account and others who are working for gain but do not work under the control of an employer—about 1½ million.

Class 3. Non-employed people. All those insured who are not in class 1 or class 2—about a quarter of a million.

There is a general liability to pay flat-rate contributions according to this classification but certain people are excepted. These include full-time students, prisoners and most people in receipt of national insurance benefits. Self-employed and non-employed persons whose income is below £650 a year can apply for exemption. Married women can choose to pay contributions and receive benefit in their own right or not to pay flat-rate contributions (if they are working they must pay graduated contributions) and rely upon their husband's insurance for maternity grant, retirement pension (at a lower rate), widow's benefit and death grant. If a married woman works for an employer he must pay his full share of the flat-rate contributions even if she has chosen not to pay flat-rate contributions.

Flat-rate contributions are credited to students up to the age of 18, and to most people in receipt of national insurance benefits. People who are excepted from liability to pay but are not entitled to credits may pay contributions at the non-employed rate if they wish to safeguard entitlement to retirement pension and widow's benefit.

An employed person ceases to be liable for national insurance contributions at the age of 70 (for a man, 65 for a woman), or when he retires from regular employment after reaching minimum pension age (65 for men, 60 for women), whichever is the earlier. If he does any work as an employed person thereafter, he must pay an industrial injuries contribution; the employer still has to pay his full share of the flat-rate contribution.

## Contributions

Flat-rate contributions are normally paid by means of national insurance stamps bought from a post office and fixed, for each contributor, to a single contribution card. All three classes pay flat-rate contributions (see Table 7) and these include the national health service contribution (which for convenience is paid with the national insurance contribution although the two services are separate). The stamps for class I contributors also include the employer's redundancy contribution (to help to provide for payments in certain circumstances to employees whose work is terminated, see p. 341). It is the employer's responsibility in the first place to see that the class I contributions are paid, but he can deduct the employees' share from their wages. The self-employed and non-employed must stamp their own cards. Flat-rate contributions are usually credited for weeks of unemployment, sickness or injury, or if certain widow's benefits are being paid.

TABLE 7: Standard Adult Contributionsa

	Insured Person	Employer	Total
Employed men: Contracted out Not contracted out Employed women: Contracted out Not contracted out Self-employed men Self-employed women Non-employed men Non-employed women	£ 0.87 0.75 0.70 0.62 2.41 2.01 1.90 1.49	£ 1.777 1.657 1.511 1.431	£ 2.647 2.407 2.211 2.051 2.41 2.01 1.90 1.49

<sup>&</sup>lt;sup>a</sup> Including National Insurance, Industrial Injuries and National Health Service Contributions, but excluding Redundancy Fund Contribution. Rates given to three decimal places are expressed in this way for accounting purposes only. Lower rates of contribution are payable for boys and girls and for certain married women.

TABLE 8: Some Principal Standard Benefits

	Beneficiary	Wife or other Adult Dependant	First <sup>b</sup> Child
Invalidity, Widow's and Retirement Pensions and Widowed Mother's	£	£	£
Allowance	10.00	6.00	4.90
Unemployment and Sickness	10 00	0 00	1 70
Benefit	8.60a	5.30	2.70
Widow's Allowance (first 26 weeks			
of widowhood)	14.00		4.90
Attendance Allowance:			
Higher Rate	8.00		
Lower Rate	5.35		
Injury Benefit	11.35	5.30	2.70
Disablement Benefit (100 per cent)	16.40	6.00	4.90
Private's War Pension (100 per cent)	16·40	6.00	4.90

a Married women living with a husband of working age and capable of work get £6.05. b For subsequent children the relevant family allowance is deducted.

# Britain 1975

# An Official Handbook Supplement

(page references are to the text of the Handbook)

A general election was held in Britain on 10th October 1974. The number of seats obtained by each party (see p. 32) and the distribution of votes (see p. 32) were as follows:

Party	Seats	Party	Votes	Percentages of Votes
				Cast
Labour	319	Labour	11,447,165	39.3
Conservative	276	Conservative	10,458,548	35.8
Liberal	13	Liberal	5,348,193	18.3
Scottish National	11	Others	1,920,534	6.6
United Ulster Unionists	10		29.174.440	100.0
Plaid Cymru (Welsh Nationalists	s) 3		25,174,440	100.0
Social Democratic and Labour				
(Northern Ireland)	1			
Independent (Northern Ireland)	1			
The Speaker	1			
	635			

#### MINISTERIAL CHANGES

The number of Cabinet ministers (see p. 42) is 23 and the number of junior ministers in some departments (see pp. 45–58) has been altered.

The Lord President of the Council, a senior Cabinet minister, has been made responsible for policy concerning the devolution of government functions (see footnote, p. 23); a new unit has been set up within the Cabinet Office (see p. 45) to deal with this and other work related to the development of British political institutions

#### THE NOVEMBER BUDGET

The aim of the Budget (see p. 360) presented to Parliament on 12th November 1974 was described by the Chancellor of the Exchequer as helping to lay the foundation of a comprehensive strategy for dealing with Britain's economic problems over the following four years. This strategy included giving priority to investment and the balance of payments over public expenditure and private consumption; a national campaign against waste and a programme of energy conservation; and prevention of excessive growth of the money supply.

In order to establish firm control over the public sector demand on resources, the growth of public expenditure (see p. 355) would be held back to an average of 2.75 per cent a year over the next four years.

The public sector borrowing requirement for 1974–75 (see p. 359) had been revised upwards to £5,500 million due primarily to a loan of £100 million to building societies (see p. 372), wage and other cost increases of about £1,000 million and an increase in subsidies (see p. 193) of some £1,100 million. The Budget measures would involve a further increase to £6,300 million. The main proposals are as follows:

#### Personal Taxation

The starting point of the investment income surcharge (see p. 360) would be reduced from £2,000 to £1,000, except for those aged over 65 for whom the

starting point would be £1,500. Tax benefits for elderly and blind people would be improved from April 1975.

## Company Sector

Companies with a closing stock of at least £25,000 would be granted a post-ponement of corporation tax (see pp. 361–2) on the abnormal increase, caused by inflation, in the value of stocks and work in progress. The initial building allowance (see p. 205) would be increased from 40 to 50 per cent. Additional help for the financial position of industries would be provided through amendments to the Price Code (see p. 193) and through a programme of medium-term lending by Finance for Industry Ltd. (see p. 369), whose resources would be expanded by the Bank of England and the London and Scottish clearing banks.

## Taxes on Capital

A Capital Transfer Tax (see p. 362) would apply to all lifetime gifts made on or after 26 March 1974 and would replace estate duty (see p. 362). The rates would apply for the estate duty chargeable in respect of deaths after 12th November 1974. Transfers not exceeding £15,000 would not be charged to tax and the rates would be progressive, rising to 75 per cent on transfers over £2 million.

#### Value-added Tax

The rate of value-added tax (see p. 363) on petrol (hydrocarbon oil for private use) was increased from 8 per cent to 25 per cent.

## Sterling Guarantee Arrangements

There would be no extension beyond the end of 1974 of the guarantee of official overseas holdings of sterling (see p. 195).

## **Social Security**

Retirement pensions (see p. 125) would be increased from April 1975 by £1.60 for a single person and £2.50 for a married couple. Family allowances (see p. 122) would be increased at the same time by £0.60 for second children and £0.50 for third and subsequent children. There would also be increases and improvements in other social security benefits.

#### Oil Taxation

An Oil Taxation Bill would be presented to Parliament to impose a new tax on the profits of the oil companies engaged in operations on the Continental Shelf (see pp. 257 and 261).

## **Development Land Tax**

As a transitional measure designed to help to bring land needed for development into community ownership (on which proposals have been published), legislation would provide for a new Development Land Tax (see p. 166). The tax would be levied at a flat rate of 80 per cent and would be payable when development value was realised.

# INDUSTRY (see pp. 193 and 201)

The Government's proposals for industrial reform and reconstruction include the setting up of a National Enterprise Board, through which the Government would invest in British manufacturing industry. A system of Planning Agreements is also proposed, involving regular discussion with the Government of the forward plans of key industrial companies, drawn up by management in consultation with workers' representatives.

Please Note: The figures for employment in agriculture given on p. 278, paragraph 1, line 3, in this edition include Northern Ireland; previously the figures have excluded Northern Ireland

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In general graduated contributions are payable by employed people (including married women) aged between 18 and 70 (65 for women) who earn more than £9 a week. Employees whose job provides them with an occupational pension of at least £3.48 a year for each year of service (£2.90 for women) may be 'contracted out' of part of the graduated pension scheme. Accordingly while all employees pay 5.5 per cent of their weekly earnings between £18 and £62, contracted out employees pay only 1.25 per cent on their weekly earnings between £9 and £18, while those not contracted out pay the full 5.5 per cent on this lower range as well. Their employers pay the same amount.

Graduated contributions provide a graduated addition to retirement pension and meet the cost of earnings-related supplements to sickness and unemployment benefit and to widow's allowance. From April 1975, for people working for an employer, flat rate national insurance contributions and graduated contributions will be replaced by a system of earnings related contributions.

**Benefits** 

The scheme provides payments to contributors in the event of unemployment (if normally working for an employer), sickness (if normally working for an employer or self-employed), and confinement and the weeks immediately before and after (for women normally working for an employer or self-employed and paying national insurance contributions at the full rate). Retirement pensions are paid to people who have reached 65 (60 for women) if they have retired from regular work and from the age of 70 (65 for women) even if they continue to work; people aged 80 and over who have not participated in the scheme are eligible for an old person's pension; widows normally receive benefit in the first 26 weeks after bereavement and subsequently while they have young children or if they have reached the age of 40 when widowed or before their children have grown up; and there are two kinds of allowance in respect of orphan children where a widow's pension is not payable. The scheme also provides lump-sum cash grants for two expensive contingencies—the birth of a child and a death.

For most of the benefits there are two contribution conditions. First, before benefit can be paid at all, a minimum number of contributions must actually have been paid since entry into insurance; secondly, the full rate of benefit cannot be paid unless a specified number of contributions have been paid or credited 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 woman who has been divorced and was not paying contributions during her marriage.

Amounts

The standard flat-rate benefit for single men and women is £8.60 a week for unemployment or sickness, while for invalidity, widows' and retirement pensions it is £10. Benefit, other than invalidity pension for those under retirement pension age, may be reduced if insufficient contributions have been paid, but is not affected by other unearned income or the previous level of earnings. Earnings received while the benefit is in payment, however, may cause its reduction or withdrawal: unemployment benefit cannot be paid to a person earning more than a specified amount from a subsidiary occupation; retirement pensioners under the age of 70 (65 for women) have their pensions reduced in step with earnings over certain specified amounts; sickness and

invalidity benefits, though not affected by continued payment of wages during illness, are not normally payable to a person doing any actual work. Widows' benefits, however, are not affected by earnings. Exceptions to the basic flat rates are the higher rate of  $f_{14}$  a week payable to widows during the first 26 weeks after bereavement, the increased retirement pension earned by someone who has continued at work and paid contributions beyond minimum pension age and the invalidity allowance paid to people becoming chronically sick more than five years before pension age; and the lower rate of £6.05 a week unemployment or sickness benefit payable to married women who pay contributions and the rates for widows between 40 and 50 which reduce on a scale to £3 a week for a woman aged 40 at the date of entitlement. An age addition of £0.25 a week is paid to pensioners aged 80 and over, and people over 80 who have failed to qualify for a national insurance pension receive an old person's pension to bring their total pension up to f,6 a week (f,9.70 for a married couple). Invalidity allowance is £2.05, £1.30 or £0.65, depending upon the age at which incapacity begins. An attendance allowance of  $f_{i}$ 8 a week is paid to severely disabled people requiring a great deal of help from another person both by day and by night. A lower rate of £5.35 may be paid to those who need help either by day or by night.

Additions to benefits are payable for dependants. For invalidity and retirement pensions the additions are £6 for a wife or other adult dependant and for these pensioners and for widow's benefit £4.90 for each child inclusive of family allowances. For other beneficiaries the additions are less—£5.30 for an

adult and £2.70 for each child, inclusive of family allowances.

A guardian's allowance of £4.90 a week is payable to a person who has in his or her family a child who has lost both parents, one of whom was insured under the National Insurance Acts. The allowance can sometimes be paid on the death of one parent. For certain fatherless children there is a child's special allowance also of £4.90 a week inclusive of family allowances; this is payable to a woman whose marriage has been dissolved or annulled and who has not remarried, if her former husband dies and she has a child to whose

support he was contributing before he died.

The graduated addition to retirement pension is at the rate of £0.02½ a week for each £7.50 of all graduated contributions paid by a man and for each £9 of such graduated contributions paid by a woman (with, in each case, the matching amount of graduated contribution coming from the employer). The earnings-related supplements to flat-rate unemployment and sickness benefits are one-third of that part of a person's average weekly earnings between £10 and £30 and 15 per cent of that part between £30 and £42 but the supplements cannot raise the total benefit, including increases for dependants, beyond 85 per cent of the average weekly earnings on which the supplement is based. The supplement is also paid on this basis to widow beneficiaries who have the appropriate record of earnings, if they become unemployed or sick. A supplement based on the late husband's earnings is also paid, as an addition to the widow's allowance, to widows whose husbands were under 70 and had not retired from regular employment.

A £25 maternity grant is payable for a confinement and a further £25 for each additional child born at the same confinement living 12 hours after birth; while a £30 death grant is payable on the death of an adult insured person or certain close relatives of the insured person (less for a child, or for an adult who was within ten years of minimum pension age when the scheme started).

requiring them lasts. However, invalidity pension cannot be paid and sickness benefit can only be paid for one year if fewer than 156 employed or self-employed contributions have been made (possible in three years for a contributor continuously at work), while unemployment benefit is payable for a maximum of one year. The supplement to unemployment and sickness benefit is paid for a maximum of six months starting from the thirteenth day of unemployment or incapacity for work. Maternity allowance (£8.60 a week) normally begins 11 weeks before the expected week of confinement and ends six weeks after the expected week or the actual confinement if this is later.

Similarly, a widowed mother's allowance at the full rate ceases when her children are no longer dependent on her, though a widow can continue to receive £10 a week for herself while she has living with her a son or daughter under 19. The widow's pension payable to the childless widow, provided she is 40 or over at the time of being widowed, or the similar pension payable to the widowed mother who has reached 40 before her widowed mother's allowance ends, normally continues until she has reached minimum pension age (provided she does not remarry before that age) and retired, or at most till the age of 65. On retirement she receives a pension at a rate not lower than her widow's pension.

NATIONAL INSURANCE (INDUSTRIAL INJURIES) The industrial injuries insurance scheme, which, in 1948, replaced the workmen's compensation scheme (first introduced by the Workmen's Compensation Act of 1897), provides benefits for personal injuries caused by accidents arising out of, and in the course of, employment, and for prescribed diseases due to the nature of employment. It covers practically everyone in class 1 of the national insurance scheme and certain others. Like the national insurance scheme, the industrial injuries scheme is financed partly from contributions (see Table 7) and partly from taxation. The legal basis of the scheme is the National Insurance (Industrial Injuries) Act 1965 which consolidated the 1946 Act and subsequent legislation. Similar cover against industrial injuries and diseases is provided by Northern Ireland's legislation.

Benefits

Injury Benefit

Injury benefit for an adult is £11.35 a week plus £5.30 for an adult dependant, £2.70 for the first or only child under the family allowances age limits, £1.80 for the second child and £1.70 for each other child in addition to any family allowance payable. 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. 126) 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 £16.40 for 100 per cent disablement to £3.28 a week for 20 per cent disablement, but for disablement of less than 20 per cent a gratuity of up to £1,090 is normally paid.

In certain circumstances disablement benefit may be supplemented as follows; unemployability supplement, at the weekly rate of £10; constant attendance allowance of up to £6.60 weekly normally, or a special rate of £9.90 or £13.20 a week in exceptionally severe cases; an allowance of £6.60 a week for exceptionally severe disablement; a special hardship allowance of

up to £6.56 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 benefit for dependants are payable with unemployability supplement and hospital treatment allowance. People receiving unemployability supplement may also receive an additional allowance similar to invalidity allowance (see pp. 124 and 126).

Death Benefits for Dependants

If the accident or disease results in the insured person's death, death benefit

may be paid to the dependants.

For a widow a pension of £14 a week is payable for the first 26 weeks of widowhood. In addition she receives any earnings-related supplement (see p. 126) 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 £10.55 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 £3 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 at the higher rate of £4.90 to widows but at the lower rate of £2.70 for other beneficiaries.

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

#### SUPPLEMENTARY BENEFITS

The Ministry of Social Security Act 1966, now known as the Supplementary Benefit Act 1966, provided for a scheme of supplementary benefits to replace the system which had been administered by the former National Assistance Board since 1948. The Act established within the then Ministry of Social Security a Supplementary Benefits Commission responsible for guiding the scheme and for determining awards of benefit. Parallel legislation in Northern Ireland made similar provision.

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 is entitled to a supplementary benefit. The benefit takes the form of a supplementary allowance for people under the statutory 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 most other long-term cases a higher long-term scale rate is payable. Available resources include certain income and capital; the main national insurance and industrial injury 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 but some part of all other resources is disregarded.

The payment of a supplementary allowance in the case of an able-bodied person of working age may be conditional on registering 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. The commission provides temporary accommodation for them in 21 reception centres, three of

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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 or are using reception centres, it runs 15 reestablishment centres, three of which have residential accommodation where they are given help to fit them again for work.

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 £16·40 a week, but the amount varies according to rank and the degree of disablement. The latter is assessed by comparing the condition of the person disabled by service with that of a normal healthy person of the same age and sex. 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 (£10·75 a week), constant attendance (up to £6·60 and, exceptionally, £13·20 a week), comforts (£1·40 or £2·80 a week), and lowered standard of occupation (up to £6·56 a week). An additional allowance of £3·30 or £6·60 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 £1·20 and £3·60 a week) is payable to disablement pensioners who are aged 65 or over and whose assessment is 40 per cent or more.

Both the basic disablement pension and the supplementary allowances are free of income tax, and children's allowances are paid in addition to any family allowances payable.

Pensions are also paid to war widows and war orphans. The standard rate of pension for widows of private soldiers is £13 a week, with additional allowances for their children and, in certain cases, a rent allowance (up to £5 a week). There is an additional allowance of £1·30 for widows aged 65 which is increased to £2·60 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 and war orphans which is available to help any who require advice or assistance. War pensioners have priority for treatment of their war disablements in National Health Service hospitals subject only to needs of emergency and other urgent cases.

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 other statutory bodies.

### 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, as distinct

from environmental services, culminating in the introduction in 1948 of a comprehensive National Health Service available to every resident and to every visitor taken ill or meeting with an accident while in Britain. Reciprocal health agreements have been concluded between Britain and certain countries and in any member country of the European Community the families of British nationals and stateless persons permanently resident in Britain and working for a British employer or receiving British social security benefit are entitled to urgent medical treatment on the same basis as the nationals of that country.

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 (see p. 10) and improved physique. The infant mortality rate has more than 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 emphasis is now placed on prevention or early detection of disease or disability. Deaths from such diseases as tuberculosis, poliomyelitis and diphtheria have fallen so markedly that they are no longer major health problems. Diseases now in the forefront of research programmes include cancer and diseases of the central nervous system, such as muscular dystrophy. Efforts are also being made to combat some of the most prevalent diseases, which include, besides the common cold and influenza, bronchitis, rheumatism and arthritis, and heart diseases.

The Public Health Acts of 1936 and 1961 and the Health Services and Public Health Act 1968 constitute the present basic public health code in England and Wales. Local authorities (under the general direction of the Department of Health and Social Security or the Welsh Office and the Department of the Environment) have extensive powers for making and administering by-laws on matters of public health.

HEALTH SERVICE The general form of the organisation established in 1948 to administer the ADMINISTRATION National Health Service persisted until the end of March 1974. Essentially it was a tripartite structure, corresponding to the three main parts of the service: the hospital service, the general practitioner service and the local authority health service, comprising a range of home and clinic services for the prevention of ill-health and for treatment or care. The School Health Service was separately administered by the education authorities and environmental health was largely the responsibility of the local authorities. A new and functionally unified health service administration came into operation from April 1974 at the same time as the new structure of local government in England and Wales (see p. 65). The main aims of the reorganisation have been to unify the various forms of health provision, to improve co-ordination between the health service and local authorities, and to streamline the management of the health service. Under the Acts establishing the new system, the health ministers the Secretary of State for Social Services in England, and the Secretaries of State for Scotland and Wales—have a broad responsibility for all aspects of the health services in their respective countries, and a duty to make provision to meet all reasonable requirements for hospitals and other accommodation for health services; for medical, dental, nursing and ambulance services; for facilities for expectant and nursing mothers and young children; for facilities for the care and after-care of the sick; for the provision of a contraceptive service; and for any other services needed for prevention, treatment and diagnosis of illness.

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The organisation established to run these health services is three-tier in England, and two-tier in Scotland and Wales. Within each of the three countries the health departments (the Department of Health and Social Security in England, the Scotlish Home and Health Department in Scotland, and the Welsh Office in Wales) are responsible for strategic planning, while area authorities, called area health authorities in England and Wales and health boards in Scotland, 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, an intermediate tier of regional authorities responsible for regional planning and certain central services has been interposed between the area authorities and the central department.

There are 14 regional health authorities and 90 area health authorities in England, 12 area health authorities in Wales and 15 health boards in Scotland. They are all statutory agencies of central government, but co-operate closely with local authorities responsible for social work and environmental and other services. In general the areas covered by area health authorities and health boards correspond with those of the new major local authorities established in England and Wales and to be established in Scotland in May 1975.

Area authorities and health boards have wide discretion to determine the pattern of services best suited to their area, and most have deputed the day-to-day running of services to health districts which usually contain a district general hospital and have a population of between 150,000 and 300,000,

though some are considerably larger.

The health authorities and boards consist mainly 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. The members of the area health authorities are appointed by the regional health authorities in England, and the health ministers in Wales except for some members appointed by the corresponding local authorities, two elected by community health councils (see below), and at least one nominated by the university concerned. 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 experience of medical teaching. All regional and area health authorities contain two members drawn from staff employed in the NHS, other than doctors and nurses.

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 the provision of teaching.

There is statutory provision for professional advisory committees at all levels of the new service, and the authorities have a duty to consult with these committees. At the national level the main standing advisory bodies are the Central Health Services Council in England and Wales, and the Scottish Health Service Planning Council in Scotland. There is also in Scotland a Common Services Agency serving all 15 Scottish boards.

Public representation in the reorganised service for England and Wales is provided by district community health councils. These consist of 20–30 members, half of them appointed by local government councils and the rest mainly on the nomination of voluntary bodies.

In Scotland local health councils have been set up by the health boards to represent the interests of the public, and to report on questions relating to the

health service in their area or district. The appointment of Health Service Commissioners is an additional safeguard and means of redress.

### 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 the commissioner can investigate, the complaint must have been brought to the attention of the authority concerned, and an adequate opportunity given to investigate it 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 their general medical and dental services.

The commissioners report annually, and as they think fit, 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, who at present holds the three posts of Health Service Commissioner, have been expanded to cover these reports (see p. 38).

#### **PUBLIC HEALTH**

The health authorities have general responsibility for the prevention of disease, and co-operate for this purpose with local, water and port authorities, which have certain specific powers of inspection and control. The local authorities mainly concerned are in England and Wales the district councils, the London borough councils and the City of London council; and in Scotland, till May 1975, county and large burgh councils and, afterwards, new district and island councils. District community physicians have been appointed with dual responsibilities to the health authorities and the local authorities, thus exercising both local government and health authority functions.

# Water Supply and Sewerage

In April 1974 the primary responsibility in England and Wales for water conservation and supply and sewerage and sewage disposal, was transferred under the Water Act 1973 to nine regional water authorities and a Welsh national development authority (see p. 275), though these may and do use local authorities as their agents in respect of sewerage. Until May 1975 the authorities concerned in Scotland with water supply and distribution are regional water boards, whose members are drawn from town and county councils. The Central Scotland Water Development Board supplies water in bulk to the regional water boards in central Scotland. The authorities responsible for sewerage are the county and burgh councils. From May 1975, the local authorities responsible for water supply and sewerage will be the new regional and island councils.

# Control of Infectious Diseases and Food Poisoning

Local authorities, under the new structure, mainly district councils, have responsibilities and powers to investigate outbreaks of certain specific infectious diseases and of food poisoning, and to carry out disinfection and various other preventive measures. Most local authorities have appointed as their 'proper officer' to deal with infectious disease and food poisoning, a doctor who is also a community physician of the health authority, and as such has a general responsibility for the prevention and control of disease. The same arrangements also generally apply to the proper officers of the port authorities which

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supervise health control at seaports and airports, the primary object of which is to prevent the introduction of infectious disease into the country.

*Immunisation* 

In April 1974 the area health authorities and health boards took over from the local authority health departments their planned programmes of vaccination and immunisation against diphtheria, measles, rubella (women and girls only), poliomyelitis, tetanus, tuberculosis and whooping cough. Such protection is given either in family doctors' surgeries, or in health centres or at child health centres (see p. 137).

Bacteriological and Virological

The Public Health Laboratory Service provides a network of bacteriological and virological laboratories throughout England and Wales which conduct Laboratory Services 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.

Pure 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, by the Food and Drugs (Scotland) Act 1956 in Scotland and by the Food and Drugs Act (Northern Ireland) 1958 in Northern Ireland. In England and Wales the question of 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 council) and questions of food hygiene and the safety and fitness of food are the concern of district councils. 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, transported or sold must conform to certain hygienic standards. Authorised officers of the councils 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 till May 1975 the councils of counties and large burghs. Thereafter regional and island councils will be responsible for food standards and labelling and district and island

councils for food hygiene.

Other Public **Health Duties**  Local authorities are also responsible for street paving and housing, and the abatement of noise nuisance. They have power to establish smoke-controlled areas to secure cleaner air.

**Finance** 

Public expenditure on the health services in Britain was estimated at £3,105 million in 1973-74. Most of the cost falls on the Exchequer while the rest is met from local rates and from the national health service contribution paid with the national insurance contribution. In addition charges paid by people using certain services amount to some £98 million.

There are charges for 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 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 exemptions or refunds are made and help with health service dental and optical charges can be given under the supplementary benefits scheme to anyone aged 16 or over whose income is below a certain level. A limited number of beds may be made available for hospital patients wishing for privacy, provided that this accommodation 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. Such patients may make private arrangements for treatment by doctors of their own choice.

Hospital medical staffs are either full-time and salaried, or part-time; parttime 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.

# CARE

PRIMARY HEALTH 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 general practitioner services cover the services given to individuals by doctors, dentists, opticians and pharmacists of their own choice from among those taking part in the service.

About 98 per cent of the 25,000 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. It is normally through the patient's own doctor that access to most other parts of the health service is obtained.

There are about 11,000 dentists in England and Wales and some 1,000 in Scotland in the general dental service.

Some 900 ophthalmic medical practitioners and over 6,000 ophthalmic and dispensing opticians in England and Wales, and about 70 ophthalmic medical practitioners and about 700 ophthalmic and dispensing opticians in Scotland are engaged in the general ophthalmic services. These services provide for the testing of sight and provision of spectacles. Patients requiring treatment are dealt with through the hospital eye service.

# **Nursery** education

Local authority nursery schools and classes cater for children between 2 and 5 years old.



Indoor and outdoor activities provide opportunities for play with other children.



All-weather portable play centre.





# Some school buildings

The school-building programme has provided for new ideas and methods in design and construction.

Left: School for Girls, Enniskillen, Northern Ireland.

Below left: Aylwin Comprehensive School, London.

Below right: Paddington Comprehensive School, Liverpool.

Bottom left: Ravenscroft Secondary Modern School, Barnet.

Bottom right: Hampstead Comprehensive School, London.













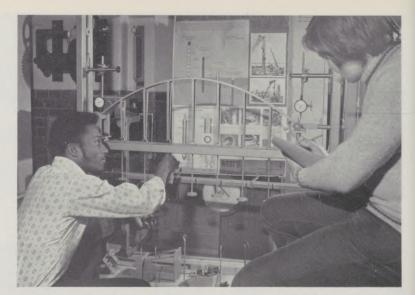
From top: Pimlico
Comprehensive School,
London.
Clapham Park School for
Partially Sighted
Children, London.
Benhall Infants School,
Cheltenham.



# Higher education in polytechnics

Right: Civil engineering. Below: Metallurgy and minerals.

Bottom left: Pharmacy. Bottom right: Civil engineering.









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There are about 11,500 retail pharmacies under contract to the National Health Service in Great Britain. They are responsible for the dispensing of all prescriptions except for the small number dispensed by certain general practitioners and hospital pharmacies.

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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 7 per cent of all confinements), and care for mothers and babies (whether born at home or in hospital) for 14 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 pediatric and geriatric wards of hospitals and social workers.

Group Practices and Health Centres

Increasingly family doctors are working 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 and more common for home nurses, midwives and health visitors to work from the larger premises established for such practices. About ten per cent of doctors now work in 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, Services frequently provided at health centres include dentistry, chiropody, family planning, ante-natal care, school health and health education. Occasionally, when necessary, provision is made for general ophthalmic and pharmaceutical 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. At the end of July 1974, 558 health centres were in operation in England and Wales, 150 were under construction and many more planned. In Scotland, there were 57 centres in operation, and 16 under construction with more planned.

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 departments, infectious disease units, psychiatric and geriatric facilities, rehabilitation facilities, convalescent homes and all forms of specialised treatment. A number of specialist hospitals for mentally ill, mentally handicapped and geriatric patients are also provided.

Hospitals

A large proportion of the hospitals in the National Health Service were built in the nineteenth century; some trace their origins to much earlier charitable foundations, such as the famous St. Thomas' and St. Bartholomew's Hospitals in London. Much has been done in recent years to improve and extend existing hospitals, some of which are housed in inconvenient buildings, and a number of new hospitals have been built. In 1962 long-term plans for hospital building were published by the Government and a revision made in 1966 set out the probable future pattern of the hospital service and contained assessments of the work to be undertaken in the ten years ahead. These plans were revised upwards in 1972.

Nearly 2,500 of the existing hospitals in the National Health Service are in

England and Wales, including the 25 teaching hospitals in London (actually groups of hospitals, convalescent homes, branches, annexes, or treatment centres, numbering over 100 altogether) and the 10 teaching hospitals elsewhere in England and Wales (comprising some 50 hospitals and other establishments). They have 428,571 beds available for use and a nursing and midwifery staff of 207,744 full-time and about 120,746 part-time. There are 355 hospitals in Scotland with some 64,373 beds and nearly 30,615 full-time and 18,350 part-time nurses and midwives.

A small number of hospitals remain outside the service for special reasons. Most of these are run by religious orders. Some, such as the Italian and Jewish Hospitals, were set up to serve a special group of patients; others are maintained for the chronic sick or for convalescents by charitable organisations. Some treat NHS patients under special arrangements. There are also private nursing homes which must be registered.

#### 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. Medical rehabilitation has been applied with advantage in the care of many patients, including the chronic sick, the mentally ill, the aged and the handicapped and has enabled many patients to become self-sufficient and to resume an independent life in their own homes. Specialised medical rehabilitation facilities are provided in the majority of hospitals and at medical rehabilitation centres. The work is carried out under the supervision of the appropriate medical specialist by physiotherapists, remedial gymnasts, occupational therapists together with social workers acting as a team. The hospital departments work closely with the Disablement Resettlement Service of the Employment Service Agency.

Medical rehabilitation includes the provision, free of charge, of artificial limbs and eyes, hearing aids, surgical supports, invalid chairs, certain types of invalid vehicles, and other appliances. Nursing aids for the handicapped at home can be borrowed through the service.

Social work help is available to those hospital patients who have difficulties connected with their illness. Social workers help to solve social and emotional 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, providing treatment for both in-patients and out-patients 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 dangerous drugs.

#### Alcoholism

Treatment is provided for alcoholics as part of the general psychiatric service. In addition a number of specialised hospital units have been set up. 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. There are maternity and

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child health centres in almost all areas. Special sessions are held for vaccination and inoculation and for early testing of babies for deafness and other defects. A feature of the service is the education of mothers before and after the birth by means of talks, discussion groups, demonstrations and classes. Some 70 per cent of babies are taken to the centres. Family planning advice and help is provided at many maternity and child health 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 that need hospitalisation, many hospitals have children's departments

under the oversight of pediatricians and specially trained nurses.

The school health service, now part of the National Health Service, comprises medical and dental inspection of school children, medical services connected with the education of handicapped children, school clinics to treat and advise on health problems of children of school age and child guidance clinics to give help and advice about children with mental or emotional problems.

**Family Planning** 

National Health Service family planning clinics and hospitals provide a family planning service to all irrespective of age, sex, or marital status. Advice is free

as are supplies prescribed and dispensed.

Advice is also available from general medical practitioners who can charge for the prescription and full cost of supplies. Negotiations with the medical profession are taking place on the terms on which general practitioners will be able to prescribe, for non-medical cases, free family planning under the National Health Service.

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 of any children in 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 approved for the purpose by the Secretary of State concerned.

Blood Transfusion The National Blood Transfusion Service in England and Wales is administered by the new regional health authorities. Donors give their blood voluntarily without payment. There are two central laboratories administered by the Medical Research Council on behalf of the Department of Health and Social Security: the Blood Group Reference Laboratory, which prepares grouping serum and investigates blood grouping problems referred to it, and the Blood Products Laboratory, which prepares dried plasma and plasma fractions. In Scotland the Blood Transfusion Service is administered by the Common Services Agency (see p. 131). In Northern Ireland the Blood Transfusion Service is operated by the Eastern Health and Social Services Board, which provides a service for all four Health and Social Services Boards.

Chest Radiological Service A Chest Radiological Service, which is freely available, is provided by chest clinics and the radiological departments of general hospitals. The success of mass radiography units has been such that their work is being phased into the hospital radiography service. Mobile X-ray units are still used among especially susceptible groups.

Safety of Medicines Under the Medicines Act 1968 the health and agriculture ministers are responsible for licensing the marketing, importation and manufacture of medicines for human and veterinary use. The Medicines Commission has been established as an advisory body to the ministers on policy regarding medicines and a statutory Committee on Safety of Medicines advises the health ministers on the safety, efficacy and quality of medicines.

Ambulance Services Free conveyance by ambulance in England and Wales between home and hospital is provided, where necessary, by the health authorities either directly or by arrangement with voluntary organisations. The Hospital Car Service (organised by the St. John Ambulance Association and Brigade, the British Red Cross Society, and the Women's Royal Voluntary Service) augments the ambulance service in many areas by the conveyance of sitting patients. In Scotland ambulances are run by the Common Services Agency (see p. 131). In Northern Ireland they are run 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. Health education services in Scotland are provided by the Common Services Agency (see p. 131). Expenditure is met from both central and local government funds.

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 the million or so subscribers to the provident schemes which make provision for private health care in return for annual subscriptions (now about £37 million or 2 per cent of the expenditure on NHS hospital and specialist services).

THE MEDICAL, DENTAL, NURSING AND ALLIED PROFESSIONS Only people whose names are on the medical and dental registers respectively may practise as doctors and dentists under the National Health Service. Dental auxiliaries (who have undergone a two-year training course) may carry out some kinds of simple dental work under the direction of a registered dentist. The minimum qualification for registration as a doctor requires five to seven years' training in medical school and hospital, with an additional year's experience as a resident assistant doctor 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, first set up in 1858; that of the dentists is the General Dental Council which succeeded the Dental Board in 1956. The British Medical Association is the doctors' main professional association; that of the dentists is the British Dental Association.

The minimum period of hospital training required to qualify for registration as a nurse is normally three years. Training may be in general, sick children's, mental or mental subnormality nursing. An enrolled nurse takes a two-year course. The examining bodies of the nursing profession in England and Wales and in Scotland are the General Nursing Councils, 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

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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 by the Pharmaceutical Society of Northern Ireland. Four or five 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 (called, for example, the Chiropodists' Board or the Dietitians' Board) 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 these professions who are state registered may be employed in the National Health Service and some other public

services.

#### PERSONAL SOCIAL SERVICES

Responsibility for personal social services rests with the social services departments of the major local authorities (see p. 65). 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, the elderly, the chronically sick and the disabled and the mentally ill or handicapped. Other groups that are helped by the local authority social services are young families with social problems, children deprived of a normal home life and the young offender. Many adults and children in these groups are also in need of medical and psychiatric services. Close co-operation is maintained between local 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

A new non-statutory body, the Personal Social Services Council, was established in 1973 to replace the former advisory councils in the field of personal social services by a single body. The council has members drawn 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. The council's functions are to advise ministers on policy issues and to provide a service of information and advice to all concerned with the personal social services, based on developmental and research projects or enquiries which the council will be in a position to sponsor. The council is financed jointly by central Government and the local authorities and is served by its own staff.

# The Handicapped

Local authorities in England and Wales have a duty under the National Assistance Act 1948 and under the Chronically Sick and Disabled Persons Act 1970 to provide social services for people who are blind, partially sighted, deaf, hard of hearing, or otherwise substantially and permanently handicapped, physically or mentally. Local authorities are required to identify the number of handicapped people in their area and to publicise services available to them. A wide range of facilities is available, including advice on occupational, social and personal 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; teaching of handicrafts and other occupations either at home or in centres; the provision of recreational facilities, outings and holidays including recuperative holidays. They also provide residential homes for the severely handicapped.

Help available from other sources includes financial aid, preventive and medical treatment, special education, training for employment and placement in suitable occupations, specially designed housing and specially designed

means of access to public buildings.

(For the provision of special educational treatment for handicapped children see p. 150, and the child health centres and the school health service, which keep a watch for abnormalities, pp. 137 and 148.)

# The Elderly

A number of 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. The services of local authorities include the advice and help of social workers, domestic help, a chiropody service, 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.

Local 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 provided by local authorities for elderly and other infirm people usually have accommodation for 30 to 50 residents. About 2,500 homes for elderly people are provided by local authorities in England and Wales which house about 2 per cent of the population over 65.

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 to undertake welfare duties in such specially designed housing.

The Mentally Ill and the Mentally Handicapped Local social services authorities have a duty to make arrangements for helping the mentally ill or 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 welfare support. Arrangements include training centres for the mentally handicapped, day care and occupation centres for the mentally ill, as well as social centres and a variety of residential care for the mentally ill and handicapped of all ages. If necessary, the local authority can place a mentally disordered person under guardianship within the community. Local authority social workers help patients and their families to deal with social problems arising from mental illness or mental handicap.

## Help to Families

Local 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 by local authorities. By far the most numerous category getting this help are the elderly, but others include the chronically sick and severely physically handicapped, the mentally ill or handicapped and maternity cases.

Some local 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 provide or arrange temporary accommodation. There were at the end of 1973 about 27,400 people in such accom-

modation in England.

Local authorities also arrange day care for children under five and not attending maintained schools, who are in a priority category of need, for example, with only one parent who has to go out to work. Full-day care is not usually provided by local authority day nurseries, but local authorities may place priority children in private or voluntary day nurseries or with registered child minders.

#### Child Care

Local authorities in Britain have a duty of care and protection towards children who have no parent or guardian willing and able to provide for them and control them adequately. Local authorities in England and Wales are empowered under the Children and Young Persons Act 1963 to make available such advice, guidance and assistance as may promote the welfare of children by diminishing the need to receive or keep them in the authority's care or to bring them before a juvenile court. The Children and Young Persons Act 1969 (for England and Wales) provides for children to be brought before a court if they are neglected, exposed to moral danger, beyond the control of parents or not attending school or if they have committed an offence and are in need of care and control; and for the care and treatment of young offenders and others in need of care and control; and gives local authorities responsibilities for undertaking, through social workers, enquiries and consultations with parents, schools and the police, and for the supervision of a child or young person found to be in need of care and control. Children under 17 who are charged with offences or brought before the court as being in need of care or control are almost always dealt with in a juvenile court.

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. In England and Wales local authorities have a further duty, under the Children Act 1948, to receive into their care any child under the age of 17 who has been abandoned or has no parent or guardian able to provide for him. A child so

received remains in the care of the local authority until he is 18 years old unless discharged to the care of parents, other relatives or friends before that time. Similar provisions for assistance and care apply in Scotland under separate legislation. Under the provisions of the Social Work (Scotland) Act 1968, the juvenile courts were replaced by a system of children's hearings which 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 cannot be found for a child, or he is not suitable for boarding out, he may be placed in a community home, a voluntary home or other suitable residential accommodation. Community homes for children in the care of local authorities are now provided under plans formulated by regional planning committees in accordance with the Children and Young Persons Act 1969. These homes comprise local authority children's homes and the voluntary homes which have become 'assisted' or 'controlled' together with former approved schools and remand homes which have ceased to function under these names. In Scotland local authorities are responsible for providing appropriate accommodation for children in their care and informal arrangements exist for the development of services on a regional basis.

In England and Wales local authority child care functions are the responsibility of the social services committees appointed under the Local Authority Social Services Act 1970. In Scotland child care work is undertaken by local authority social work departments set up under the Social Work (Scotland) Act 1968. Regulations regarding, for example, 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.

In Northern Ireland arrangements for young offenders follow the same general principles as in Great Britain.

# 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 (with some 12,000 places in Great Britain) are required to be registered under the Children Act 1948 in England and Wales, in Scotland under the Social Work (Scotland) Act and in Northern Ireland under the Children and Young Persons Act. 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 25,000 adoption orders are made annually by the courts in Great Britain and some 400 in Northern Ireland. Adoption is now regulated by the Adoption Act 1958 in Great Britain and by the Adoption Act (Northern Ireland) 1967 in Northern

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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. 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

Social services of all kinds require for their effective operation professional social workers, that is, full-time salaried workers trained in the methods of social work. Most professional social workers are employed in local authority social services departments, in hospitals, in voluntary organisations or in the probation service (see p. 107). In England and Wales social workers working in the health services are employed by local authority social services departments and made available by them to hospitals and other health service establishments. Responsibility for professional training in social work in Britain rests with the Central Council for Education and Training in Social Work. Professional training normally takes two years, or one year for certain students who have previously obtained relevant degrees or diplomas. Advice in social work training is given by the Social Work Advisory Service.

HEALTH
AND PERSONAL
SOCIAL
SERVICES IN
NORTHERN
IRELAND

The services established under the Health and Personal Social Services (Northern Ireland) Order 1972 correspond fairly closely to the system under the National Health Service in Great Britain and are financed in the same way as in the rest of the United Kingdom.

From October 1973 the former tripartite arrangement for the provision of health and personal social services was replaced by a unified structure in which these services are provided by four health and social services boards acting as agents of the Department of Health and Social Services. The services provided include hospital and specialist services, practitioner and other primary health care services and personal social services. The boards have under their control 94 hospitals containing in all about 18,000 beds. There are some 750 general practitioners (with an average of 2,102 patients each), 319 dentists, 12 ophthalmic medical practitioners and 116 ophthalmic and a few dispensing opticians.

#### 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 (see pp. 12 and 338). It was estimated that coloured Commonwealth immigrants and their families numbered some 1.5 million in 1971, about  $2\frac{1}{2}$  per cent of the total population of Britain.

Welfare of Immigrants

Commonwealth immigrants are making an important contribution to the economy and public services; but their concentration in areas where opportunities for employment are greatest—60 per cent have settled in Greater London and the West Midlands, including Birmingham—led to an increased demand for housing and additional pressures on some of the social services. The problems of these inner urban areas are being met by continuous social service programmes in housing, education, hospitals, health and personal social

services, which benefit the whole community, and by several 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. The welfare of immigrants and good relations between immigrant groups and the local community are promoted by voluntary community relations councils and other voluntary bodies.

### Community Relations

The co-ordination of government action to promote the welfare of immigrants is the responsibility of the Home Office. Voluntary efforts to achieve the integration of immigrants as part of a wider aim of promoting harmonious community relations 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 where there is an immigrant population. It makes grants towards the salaries of full-time community relations officers and assistants and towards special projects which help improve community relations and advises 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, in the context of a multi-cultural society.

### 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 replaced the 1965 Act and is much wider in scope, making discrimination unlawful in the provision of goods, facilities and services, in employment and housing and in advertising. The Race Relations Board has a statutory duty to receive and investigate complaints and seeks to resolve them by conciliation. The Board constitutes regional conciliation committees which between them cover all areas of Great Britain. If conciliation fails the Board can seek remedies in the courts. Employment complaints are dealt with in the first instance by the Department of Employment whose function it is to see whether voluntary machinery exists within industry to deal with them. Where no such machinery exists the complaints are investigated by the Board.

# 7 Education

There are over 11 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 1973–74 estimated total public expenditure on education, including school meals, milk, local libraries and museums, amounted to over £4,000 million, which was 12 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 systems both have long and separate histories, but the same general policy is implemented throughout Britain, with some national variations. Education is governed by the Education (Scotland) Act 1962 and the Education Act (Northern Ireland) 1947.

A ten-year education programme for England and Wales was announced by the Government in December 1972. The proposals involve substantially increased expenditure in five sectors: a new programme of nursery education (see p. 148); 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. Similar pro-

posals have been made for Scotland.

# 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 (see p. 47) throughout Great Britain; the Secretary of State for Wales is responsible for nursery, primary and secondary education in Wales; the Secretary of State for Scotland and the head of the Department of Education in 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. The relation between these three groups is based on consultation and co-operation.

The local education authorities are responsible for the provision of school education and further education and also provide grants to students proceeding to higher education. In Scotland grants are paid by the Scottish Education Department.

In England and Wales colleges of education (for teacher training) are under the financial and administrative control of local education authorities or voluntary organisations. The organisation of courses is based on university institutes of education. The Scottish colleges of education are financed directly by the Scottish Education Department and administered by independent governing bodies; in Northern Ireland they are controlled by the Department of Education 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. 156).

**SCHOOLS** 

Parents in Britain 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.

At present there are about 10.7 million school children at 37,860 schools. In England and Wales there were 8.7 million children in publicly maintained schools in 1973 besides 130,520 others at schools receiving direct grants from the Department of Education and Science or the Welsh Office; there were also 425,390 children of all ages at 2,523 independent schools. In Scotland 1,025,310 children were attending education authority or grant-aided schools and over 17,030 were at independent schools. In Northern Ireland 358,470 children were attending publicly maintained or assisted schools.

In Britain boys and girls are generally taught together in primary schools. Some 74 per cent of pupils in maintained secondary schools in England and Wales and about 50 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 either for boys or for girls.

Management

Schools supported from public funds are of three kinds in England and Wales: county schools (the largest group), provided and maintained by local education authorities wholly out of public funds; voluntary schools (mostly 'aided' or 'controlled' schools), provided by a voluntary body, usually of a religious denomination; and direct-grant schools, completely independent of local education authorities but receiving a grant from the Department of Education and Science or the Welsh Office. 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. 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. 151). About a third of the 28,330 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 2,607 Roman Catholic voluntary schools and smaller numbers belonging to other religious bodies.

Direct-grant schools (the smallest group) are mainly grammar schools; they

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include some schools of ancient foundation. 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. 150). There are also 27 grant-aided secondary schools comparable to the English direct-grant schools. In Northern Ireland controlled schools, managed by education and library boards and voluntary schools managed by maintained school committees, boards of governors and individual (usually clerical) managers, are both grant-aided from public funds.

Fees

In England and Wales no fees are charged to parents of children attending maintained schools (that is, 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.

The direct-grant grammar schools in England and Wales and a few of the grant-aided secondary schools in Scotland take pupils paid for by local education authorities as well as those whose fees are paid wholly or partly by parents. 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 curricula in maintained schools are the responsibility of the schools' managers (primary) or governors (secondary). In practice there is a very high degree of devolution to headteachers. 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 advisers. Local education authorities also employ inspectors to advise on maintained schools. Further advice 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. 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.

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 and partly prompted by the raising of the school-leaving age from 15 to 16 in September 1972. The general purpose is to adapt the curriculum to the everyday life and needs of children and young people.

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 an undenominational Christian character is given which may include the study of comparative religions. In all kinds of voluntary school there is opportunity for denominational

instruction. In Scotland, subject to safeguards for the individual conscience, religious instruction must be given, but the content is determined by education authorities 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 purposes; in voluntary schools corporate worship and religious education are controlled by the management authorities.

Health and Welfare of School Children Physical education, including organised games, is a 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 (which became part of the reorganised National Health Service in April 1974) provides medical inspection and arranges for free medical and dental treatment for all children attending schools maintained by local education authorities. Treatment facilities include dental clinics and

child guidance centres.

Milk (normally one-third of a pint 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 66 per cent of pupils in England and Wales, 44 per cent of pupils in Scotland and 53 per cent of pupils in Northern Ireland in education authority schools make use of the service. Education authorities have a duty, under certain conditions, to assist financially in the provision of transport for pupils between home and school.

**Priority Areas** 

The Government has allocated resources under several schemes for the improvement of educational facilities in 'priority areas'. Educational problems in these areas arising from poverty, overcrowding and old school buildings were highlighted in the Plowden report (see Bibliography p. 468) which made a number of recommendations on aid to what it defined as educational priority areas. These recommendations led to the introduction of a special annual increment for teachers employed in schools of exceptional difficulty and to the allocation of additional funds for school building in these areas. Before the proposals for a major expansion in nursery education were announced in 1972, over 24,000 additional nursery school places in Great Britain had been approved in areas of acute social need through the Urban Programme (see p. 120). The educational share of the Urban Programme has since been devoted to other uses, for example, the improvement of the links between home and school, which was recommended in the report on the educational priority area project (see Bibliography p. 468). This 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), have encouraged such innovations as community schools, pre-school experiments and new approaches to adult education. The education programme announced in 1972 (see p. 145), which included the provision of more nursery education and the improvement or replacement of old school buildings, also incorporated as an objective the need to give priority to the deprived areas.

Primary Schools Nursery schools and classes provide informal educational and play facilities. Only a small proportion of children between two and five years old attend

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these schools but the major expansion of nursery education announced in December 1972 is planned to provide, within ten years, nursery education without charge to those children of three and four whose parents wish them to have it. 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. At present 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 for pupils aged 8 or 9 to 12 or 13 and 10 to 13 or 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.

The content of curricula is very largely a matter for the schools themselves (see p. 147). In England, Wales and Northern Ireland there are no compulsory secular subjects but generally a curriculum includes the teaching of reading, writing, mathematics, English, music, art and handiwork, science and nature study, history and geography. French is taught in an increasing number of schools. Additionally, in Wales, the Welsh language is taught. Where it is the home language of the pupils, Welsh is used as either the main or a secondary medium of teaching in many schools especially in the early years of primary school. In Scotland the scope of the curriculum is similar and provision is made, where appropriate, for the teaching of Gaelic and its use for the purposes of instruction.

## Secondary Schools

England and Wales

The public or state system of education aims to give all children an education suited to their particular abilities. Just over half the school children in England and Wales 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 995 grammar schools providing academic education (including 176 direct-grant grammar schools); some 1,915 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.

Nearly a half of the maintained secondary school population, however, attend some 1,835 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.

In 1974 the Government announced plans to encourage progress towards a fully comprehensive system of secondary education.

Scotland

Secondary education in Scotland is almost completely organised on comprehensive lines and in 1973 306,000 pupils (about 90 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.

# 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).¹ There are over 1,730 special schools in Britain, including hospital schools, day and boarding schools. There are also boarding homes for handicapped children attending ordinary schools.

There are ten 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 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 overall 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 broadly comparable with those of well-run maintained schools are, on application, granted the status of 'recognised as efficient'. Such schools (1,390 of 2,523 independent schools registered) contain 75.2 per cent of the pupils in independent schools. In Scotland where there are 107 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 and abilities. They include the preparatory schools and the public schools.<sup>2</sup> The preparatory schools cater mainly for boys from about 8 to 13 years of age who hope to enter public schools, the largest and most important of the 'recognised as efficient' independent schools. Combined tuition and boarding fees in public schools generally range between £750 and £1,200 a year. There are some 250 public schools about half of which are for girls. The boys' schools in particular include a high proportion of boarding schools and it is among these that some of the most famous schools are numbered.

<sup>1</sup> The setting up of an inquiry into educational provision for handicapped children in

England, Wales and Scotland was announced in 1973.

<sup>2</sup> '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. Some other schools, mainly direct grant, which are not independent schools, are also represented on these bodies. They should not be confused with the state-supported public schools in Scotland.

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School Leaving and Secondary School Examinations The minimum school-leaving age is 16, but the numbers choosing to stay on beyond this age have shown a steady increase over the past decade.

There is no national school-leaving examination in England and Wales, but secondary school pupils may attempt examinations, in various subjects, leading to the Certificate of Secondary Education (CSE) or the General Certificate of Education (GCE). 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 is widely accepted as being of the same standard as a pass at GCE 'Ordinary' level. Control over the scope and standards of the examinations is exercised by the Schools Council (see p. 147) 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.

Passes in various subjects at GCE 'O' level and the equivalent CSE grade are usually considered to be qualifications for entry to courses of further education and training. Since the inception of the CSE the number of passes at the highest grade has increased steadily as the popularity of the examination has grown while the annual number of GCE 'O' level subject passes has also increased. The 'A' level examination is at the standard for entrance to university and for entry to many forms of professional training. Since 1955 the number of school-leavers obtaining two or more 'A' levels (the minimum qualification for entry to first degree courses at university) has more than trebled. 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 award of passes on 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 decide on the size and nature 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 15,000 new schools in Britain, together with extensions, alterations and remodelling of existing state schools; over 8 million new places have been provided.

Grants of up to 80 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 80 per cent are available for voluntary schools managed by maintained school committees and voluntary grammar schools which have entered into an agreement under the relevant statutory provisions.

The school building programme has provided for new ideas and methods in design and construction. Industrialised building techniques have been widely adopted. The new schools are light, airy and colourful, well equipped and with a generous provision of teaching area and outdoor games space. In primary schools especially, traditional classroom designs are being modified to allow more flexible use of space.

#### **TEACHERS**

Teachers are appointed by local education authorities or school governing bodies or managers. In 1973 there were about 455,890 full-time and 52,760 part-time (equivalent to 24,510 full-time) teachers in publicly maintained schools in Britain, an average of one teacher to 21.9 pupils. The supply of teachers is increasing rapidly and the pupil-teacher ratio is improving each year. Increasing numbers of university graduates are turning to teaching.

In 1973 the Advisory Committee on the Supply and Training of Teachers was set up to advise the Secretary of State for Education and Science on the supply and training of teachers for maintained schools and establishments of further education in England and Wales. In 1973 there were 68,620 full-time teachers in grant-aided establishments of further education in Britain, and many more part-time teachers. There is also an increased use of teachers' aides (helpers) particularly in primary schools, while the rapid growth in the number of teachers' centres (some 550) has helped the spread of new ideas in teaching practice. Most teachers in technical colleges have had industrial and professional experience.

There are national salary scales for teachers in schools and other educational institutions maintained from public funds in England and Wales, in Scotland, and in Northern Ireland.

#### FURTHER EDUCATION

Further education is a broad term used to cover education beyond the secondary stage; it includes much vocational education (full-time, part-time day or evening courses), non-vocational and recreational evening classes, and adult education. Further education advanced courses constitute one of the three sectors of higher education (see p. 155 and below).

### Institutions

In England and Wales there are about 625 major establishments of further education including polytechnics (see p. 159), technical colleges, colleges of commerce, colleges of art, and a number of agricultural establishments. They provide both full-time and part-time courses up to the levels of first and higher degrees. There are also over 6,360 evening institutes (see p. 154).

In Scotland there are about 75 local further education colleges offering full- and part-time day courses and a number of evening courses and 13 central institutions for further education doing mainly advanced work.

In Northern Ireland there are 27 institutions of further education.

#### **Finance**

Since most further education establishments in Britain are either maintained or aided from public funds, tuition fees are moderate, and nearly always remitted for young people under 18 years of age. Where industrial training is provided by the colleges, charges (the responsibility of the employer) broadly

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reflect the economic cost of provision. Many full-time students are helped by awards from local education authorities. The awards, generally based on the results of the General Certificate of Education or a corresponding examination, 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. There are also some scholarships available from endowments, and from particular industries or companies for the most promising of their young workers.

Students

In autumn 1972, there were 344,939 full-time and sandwich-course students (307,000 in England and Wales, 26,077 in Scotland and 11,862 in Northern Ireland) and 1,638,424 part-time students in vocational further education (1.5 million in England and Wales, 115,285 in Scotland and 23,139 in Northern Ireland). The total number of students on advanced courses in England and Wales was about 208,700, in Scotland 19,043, and in Northern Ireland 2,692.

Courses

The courses provided are full-time, sandwich (up to five years in length, generally consisting of alternate periods of about six months of full-time study in a technical college and supervised experience in industry), block release (on similar principles, but with shorter periods in college), day release (generally attendance at a technical college for one day a week during working hours), and evening classes.

Sandwich courses in higher education are becoming increasingly popular. At the lower levels the numbers of day release and block release courses are expanding, and to a large extent replacing evening classes in certain vocational subjects. Many students attend courses in which further education and industrial training are combined.

Technical Courses

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 was set up in 1973 with overall 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 parttime 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 study to a greater depth. 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.

Business and Secretarial Courses Many technical colleges, evening institutes and independent colleges offer courses in shorthand, typing and book-keeping. Most local technical colleges offer some lower-level work in business and commerce; higher-level work is generally concentrated in colleges with a department of business studies or in specialised colleges of commerce. There are a number of part-time and full-time courses leading to the Certificate or Higher Certificate in Office Studies.

Some business education is related to the specialised examination requirements of various professional bodies; large numbers of the candidates taking such courses do so through correspondence courses. In England, Wales and Northern Ireland there are part-time courses leading to the ONC and HNC in Business Studies. There are also full-time and sandwich courses leading to the OND and HND in Business Studies. 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.

#### **Adult Education**

Adult education is generally taken to mean courses of non-vocational education for people over 18. In 1973 some 2·2 million people registered for these courses which were provided by local education authorities, various voluntary bodies, of which the Workers' Educational Association (WEA) is the most notable, certain residential colleges, and the adult education ('extra-mural') departments of universities.

The residential colleges, the university departments and the voluntary bodies, such as the WEA, 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 provided by local education authorities. Most of it is on a part-time basis, mainly in evening institutes (day schools used by adults in the evening) and increasingly by day as well as in the evening in colleges of further education, schools of art, adult education centres, community centres, literary institutes and youth clubs. About 1.8 million students attended local authority adult education classes in 1973. There are about 24 short-term residential colleges or centres in England and Wales, most maintained or aided by local education authorities, providing courses varying in length between a weekend and a fortnight. Many of the courses are practical, but there are widespread opportunities for academic study.

The village colleges pioneered in Cambridgeshire and variously adapted as community schools and colleges, at first in rural, but now also in urban areas, are secondary schools planned 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 training of community centre wardens is linked with that of youth workers (see p. 164).

Long-term residential colleges (6 in England and Wales, 1 in Scotland) 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.

In general, part-time courses of more academic studies are provided by the

<sup>&</sup>lt;sup>1</sup> Recommendations for changes in the provision of adult education in England and Wales, made by a committee of inquiry (see Bibliography p. 468), are being considered by the Government. A similar committee of inquiry for Scotland is expected to report towards the end of 1974.

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extra-mural departments of the universities, many of which have full-time staff appointed for this purpose and can also call on the services of other members of the university staff; and by the Workers' Educational Association, which also employs organising tutors and works closely with the university extra-mural departments. In 1972–73 some 300,000 students in Britain attended such courses. Similar work is promoted in some education authority centres.

The National Institute of Adult Education provides in London a centre of information, research and publication for adult education, as well as a channel of co-operation and consultation for the many organisations in England and Wales which are interested in this subject. It is mainly financed by contributions from local education authorities and assisted by a grant from the Department of Education and Science. The Scottish Institute of Adult Education is the corresponding body 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.

TEACHING AIDS AND EDUCATIONAL TECHNIQUES In 1973-74 the British Broadcasting Corporation (BBC) broadcast 84 radio series for schools including nine series for Wales, nine for Scotland, and four for Northern Ireland. These programmes were used by about 92 per cent of all schools. Television reached some 80 per cent of all schools and the BBC and the Independent Broadcasting Authority between them transmitted 94 series of educational programmes, most of which were repeated.

Radio provides a great variety of educational programmes for adults, both vocational and non-vocational; most of them are grouped in an hourly study programme on five nights a week. Television programmes for similar audiences are mostly shown on Saturday and Sunday mornings and in the evening during the week. Radio and television form a major part of the Open University's courses (see p. 156) and in 1973 the BBC produced 520 hours of radio and 606 hours of television in support of 42 courses prepared by the Open University. There have also been a number of experimental projects sponsored between the BBC, some of the independent television companies, universities and local education authorities.

A number of other audio-visual aids are in use throughout the educational system. Most universities and a high proportion of colleges of education use closed-circuit television; it is also used increasingly in further education colleges and schools—the Inner London Education Authority's system links about 1,400 educational establishments and is one of the world's biggest networks. There are about 3,000 language laboratories in use in schools and institutions of further and higher education in England and Wales.

Schools and colleges co-ordinate different methods of audio-visual presentation, including radio, television, films, colour slides, wall charts, maps, models and tape recordings. For example, the BBC's 'Radiovision' programmes for schools use coloured film strips in conjunction with a tape recording of the broadcast. 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 system of higher education includes universities, colleges of education and advanced courses at various colleges in the further education system

HIGHER EDUCATION particularly the polytechnics. There has been a rapid expansion in higher education in the last decade; the numbers in full-time higher education in Britain have increased from 222,400 in 1962 to 483,387 in 1972–73. This expansion has been achieved by increasing the number of universities; by concentrating much of the advanced work in further education establishments in the polytechnics and thus providing opportunities for students to gain a degree outside a university; by introducing new courses leading to a Bachelor of Education (B.Ed) degree; and by the establishment of the Open University which provides people, with or without formal qualifications, with the opportunity of studying for a degree.

#### Universities

There are 44 universities (not counting the Open University) in Britain, compared with 17 in 1945. Although the Government is responsible for providing about 90 per cent of universities' income it does not control their work or teaching nor does it have direct dealings with the universities. The grants are distributed by the University Grants Committee, a body 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.

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 Warwick¹ and York.¹ 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 (see p. 159).

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.

There are five other institutions where the work is of university standard: the University of Manchester Institute of Science and Technology; the two postgraduate business schools which are supported jointly by industry and the Government—the Manchester Business School and the London Graduate School of Business Studies; Cranfield Institute of Technology for mainly postgraduate work in aeronautics and other subjects; and the Royal College of Art.

The Open University is a non-residential university which provides parttime 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 (which are awarded on a system of credits for each course completed) are the same as those of other universities. The university is financed by fees and a direct grant from the Department of Education and Science. The first courses began in January 1971 and in July 1974 some 42,170 students were following courses.

University Finance

In spite of the large sums of public money spent on universities they have remained autonomous institutions, due largely to the existence of the Univer-

<sup>&</sup>lt;sup>1</sup> Has received its charter since 1960.

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sity Grants Committee. The Committee acts as a link between the Government from which it receives a block grant and the universities to which it allocates this grant. In this way the Government contributes about 90 per cent towards both the current income of universities and towards their capital programmes for building work, purchasing sites and properties, professional fees and furniture and equipment. Further sums are raised by the universities.

In Great Britain the recurrent grants for the academic year 1974-75 are estimated to be about £331 million. Capital grants are expected to be about £11.5 million. Total public expenditure on universities rose from £4 million in 1945 to £426 million in 1973-74. The Comptroller and Auditor General (see p. 357) has access to the books and records of the University Grants Committee and the universities to check that the funds entrusted to the universities are efficiently administered. He cannot question policy decisions

or those reached on academic grounds.

Studies and Degrees

Courses in arts and science are offered by most universities. Imperial College, London, the University of Manchester Institute of Science and Technology and some of the newer universities concentrate on technology although they also offer a number of courses in social studies, modern languages and other non-technological subjects. About 50 per cent of full-time university students in Great Britain are taking arts or social studies courses and 35 per cent science and technology: about 12 per cent are studying medicine, dentistry and health, and the remainder agriculture, forestry, veterinary science, architecture and town and country planning.

University degree courses generally extend over three or four years, though in medicine, dentistry and veterinary science five or six years are required. The first degree of Bachelor (Master in the arts faculties of the older Scottish universities and in Dundee) is awarded on the completion of such a course, depending on satisfactory examination results. Further study or research is required at the modern universities for the degree of Master and by all universities for that of Doctor. Actual degree titles vary according to the practice of each university. A uniform standard of degree throughout the country is ensured by having external examiners on all examining boards. In the last decade there has been a tendency for degree courses to become more broadly based in subject matter, particularly in the new universities. A recent innovation has been the introduction of 'modular' degree courses which provide more flexibility for students in their choice of courses.

University teaching combines lectures, practical classes (in scientific sub-

jects) and small group teaching in either seminars or tutorials.

Most members of the academic staffs devote time to research and at all universities there are postgraduate students engaged in research.

Admission to the universities is by examination and selection; there is no religious test and no colour bar. Women are admitted on equal terms with men but at Cambridge their numbers may be limited by ordinance. The general proportion of men to women students is less than three to one; at Oxford it is over four to one, and at Cambridge seven to one. Just under a half of all fulltime university students in Britain are living in colleges and halls of residence, over one-third are in privately rented accommodation, and the remainder live at home.

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.

Students

In 1973-74 there were about 244,480 full-time university students in Great Britain including 46,100 postgraduates. In 1972-73 there were some 22,625 part-time students. Some 32,170 home and overseas candidates were also registered in 1974 for London University's external first degree examinations.

Staff

In 1972-73 there were about 35,595 full-time university teachers in Great Britain; about 10.5 per cent of them were professors. The ratio of staff to students was about one to eight, one of the most favourable in the world.

Teacher Training Teachers in maintained schools must hold qualifications approved by the education departments. In England, Wales, and Northern Ireland the majority qualify by undertaking a three-year course at a college of education.¹ Some college students obtain a degree—Bachelor of Education (B.Ed)—and a professional qualification by means of a four-year course. A one-year course of professional training for newly qualified people with degrees and certain other specialist qualifications, hitherto entitled to teach without further training, is now compulsory for teachers of all subjects in primary schools and for all subjects in secondary schools except, temporarily, mathematics and science where a shortage exists.

In Scotland all teachers in education authority and grant-aided primary and secondary schools must be registered with the General Teaching Council for Scotland. Secondary school teachers must be graduates (or have equivalent qualification) and have taken a course of teacher training at a college of education. Primary school teachers, if graduate, take a one-year course of teacher training or, if non-graduate, a three-year course at a college of education. Most Scottish colleges of education also offer courses leading to the degree of Bachelor of Education.

In England and Wales there are 154 colleges of education, 14 of which are for day students only, 7 departments of education in polytechnics, 30 university departments of education, 4 colleges for training teachers for technical institutions and 13 art teacher training centres. In October 1973 there were about 113,600 students in colleges and departments of education outside universities (including nearly 6,900 in day colleges), some 6,600 in university departments of education, and 2,700 in colleges of education (technical) and art teacher training centres. In Scotland there are 10 colleges of education; the number of students in training in 1973–74 was over 14,000.

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

Advanced Courses in Further Education In 1972–73 over 222,000 students in Great Britain were taking advanced courses other than in universities and colleges of education in a wide variety of subjects including architecture, art and design (see p. 424), catering, engineering, natural sciences 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 1973–74 there were 603 courses being followed by about 41,650 students. These courses were mainly in science and technology but

<sup>&</sup>lt;sup>1</sup> The Government has announced proposals for changes in the system of teacher training (see p. 145) based on the recommendations made by the James committee of inquiry (see Bibliography p. 468).

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included the arts, social studies, business studies and law. In 1974 the council approved its first teacher training courses including some leading to the B.Ed

degree.

In England and Wales higher education provision outside universities and 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) at all levels of higher education. In Scotland similar provision is made in 13 central institutions and a few further education colleges managed by education authorities.

Management studies are provided by universities, polytechnics and other further education colleges, by individual companies and by trade and industrial federations. (For the two postgraduate business schools, see p. 156.) Certain independent colleges specialise in management training. Many universities have introduced management studies into the curriculum. Courses for the postgraduate Diploma in Management Studies are run by about 80 colleges. In Scotland courses leading to the Certificate of Business Administration are provided for students in junior supervisory positions.

Awards

Awards to enable students to undertake higher education are made under one of the most generous grant systems in the world. It is national policy that no school leaver should be prevented by lack of means from taking an advanced course at a university or elsewhere. As a result, over 90 per cent of students in

higher education in Great Britain are aided from public funds.

In England, Wales and Scotland most adequately qualified British students can obtain awards from public funds in order to attend full-time at a university, college of education or major further education establishment. In England and Wales local education authorities provide awards. In Scotland students' allowances for advanced courses are granted by the Scottish Education Department. The amount of these awards depends upon the income of the student and his parents. Grants for postgraduate study are offered annually by the Department of Education and Science, the Research Councils and the Scottish Education Department.

Northern Ireland

Two institutions provide university education in Northern Ireland—the Queen's University of Belfast and the New University of Ulster, Coleraine. The New University consists of four schools (biological studies, social and economic studies, physical sciences and humanities) and an education centre with the status of a school. Technological studies are provided at the Queen's University of Belfast, in addition to a wide range of courses in other faculties. In October 1973 there were 5,500 students at the Queen's University and 1,560 at the New University. Government grants to the universities are made by the Department of Education which first seeks the advice of the University Grants Committee.

Higher education outside the universities is mainly centred in a new polytechnic called Ulster College which has 1,824 full-time and 2,090 part-time students.

Teacher training takes place in the two university education departments, three colleges of education, the Ulster College and one technical college. In 1973-74 there were about 3,233 students in training. 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. University and further education scholarships are awarded by the education and library boards and postgraduate awards and teacher-training scholarships

by the Department of Education, the conditions of award being the same as those for Great Britain.

### 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, 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 colleges of education and polytechnics and by a few independent research organisations.

Among philanthropic organisations that provide generously for research are the Nuffield Foundation, the Ford Foundation, the Gulbenkian Trust, the Leverhulme Trust, the Bernard van Leer Foundation, the Rockefeller Foundation, the Carnegie United Kingdom Trust, the Wolfson Foundation and the Foundation for Management Education.

## 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 and ultimately 1,000 teacher exchanges a year are planned. These schemes are administered by the Central Bureau for Educational Visits and Exchanges which also makes appointments available to European teachers wishing to teach in Britain and negotiates posts on an inservice training basis for British teachers wishing to further their experience in another European country. Opportunities for students from the Community to study at higher education institutions in Britain have increased under the European Fellowship Scheme, initiated by Britain, for the provision of European Fellowships for postgraduate study. Britain has also 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 establish common standards of professional qualification 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 1972–73 there were about 82,830 overseas students in Britain, of whom about 22,410 were at universities, another 22,240 at technical colleges and the remainder learning English or training as teachers, nurses, for the law, banking and accountancy, or in industry. About 49 per cent of all overseas students were from the Commonwealth.

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 1973–74, 632 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. There are 550 study fellowships tenable for periods of between 3 months and 3 years.

About 500 British Council¹ scholarships tenable usually for one year in Britain, and 24 British Council Fellowships tenable for two to three years, are offered annually to graduates of overseas universities. Thirty 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 and over 60 Rhodes Scholarships are awarded annually to Commonwealth and United States graduates for two years of study at the University of Oxford. A further two Rhodes Scholarships are awarded to graduates from the Federal Republic of Germany. 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.

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 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

Arrangements for Overseas Students

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 an executive committee of 30 members, broadly representative of many elements of the life of Britain, and including eight members nominated by ministers. It is financed almost entirely from public funds. The activities of the council, which has staff in 82 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 the best in the arts in Britain. Its work in Britain is concerned mainly with professional visitors and with the welfare of overseas students.

<sup>&</sup>lt;sup>2</sup> The Association of Commonwealth Universities publishes two handbooks, Awards for Commonwealth University Staff (see Bibliography p. 467) and Scholarships Guide for Commonwealth Postgraduate Students, which includes information about sources of financial aid available for use in Britain. The Association promotes co-operation between Commonwealth universities. Its activities include the provision of publication and information services, and of secretariats for various bodies affecting its member institutions, such as the Commonwealth Scholarship Commission and the Marshall Aid Commemoration Commission.

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 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, Round Table, 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 students 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 1974 grants had been approved for 160 projects, providing places for about 6,500 students.

#### British Students Overseas

In 1973-74, 31 awards were accepted by British students in eight Commonwealth countries under the Commonwealth Scholarship and Fellowship Plan (see p. 161). 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 Commission) offers travel grants for postgraduate study in the United States. Notable among more recently established scholarships are the Kennedy scholarships, to enable British students to study at three American universities, 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

About 1,265 teachers were recruited in Britain during 1973 for posts in schools, colleges of education, technical colleges and universities in developing countries, including about 1,115 for posts in the developing countries of the Commonwealth; almost all of them are 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 the Overseas Appointments Bureau and Catholic Overseas Appointments. Some developing countries carry out their own recruitment of British teachers through their offices in London.

During 1973 about 1,510 British teachers served in universities in developing countries, most of them recruited through the Inter-University Council for Higher Education Overseas and the Association of Commonwealth Univer-

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sities 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 and a few cadet volunteers for service overseas. Of the 2,705 overseas in 1973, 1,829 were teachers. The BVP receives financial assistance from the Govern-

ment.

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 temporary 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, on request, assistance to the developing countries in several other ways, including the loan of educational experts for technical and consultant services and specialist missions, through various educational organisations and the Ministry of Overseas Development. In 1974 the Centre for Educational Development Overseas, which was concerned with the modernisation of education in developing countries was amalgamated with the British Council which has assumed responsibility for the centre's work.

#### 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 achievement 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. Departments in Scotland and Northern Ireland are advised on the finance and development of the service by councils representing all those concerned in youth work. 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.

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 5·5 million. Some 50 national youth organisations and 39 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 15 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 500,000 and 800,000 members), the National Association of Youth Clubs (400,000), the National Association of Boys' Clubs (170,000) and the Youth Hostels Association

tions (290,000, including Scotland and Northern Ireland).

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. 469) 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 sometime been members of a youth club. A smaller proportion of girls than boys take part in youth club activities and the main involvement is between the ages of 14 and 16.

Training of Youth Workers

There are over 2,800 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 colleges of education and further education, 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 the Ulster Polytechnic provides a full-time course.

Other **Organisations** Concerned with Young People

There are in Britain 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. 448), 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 six sea and mountain schools in Britain offering 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 leisuretime 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 1973. 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 £2.6 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.

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 fullor 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 grantaided 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 Environmental Planning

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 emphasise positive planning to ensure the wise use of land.

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 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. The two types of authority exercise concurrent powers over, for example, the acquisition and disposal of land for planning purposes, development and redevelopment, parks, playing fields, open spaces and coast protection. In Scotland, planning functions are undertaken by the councils of counties and large burghs but from May 1975 (see p. 65) there will be a division of responsibilities between regional and district authorities broadly similar to that in England and Wales.

In Northern Ireland the Department of Housing, Local Government and Planning 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. 178). District councils have local environmental health

responsibilities.

Development Plans

A development control system of structure and local plans was introduced in England and Wales in the late 1960s and is being progressively brought into operation. The system is designed to reduce administrative delays, to emphasise positive planning for the creation of a pleasant environment rather than a negative control of undesirable development, and to enable the public to play a greater part in the planning process. 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 traffic management) and show 'action areas' where comprehensive development or improvement is expected to start within a specified period. Local plans, which have to conform 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 will be introduced in Scotland in May 1975.

The local authorities have wide powers for undertaking development, including the compulsory purchase of land. With a few exceptions, all other development (which includes most forms of construction, mineral extraction and any material change made 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. 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 and Wales some 75 per cent of appeals are transferred to inspectors for decision. 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 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 Secretaries of State for the Environment, Scotland and Wales can hold such

inquiries as they consider appropriate.

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 425,000 members. For the benefit of the public it owns and protects from harmful development 400,000 acres (160,000 hectares) of land, 200 historic buildings and large stretches of coastline. Properties in Scotland covering some 82,000 acres (32,800 hectares) are protected by the National Trust for Scotland, an independent body founded in 1931, which has over 64,000 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 interest in architecture and planning and makes annual awards for good developments of all kinds. It supports and advises over 1,100 amenity societies and, at the request of the Government, is providing the United Kingdom secretariat for European Architectural Heritage Year 1975.

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 Preservation of Rural Scotland and the Ulster Society for the Preservation of the Countryside; the Commons, Open Spaces and Footpaths Preservation Society; the Ramblers'

Amenity Societies Association; the Society for the Protection of Ancient Buildings; the Georgian Group and the Scottish Georgian Society; the Ulster Architectural Heritage Society; the Victorian Society; the Pilgrim Trust; 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

Advisory machinery for regional planning has been set up by the Government. The structure plans of county councils are prepared within the framework of the physical and economic planning of each particular region.

This process is encouraged by the preparation of regional strategies drawn up by regional economic planning councils (see p. 190), regional economic planning boards and local planning authorities. Certain county councils combine their preparatory work on structure plans and, in some cases, joint plans are submitted for ministerial approval.

# The Location of Industry

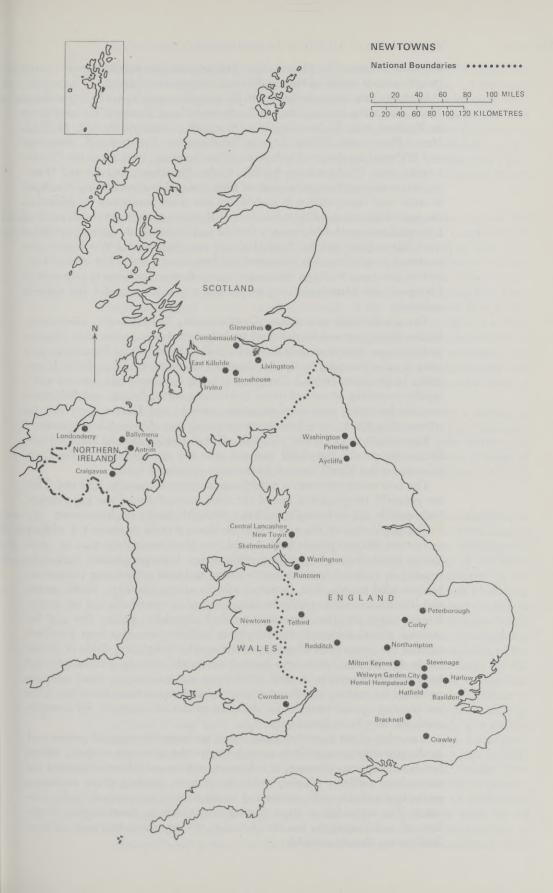
Special provisions, in addition to the general town and country planning measures, control the location of industry and offices (see p. 207). General problems of industrial development are dealt with jointly by a number of government departments, but each development scheme, as a rule, requires the local planning authority's consent. Financial incentives to encourage the location of industry in particular areas have been made available by the Government.

#### **New Towns**

In Great Britain the New Towns Act 1946 and subsequent legislation (now consolidated in Acts of 1965 and 1968) give the Secretaries of State for the Environment, Scotland and Wales power to designate as the site of a new town any area of land (which may include an existing centre of population). 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 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 £1,500 million; a total of over £1,100 million



had been advanced by March 1974. The corporations submit annual reports

(which include copies of their audited accounts) to Parliament.

Of the 33 new towns designated in Britain since 1946, 23 are in England and Wales, six in Scotland and four in Northern Ireland. Eleven of the new towns in England and Wales (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, Cwmbran, Peterlee and Washington are serving the special needs of their areas; Newtown is being developed to stem rural depopulation in mid-Wales and create conditions for growth in the area; 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. The 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.

The six Scottish new towns (Cumbernauld, East Kilbride, Glenrothes, Irvine, Livingston and Stonehouse) are helping to house people from Glasgow and are major growth areas in the central belt of Scotland; the Stonehouse new town is to be managed by the development corporation of East Kilbride new town. In Northern Ireland, Craigavon is being developed as a new city and is rapidly becoming an area of major industrial growth; Antrim and Ballymena are also becoming centres of economic growth; and Londonderry and the surrounding district have been designated as an area of special development.

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 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.

The population of the new towns in Great Britain is about 1.8 million; more than 800,000 people have moved into them during the past 25 years. Young people form a higher proportion 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 playing fields of various kinds. All the new towns have become concerned with the increasingly high level of car ownership of their inhabitants 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.

Town
Development
Schemes

The Town Development Act 1952 makes provision for the relief of congestion in large industrial towns in England and Wales (such as London and Birmingham) by encouraging the transfer of population to areas suitable for expansion. Schemes have been approved, providing some 164,000 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 and jobs for people from large cities. The Housing and Town Development (Scotland) Act 1957 makes similar provision for Scotland, where the only congested town so far involved is Glasgow.

Urban Renewal

Existing towns and cities 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. The Government believes that greater integration of land use and transport planning is of basic importance, and through the Department of the Environment (see p. 48) ensures that a total strategic approach to environmental planning and protection is adopted. Studies of six urban areas in England have been undertaken by the Department of the Environment and local authorities to emphasise this type of approach to urban problems. Three of the studies are concerned with the problems of industrial towns and the other three studies with those of 'inner city' areas.

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. The School of Advanced Urban Studies at Bristol University provides some 80 places for people concerned with all aspects of urban planning.

Historic Buildings and 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; 200,060 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 Commissions on Historical Monuments 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 2,000 buildings in Great Britain have received grants and loans totalling nearly fio million under the Historic Buildings and Ancient Monuments Act 1953. Local planning authorities have designated for special protection over 3,000 'conservation areas' of particular architectural or historic interest. 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

over 780 are in their care. Over 16 million people visited them in 1973. The Royal Commission on Historical Monuments (for England), and similar bodies for Scotland and Wales, survey monuments and specify those worthy of preservation. In Northern Ireland 137 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.

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 townspeople can seek recreation) have been established around all or part of certain urban areas and cover over 2,000 square miles (5,180 sq. km.) in England. 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. Some £2 million was raised and, as a result, the National Trust has brought under its protection a further 159 miles (255.9 km.) of coastline making a total of 346 miles (556.8 km.) in its care in March 1974. The campaign has been extended with the aim of acquiring another 100 miles of coastline.

The protection of the coastline against erosion, for which the Department of the Environment and the Welsh Office are centrally responsible in England and Wales, 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) are made to authorities with small resources. Protection against sea flooding where there is no question of erosion is the responsibility of the Ministry of Agriculture, Fisheries and Food (see p. 291). To help to prevent the pollution of the coastline, international regulations restrict the discharge of oil into the sea (see p. 307). Local authorities are equipped to deal with oil discharges which reach the shore and in-shore waters.

Countryside Commissions Two Countryside Commissions (one for England and Wales, the other for Scotland) encourage the provision and 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 August 1974, 99 country parks and 113 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 four 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. 174) and the Sports Council (see p. 448). 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) replaced and assumed the functions of the National Parks Commission set up under the National Parks and Access to the Countryside Act 1949 to select 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 5,258 square miles (13,618 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 August 1974, 32 areas of outstanding natural beauty had been designated, covering some 5,588 square miles (14,473 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 government 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 August 1974. 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 Country-side Committee advises on the establishment of national parks and the designation of areas of outstanding natural beauty. Eight areas have been designated. Five amenity areas, acquired by the Department of Housing, Local Government and Planning, are being managed as country parks. Although there are no national parks as such in Scotland, five large national park direction areas are subject to special planning control under ministerial supervision. The areas are: Loch Lomond-Trossachs; Glen Affric-Glen Cannich-Strath Farrar; Ben Nevis-Glen Coe-Black Mount; the Cairngorms; and Loch Torridon-Loch Maree-Little Loch Broom. 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. 300) 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. The parks cover some 600,000 acres (243,000 hectares). Camping and other recreational facilities provided in all the parks are used by several million holidaymakers each year. The historic New Forest, in Hampshire, although not a forest park, is also open to the public. In addition the Forestry Commission welcomes the public to many parts of the 3 million acres under its management. In Northern Ireland, the Department of Agriculture has established five forest parks—Tollymore Park, Castlewellan, Gortin Glen, Drum Manor and Gosford Castle—and there are also five forest scenic drives; in some 40 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 vehicles and obstructions and must not be permanently disturbed. 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 now includes mountains, moors, heaths, downs, cliffs and foreshores, woodlands, rivers and canals and their banks, but not farmland unless it is simply 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 were extended in 1967 to cover 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, and by the close of the registration period in 1970 over 16,000 areas had been registered. 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 (see p. 396) is the official body responsible for nature conservation in Great Britain. At the end of March 1974 there were 137 national nature reserves, covering 281,375 acres (113,867 hectares). Some 37 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 3,165 sites of special scientific

interest in Great Britain, designated 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 35 sites have been scheduled by the Department of Housing, Local Government and Planning and are subject to special planning control. Some 15 nature reserves have been established by the department 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).

Control of Pollution

Conservation and While specific measures have been adopted to ensure that the use of land in towns and in the countryside is properly supervised, a growing concern for the wider aspects of planning has meant that the restricted notion of protective planning has evolved into a positive concept for the enhancement of the land and of the enjoyment of the people who live and work on it.

> In 1970 Britain became the first major country to establish a Department of the Environment (see p. 48); 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.

> Many of the detailed aspects of planning for the environment are undertaken by local authorities. 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 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. Outdoor display of advertisements is controlled by planning legislation; consent must be sought from the local planning authority for most forms of outdoor advertising, and in rural and other localities requiring special protection on grounds of amenity special controls may be applied. In addition to the general town and country planning controls over development, land may not generally be used as a caravan site unless a site licence has been issued by the local authority. The Litter Act 1958 made it an offence to leave litter on land to which the public has free access; under the Civic Amenities Act 1967 local authorities are empowered to remove abandoned cars and other bulky rubbish. The Dangerous Litter Act 1971 improved provision for the prevention of dangerous litter.

Land Reclamation

Local authorities are responsible for reclaiming land so damaged by industrial or other development that it is not capable of being used fully without special treatment. 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 cover half the cost of local authority clearance schemes, and higher grants are available for clearance in the less prosperous areas and in the national parks and areas of outstanding natural beauty. Planning controls to prevent the spread of dereliction require that, when permission is granted for mineral working, conditions are attached

ensuring various measures to minimise the disturbance caused by the work and to secure whatever restoration is practicable when working ceases. The use of land for tipping is also subject to conditions restricting height or requiring treatment on completion. Specialist derelict land units within the Department of the Environment, the Scottish Office and the Welsh Office provide central information and advice and make a continuous assessment of land reclamation problems.

Waste on Land

The Deposit of Poisonous Waste Act 1972 introduced stringent controls to prevent the dumping of poisonous waste. These were intended to be of an interim nature only and the Government has published proposals designed to provide planning and management control over all waste disposal. Where possible recycling and reclamation is encouraged by the Government.

Clean Air

Responsibility for clean air in towns and cities rests with local authorities, who may declare 'smoke control areas' within which the emission of smoke from chimneys constitutes an offence: some 4,000 smoke control orders had been confirmed by April 1974 and 6·2 million dwellings and commercial premises are subject to smoke control. Central government is responsible through the Clean Air and Alkali Inspectorate for enforcing control of emissions to the air of noxious and offensive substances including smoke, grit and dust from certain industrial processes. The emission of smoke from motor vehicles is also controlled. 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. Partly as a result of air pollution control, London no longer experiences dense ('pea-souper') fogs or serious smogs and in central London winter sunshine has increased by 70 per cent since 1962.

Noise

Local authorities are also responsible for the enforcement of the Noise Abatement Act 1960 which requires them to inspect their areas for noise nuisances and to take action (which can be enforced by the courts) to secure abatement. Some 13,300 complaints about noise nuisance were received by local authorities in 1972, and in 44 per cent of these cases the authorities considered that nuisance existed and took appropriate action. The Advisory Council on Noise has studied the working of the Act and recommended some improvements which are being considered for legislation.

Other Measures

Other special measures have been introduced to help to combat water pollution (see p. 277), to reduce the level of fumes from motor vehicles and to ensure that the use of agricultural chemicals is properly supervised (see p. 294).

Monitoring Pollution

In order to frame a policy for pollution control there is a process of continuous updating of information on environmental hazards. The Government is advised by the Royal Commission on Environmental Pollution (see p. 398).

# 9 Housing

There are about 19.8 million dwellings in Britain: over 17.5 million in England and Wales, 1.8 million in Scotland and 475,000 in Northern Ireland. Nationally the numbers of households and dwellings are about equal, but they are unevenly distributed, and housing shortages persist in the more prosperous commercial and industrial centres such as London and Birmingham.

The large majority of people in Great Britain—85 per cent in the 1966 sample census—live in houses or bungalows, mostly with gardens; the remainder live in flats or maisonettes, normally in blocks of from two to 20 storeys.

Over half of all dwellings are owned by their occupiers, some 30 per cent are rented from public housing authorities, and most of the remainder are rented from private landlords (see diagram, p. 178). 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 304,000 dwellings completed in 1973 some 63 per cent was provided by private interests, over 34 per cent by public authorities, and nearly 3 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

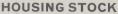
to rent has dwindled to a very low level.

Over 8.4 million new dwellings have been built in Britain since 1945, and two families in every five now live in a post-war dwelling (see diagram, p. 178). There remain a large number of older dwellings, some of which have been kept in good repair and modernised, while many others—particularly in the centres of cities—are unsatisfactory by modern standards. The demolition of slum dwellings and more advanced standards for new house-building (particularly in the public sector) have, however, led to significant improvements in the general quality of British housing. A survey carried out in 1971 established that the percentage of unfit dwellings fell from 11.7 per cent in 1967 to 7.3 per cent in 1971.

#### Administration

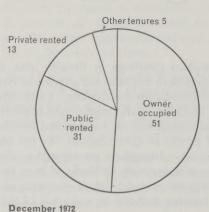
Responsibility for formulating housing policy and supervising the housing programme is borne by the Secretary of State for the Environment in England, by the Secretaries of State for Scotland and Wales, and in Northern Ireland by the head of the Department of Housing, Local Government and Planning.

In Great Britain most of the public housing is provided by 638 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 town and county councils. After the reorganisation of local government in Scotland in May 1975 (see p. 65) the new district councils



(Percentages of Totals)

BY TENURE-BRITAIN



BY DATE OF CONSTRUCTION—GREAT BRITAIN

Pre-1919
35

Post-1944
42

1919-44

December 1972

will be the housing authorities. Other public housing authorities in Great Britain are the new town authorities (see p. 168) 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 improvement 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 the public with information on local housing opportunities in both public and private sectors.

In Northern Ireland all public housing, including that in new towns, is the responsibility of the Northern Ireland Housing Executive, a public body established in 1971. The executive is aided by a housing council representing each local authority area.

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. Local authorities are encouraged to provide housing to meet local needs. Government subsidies are available for local authorities which incur financial deficits in clearing slums and providing adequate public sector housing in areas of housing shortage. The Government is concerned to ensure that best use is made of the existing housing stock.

A national system of rent rebate and allowance schemes assists poorer tenants in both the public and private sectors. Operated by local authorities, the schemes are financed mainly by central government where their cost results in a deficit for the authorities.

Research and Development Research into building materials and techniques, as well as into the needs of families, is undertaken by the Directorate-General of Research within the

Policy

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Department of the Environment, the Research and Development Group of the Scottish Development Department, the Building Research Establishment, the architects' departments of major local authorities and the research groups in big constructional firms. 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 million houses and flats and in 1973 completed over 104,000 new dwellings. The number of houses owned by each authority varies widely, some having a stock of well over 100,000 houses. Authorities plan their own building programmes within the framework of government policy. In 1974 the Government authorised additional public expenditure on housing to enable local authorities to increase their building programme for rent and to acquire unsold or completed houses in the private sector; a start is also to be 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. 72). Current expenditure, including maintenance costs and loan interest and repayments, is met from rents, supplemented where necessary by subsidies from the Exchequer and sometimes (particularly in Scotland) from the rates. Subsidies for public housing in 1973–74 totalled some £363 million in England and Wales and about £66 million in Scotland.

Under the Housing Finance Act 1972 and Housing (Financial Provisions) (Scotland) Act 1972, government subsidies concentrate financial assistance on those authorities and tenants in greatest need. All local authorities in England and Wales are required to base their rents upon the 'fair rent' principle which already applies to much rented accommodation in the private sector, while those in Scotland must ensure that rents go up by stages to such a level that (taking new subsidies into account) they can balance their housing expenditure without any deficit falling on the rates. In England and Wales the level of council house rents is intended to enable an increasing number of local authorities—especially those with a high proportion of older council housing to meet their housing expenditure without further subsidies. Other authorities—those with substantial building programmes and a large proportion of newer council housing—are assisted by subsidies designed to help them balance expenditure. Subsidies assist those authorities in Scotland which have rising expenditure resulting from a heavy building programme. Following the change in Government in March 1974 the provisions of the two Acts are being reviewed.

Supplementary subsidies have been made available under the Acts to assist local authorities throughout Great Britain with slum clearance. In addition, there is a national system of rent rebates and allowances covering all tenants, and financed largely by government subsidy where they cause a deficit in housing revenue accounts. The scheme assists poorer tenants in meeting rents of accommodation suited to their needs.

In Northern Ireland, the capital expenditure of the Northern Ireland 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 which varies according to the number of persons for whom each dwelling is designed.

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 requirements 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 in their house-

building programmes.

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, two living rooms and a kitchen, bathroom and lavatory. The standard of new local authority housing has improved, particularly in the floor space provided and the heating systems installed. In England and Wales in 1972 some 92 per cent of new dwellings had central heating, and houses built for families of four or five people had an average floor space of 959 square feet (89 square metres) and cost an average of about £4,575 to build.

Home Ownership In 1973 over 190,000 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 million owner-occupied dwellings in Britain now account for over half of the total housing stock. Although most owner-occupied houses were built for that purpose, many private rented dwellings have also been sold for owner-occupation. The Government also encourages voluntary housing societies which provide co-ownership housing.

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. 372) 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 exceptional circumstances) by equal monthly instalments to cover capital and interest. The average price of new houses mortgaged to building societies in 1973 was £10,617; houses in London and the south-east of England cost some 40 per cent more than the national average. In 1973 the societies advanced some £3,447 million.

Local authorities are encouraged to concentrate their mortgage resources on helping people with housing needs who are unable to obtain loans elsewhere.

Their mortgage lending in 1973 amounted to £293 million.

Financial Assistance Owner-occupiers are entitled to tax relief on their mortgage interest payments, and in 1973–74 this amounted to about £500 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  $3\frac{1}{2}$  per cent. Subsidy payments under the option mortgage scheme in Great Britain amounted in 1973–74 to about

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£51 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 £7,500) may be made to those participating.

In Northern Ireland, the Government pays subsidies to private people who

build dwellings for owner-occupation or letting.

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

Building

Standards

During the last 20 years there has been a steady decline in Great Britain in the number of rented dwellings available from private landlords—from nearly 45 per cent of the housing stock in 1951 to about 17 per cent (3·3 million) in 1973. 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 and many have been demolished under slum clearance programmes. While most landlords in Britain are private individuals with limited holdings, a proportion of all privately rented housing is provided by the small number of larger property owners, including property companies.

Most privately rented dwellings are subject to rent restriction under legislation which provides separate machinery for dealing with unfurnished and furnished accommodation. Tenants have a wide degree of security of tenure, and eviction from any dwelling (without a court order) and harassment of

occupiers are criminal offences with severe penalties.

Unfurnished Accommodation About 80 per cent of all private rented accommodation in Great Britain is let unfurnished. Most unfurnished accommodation is subject to either 'rent control' or 'rent regulation'. Rent control applies to about a third of the unfurnished dwellings—those with a 1956 rateable value of £30 or less (£40 in London and Scotland). Tenants of controlled dwellings enjoy security of tenure during their lifetime and 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. Landlords of controlled dwellings whose houses are of a satisfactory standard or who improve them to such a standard are able to transfer them to the alternative system of rent regulation. The transfer of all remaining controlled tenancies into the rent regulation system continues.

Rent regulation was introduced in 1965 and applies to private unfurnished dwellings (but not while they remain controlled under previous legislation) which fall within the Rent Act limits of rateable value. Under the Housing Finance Act 1972, its principle was extended to cover rented dwellings (within the rateable limits) owned by public housing authorities in England and Wales

and housing associations and societies.

Under the rent regulation procedure, a 'fair rent' may be fixed for a tenancy 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. To eliminate any artificial value derived from scarcity, the assumption is made that for similar dwellings to let in the area demand does not exceed supply. If the landlord or tenant objects to the decision of the rent officer, the case is referred to a rent assessment

committee. Since 1965 some 595,000 fair rents have been registered. Once determined, the rent is not normally reviewed for at least three years. Tenants of controlled and regulated lettings enjoy security of tenure.

The tenants of private unfurnished 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.

In Northern Ireland, houses of a 1939 rateable value of less than £50 are subject to rent control with rents fixed by reference to their rateable value in that year. However, prescribed increases were permitted in the rents of certain controlled dwellings in 1951 and 1956, and dwellings of which landlords are in, or obtain, possession and dwellings completed since 1956 are freed from rent control.

Furnished Accommodation Under the Rent Act 1974, tenants of furnished accommodation whose landlords do not live on the same premises now have the same protection as tenants of unfurnished property, and may apply to a rent officer for a fair rent determination. Tenants of furnished accommodation with resident landlords may refer their tenancy agreements to a local 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 if they so decide.

Poorer tenants in furnished accommodation are helped with their rent by a rent allowance scheme.

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 some 240,000 dwellings in Great Britain; some 30,000 were completed or acquired in 1973.

Housing associations have long existed as voluntary bodies set up for the purpose of providing low-rent housing for people in need. The associations have in the past borrowed money to finance house-building, mainly from local authorities, which may make up to 100 per cent loans. Encouragement to purchase and convert old houses into new dwellings was offered by the Housing Act of 1969 which provides for a 20-year subsidy equivalent to half of all charges (capital and interest) on loans raised for the purpose. Under the 1972 legislation housing associations, like co-ownership societies (see below), are able to borrow from the Housing Corporation for new building. The rents of housing association houses are based on fair-rent levels, and their tenants are entitled to rent allowances (see p. 178). On new schemes where fair rents produce insufficient revenue to cover the capital cost of a scheme, associations receive a government subsidy covering the deficit.

Co-ownership societies build dwellings for co-ownership by a group of occupants to let at unsubsidised rents. Following a pilot scheme introduced by the Housing Act 1961, the Housing Corporation was set up under the Housing Act 1964 to stimulate the formation of such societies. Half of the money needed for approved co-ownership society schemes is advanced by building societies, with the Housing Corporation providing the remainder. Rented housing society dwellings like those owned by housing associations are 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 and for carrying out other works to modernise their properties. Grants are also available for converting large houses or other buildings into flats. The grant normally

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amounts to half the approved cost of the works up to a grant limit of £1,000 (£1,200 in Scotland). If a house of three or more storeys is converted into flats the upper limit of grant is £1,200 for each flat provided. A grant of up to £200 is also available for the provision for the first time of basic amenities which a dwelling may lack. A government contribution amounting to three-quarters of each grant is paid to the local authority. Aid on a similar basis 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 improvement grants were first introduced in 1949, some 2.8 million dwellings in England and Wales and some 200,000 in Scotland have been improved with their aid; in 1973 house improvement grants were approved for 453,500 dwellings in Great Britain compared with over 368,000 in 1972. Grants for house improvement and conversion are also provided in Northern

Ireland.

In order to tackle systematically the improvement of whole areas of older housing, local authorities in England and Wales have been given powers 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 house. There are similar grants in Scotland and Northern Ireland for the improvement of residential areas. Under the 1974 Housing Act local authorities are empowered to declare 'housing action areas' in places of housing stress. In action areas authorities have powers to compel owners to improve their houses to a given standard and preferential rates of improvement grant are payable. Compulsory powers are also available to local authorities in general improvement areas.

Slum Clearance

About 3 million people have been rehoused in England and Wales since the mid-1950s as a result of slum clearance programmes and during 1973 some 80,000 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 Inner London and 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.

# 10 The Churches

Every person 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 in writing. There is no religious or denominational bar to the holding of public

In the services administered by the state, such as the armed forces, the national hospitals and the prisons, the clergy of the established Church of England or the Church of Scotland provide the principal ministrations and are paid a salary by the state for this part of their work. Clergy of other denominations may also be appointed as required. Voluntary schools (see p. 147) 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 censuses<sup>1</sup> 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 the land derives from the Reformation in the sixteenth century. The Church's relationship with the state<sup>2</sup> 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<sup>3</sup> 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 must obtain Parliament's consent to change its forms of worship (which are contained in the Book of Common Prayer of 1662), although it has temporary powers to use alternative forms without the need for parliamentary approval; and 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. 30).

<sup>1</sup> In Northern Ireland, recent full censuses have contained an optional question about people's religious professions.

bishops to determine whether it or the state should have responsibility for this function.

<sup>&</sup>lt;sup>2</sup> A church commission set up to consider the relationship between the Church of England and the state has recommended in a report, *Church and State* (see Bibliography p. 470), that, while the establishment of the Church should be maintained, the Church should be given final authority over its forms of worship and doctrine; alterations should be made in the present procedure for the appointment of bishops; ministers of all churches should be permitted to stand for election to the House of Commons and, if elected, to take their seats; and leading members of other churches should be invited to sit alongside Church of England bishops in the House of Lords.

The Church of England has decided to review the procedure for the appointment of

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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 46 million), 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 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 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 (attended by about 11 per cent of the 8.7 million pupils in the publicly maintained schools of England and Wales in 1973); a number of direct grant and independent schools; 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. 184—it makes no direct financial contribution to church expenses as such.) The Church's endowment income (from its assets amounting to over £600 million 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. The total net income (£28.5 million in 1972–73) has greatly increased in recent years—in broad terms this has meant a rise in the stipends of the poorer clergy and the introduction of schemes for better parsonage houses, 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 over 65 million. In the British Isles, in addition to the established Church of England, there are other, unestablished, Anglican churches: the Church in Wales, the Episcopal Church in Scotland, and the Church of Ireland.

Every ten years (most recently in 1968) 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 Church of Scotland

The Church of Scotland, established by law, has a presbyterian form of government. It has been described as 'the supreme example of a church which is established and yet is free'. It derives its status 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 about I·I 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 601,070 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 (some 5,650 members) and the Weslevan Reform Union (with some 4,520 members).

The United Reformed Church, with some 192,140 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), within which 2,197 churches have a total membership of about 190,560; 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 140,000 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 some

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101,700; 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.

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 which was formed from Congregational churches which did not enter the United Reformed Church. The Society of Friends (Quakers)—with some 21,000 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 81 other countries. Within Britain it has some 177,400 active members operating from more than 1,000 centres of worship and a total community strength of about 350,000. Believing in a very practical expression of Christian concern, the Salvation Army also has 193 centres providing help for some 30,000 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) with about 71,640 members, and the Christian Scientists with some 302 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 7 Roman Catholic provinces in Great Britain, each under an archbishop, 27 episcopal dioceses, and some 3,000 parishes. In Northern Ireland, there are 7 dioceses, some of which have territory partly in the Irish Republic. It is estimated that there are some 5.5 million adherents (including children) to the Roman Catholic faith in the whole of Britain.

The Roman Catholic Church attaches great importance to the education of its children and requires its members to try to bring up their children in the Catholic faith. Many schools for 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 400,000 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. Synagogues in Britain number about 350. There has been an increase

in the number of Jewish denominational schools, which are now attended by about one in five Jewish children.

## Other Religious Communities

Immigrants to Britain from Commonwealth and foreign countries have established centres of worship, especially in London, for their own communities. Among the Christian communities represented are Orthodox, Lutheran and Reformed Churches of various European countries and the Armenian Church.

The principal non-Christian communities in Britain, apart from the Jews, are the Hindus, Sikhs, Muslims and Buddhists. Hindu and Sikh temples have been established in many areas where Asian immigrants have settled. There are mosques or Islamic centres for Muslims in London, Manchester, Liverpool, Bradford, Cardiff and in many of the other large cities in Britain. 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 three 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.

# 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

The features of fundamental importance to Britain's economy are the contribution of manufacturing industry and services¹ to the gross domestic product—accounting, respectively, for about 30 and 45 per cent of the total and the associated significance of international trade. Britain ranks fifth in world trade (after the United States, the Federal Republic of Germany, Japan and France) and accounts for over 6 per cent of the total. It takes about 9 per cent of the world's exports of primary products, and contributes over 9 per cent to the main manufacturing countries' exports of manufactured goods.

As a result of a high level of agricultural productivity, Britain provides just over half the food it needs from its own soil (no other major industrial country has such a small proportion of its working population engaged in agriculture—about 2·9 per cent). 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).

The imports are paid for by exports of (mainly) manufactured goods and by invisible exports—earnings on overseas investment, travel, civil aviation, British-owned shipping, 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 country's competitive ability strongly influences the economic growth rate and the standard of living. The gross domestic product per head of population rose in real terms by about 29 per cent between 1963 and 1973.

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 provides perhaps

the most comprehensive and advanced capital market in the world.

Earlier
Development
of the Economy

During the nineteenth century Britain secured 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 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

<sup>&</sup>lt;sup>1</sup> Services in this context cover transport, communication, distributive trades, insurance, banking, finance, public health and education, and other services excluding public administration, defence and ownership of dwellings.

and in textiles from some eastern countries where labour was cheaper. The result was heavy unemployment.

After 1932 levels of production and employment improved. 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

In spite of generous aid from the United States and Canada, the second world 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. By 1944 exports had fallen to less than one-third of their 1938 volume.

After the second world war rationing and other war-time controls were relaxed gradually as civil production expanded and trade recovered. The abolition of quantitative restrictions on imports, other than from the dollar area, was largely completed by 1955. Exchange controls on transactions between the sterling area and the rest of the world were also for the most part lifted, and in 1958 convertibility of sterling on current account for all non-residents was introduced.

#### ECONOMIC MANAGEMENT

The objectives of the Government in managing the economy are to achieve a steady rate of growth, rising exports and investment, and a high level of employment. 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, and the Environment, 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 National Joint Advisory Council (on labour matters), the Monopolies and Mergers Commission (on action to prevent the abuse of monopoly power, see p. 204) and the Office of Manpower Economics (which provides the secretariat for bodies advising on certain wages and salaries in the public sector and undertakes research on pay questions generally).

On matters of major public policy such as the broad economic strategy, and problems such as inflation and industrial relations, 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. 42) which alone can take into account all the political, social and economic considerations.

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 coordinate 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 since 1945 has been 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 and more intermittent 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.

Economic Growth

In July 1971 the Government embarked on a reflationary policy designed to raise the economic growth rate and so reduce the unemployment rate, which had begun to rise rapidly. This was combined with a programme of longer-term reform of the structure within which the economy operates. Measures over the following 18 months included an increase in investment incentives (see p. 205), changes in the administration of regional policy (see p. 205), a reform of the framework of the taxation system (see p. 360) and the establishment of a new system of control over money and credit (see p. 365). Consumer demand was strongly stimulated by reductions in taxation and the bringing forward of certain public spending programmes in order to make use of underemployed resources.

By the early part of 1973 the economy was growing rapidly. Growth over the period from the second half of 1971 to the first quarter of 1973 was about 5 per cent a year. Industrial production, consumers' expenditure and the volume of exports were all rising rapidly, industrial investment had begun to recover and the unemployment rate, which had reached 3.8 per cent at the beginning of 1972, was down to 2.7 per cent by April 1973. Living standards (measured in terms of real personal disposable income) had increased more rapidly in 1972 than at any time since 1945, and had risen by 10 per cent since mid-1970. By the latter part of 1973 economic growth was slowing down in line with the Government's policy of preventing serious shortages of materials and manpower. With the onset of the world energy crisis towards the end of the year, however, coinciding with three industrial disputes, special measures were necessary for a time to conserve energy; this had the effect of reducing production so that, for example, industrial production

during the first quarter of 1974 was nearly 6 per cent below the level of the previous quarter. Most of the direct restrictions on the use of energy were removed in March, and by May production reached a level only slightly below that of May 1973. In July the Government took measures designed to increase employment and help industry by their effect on demand and by encouraging investment and reducing labour costs.

Money Supply

In controlling the money supply the Government has been concerned to ensure sufficient liquidity to support the growth of output but at the same time to avoid excessive monetary expansion in a period of inflationary pressures. During 1973, as during the previous year, increased bank lending in sterling to the private sector (a rise of £5,500 million) was an important factor in the rapid monetary expansion. Structural changes following the introduction in 1971 of a new system of credit control (see p. 365) also continued to influence the recorded increases in the money supply. As the economy approached full capacity, successive steps were taken to restrain the increase in money and credit. Several calls were made by the Bank of England for special deposits (which reduce the reserve assets base of the banking system). At the same time banks were requested to restrict inessential lending so that priority could be given to finance for essential purposes, such as investment and exports. Following the restrictive measures interest rates rose to reach high levels towards the end of the year. In December 1973 a scheme was introduced for supplementary deposits to be paid by banks to the Bank of England if certain of their liabilities grew by more than a specified guideline rate (see p. 365), the intention being to restrain growth of money supply more directly. In the first months of 1974 the pace of the monetary expansion slackened substantially, with the growth of bank liabilities generally well within the guideline rate. Interest rates remained at high levels, as in other countries, but there was some easing of short-term rates following repayments of special deposits to the banks.

Control of Inflation

Towards the end of 1972 inflation, which had gathered momentum in Britain as in most other industrial countries in the 1950s and 1960s, had become one of the Government's most intractable problems. Table 9 gives a broad indication of the rate of inflation in Britain since 1963. A number of influences, including rapidly rising world prices for food and raw materials (which Britain has to import in large quantities, see p. 375) and rising wage rates had combined to bring about an acceleration in price rises. During 1972 tripartite discussions on inflation and the management of the economy were held between the Government, the Confederation of British Industry (see p. 346) and the Trades Union Congress (see p. 347). In the absence of agreement on a voluntary system of wage control, however, the Government introduced a statutory counter-inflation policy, beginning with a standstill (Stage One) on increases in most prices and in rents, dividends and pay in November 1972. Under Stage Two, which began in April 1973 under the Counter-Inflation Act 1973 and lasted until November, control was exerted on price, pay and other increases through the operation of a Price and Pay Code enforced by two independent statutory agencies, the Price Commission and the Pay Board. Under Stage Three the code was revised to provide for continued strict controls over prices and profits (with modifications to facilitate investment), while allowing more flexibility in wage negotiations within prescribed limits.

During 1973 retail prices rose by 11 per cent, import prices by 43 per cent and prices of raw materials by 47 per cent (including a very substantial increase

in oil prices in the last quarter<sup>1</sup>). Average earnings during 1973 rose by 13 per cent.

TABLE 9: Price Indices of Total Final Expenditure (1970 = 100)

1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
72.9	75.3	78.7	81.9	84.2	89.9	93.2	100.0	108.1	115.4	127-1

Source: National Income and Expenditure 1963-73

The new Government, which took office in March 1974, announced its intention to secure the orderly growth of incomes on a voluntary basis and in Tuly abolished the Pay Board and its associated statutory controls on pay. (In June the Trades Union Congress had issued a statement setting out in detail the guidelines for new wage claims it expected its member unions to observe after the end of statutory pay control.) A number of measures were also taken to reinforce the Price Code and to restrain directly rises in prices, rents and rates. The measures included the payment of food subsidies (including those on milk, butter, household flour, certain kinds of bread and the most important varieties of cheese and tea), a standstill on rents until 31st December 1974, a reduction in the rate of value added tax and the granting of additional powers to the Price Commission for preventing and restricting increases in prices and charges.

#### 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 a 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, inland 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. Their managing boards and staffs are chosen for their experience and competence in a particular field; they are not 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.

As a result of decisions by oil producing countries, oil prices doubled between the middle and end of 1973 and doubled again with effect from 1st January 1974, so that raw materials prices were by then, 65 per cent higher than in January 1973.

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 12·4 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 sessional House of Commons Select Committee on the Nationalised Industries examines the reports and accounts of the nationalised industries. (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.)

European Community Membership The main economic adjustments provided for in the Treaty of Accession to the European Community are detailed in Chapter 3 and in other relevant chapters. The Government formed in March 1974 has put forward proposals intended to modify the economic effects of some Community policies on Britain and other countries (see p. 76).

The External Position

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. The lower sterling exchange rate made Britain highly competitive, and the volume of exports, which had not changed from 1971 to 1972, increased by almost 12 per cent in 1973. However, mainly as a result of rising prices of imports, including oil (see pp. 192–3), there was a large deficit on the current account in 1973, despite a big increase in the positive invisible balance (see p. 378). In the first half of 1974 there was a large rise in the value of exports

and a reduction in the non-oil visible trade deficit, but the current account deficit increased, mainly because of higher oil prices. In future years increasing supplies of oil from the North Sea (see p. 261) can be expected to bring considerable advantage to the balance of payments, although the extent of the benefit is difficult to judge at this stage.

#### INTERNATIONAL MONETARY SITUATION

#### **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. This was the direct result of the US decision to raise the dollar value of monetary gold from \$35 to \$38 per fine ounce.

The exchange markets continued to be unsettled during 1972 and early 1973, causing a number of further adjustments and flotations. By the end of March 1973, the dollar had been devalued by a further 10 per cent against gold, thus raising the official price of gold to \$42.22 a fine ounce and increasing the parity rate of the pound to \$2.89524. The yen had been floated; the deutschemark had been revalued by 3 per cent against gold; six Community countries (Belgium, Denmark, the Federal Republic of Germany, France, Luxembourg and the Netherlands) maintained their margins scheme (introduced in May 1972, under which rates between any two of their currencies could not diverge from their cross parities by more than 24 per cent), but no longer maintained margins for the US dollar; Sweden and Norway joined the Community scheme; and Britain, the Irish Republic and Italy continued to float independently. 1 At the end of 1973 and beginning of 1974 the dislocations imposed on most economies as a result of the large increase in the price of oil caused further disturbances in foreign exchange markets; in January 1974, France allowed the franc to float, and in so doing departed from the Community scheme.

Sterling

The Sterling Agreements originally negotiated in 1968 with the main holders of official sterling balances expired in September 1973. The agreements had provided a guarantee in terms of the US dollar on condition that certain minimum proportions of countries' reserves were kept in sterling. The guarantee was extended by Britain until March 1974 but on terms which prevented any increase in the amount of sterling guaranteed. A further extension until the end of 1974 was expressed in terms of the effective rate for sterling, as this provided a better measure of the value of sterling when many currencies were floating than a rate in terms of any single currency.

Monetary Reform 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

<sup>&</sup>lt;sup>1</sup> At the end of August 1974 the effective depreciation of sterling in relation to the Smithsonian parities structure (the effective rate) was about 18 per cent, and the market rate was £1 = \$2.3167.

method of valuation of the special drawing right (SDR—an international reserve asset) for an interim period, recommended special measures to assist developing countries and to combat inflation, and guidelines for the management of floating exchange rates, and proposed the setting up of a new body in the IMF to further the work of reform. The committee agreed on some principles of corrective action (in particular, avoidance of deflation and of exchange rate depreciation) for countries with balance of payments disequilibria, especially with regard to those nations experiencing large payments deficits as a result of the impact of the increase in oil prices.

#### NATIONAL INCOME AND EXPENDITURE

The following sections sketch briefly the structure and disposal of Britain's national income in recent years.

Output

In 1973 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 £63,271 million. In real terms, that is, after allowing for price changes, the increase over the 10 years since 1963 was nearly 33 per cent.

About a third of total output can be attributed to manufacturing industry

TABLE 10: Gross Domestic Product by Industrya (at current prices)

	1963		196	8	1973	
	£m.	per cent	£m.	per cent	£m.	per cent
Agriculture, forestry and fishing Mining and quarrying Manufacturing Construction Gas, electricity and water Transport Communications Distributive trades Insurance, banking and finance Ownership of dwellings Public administration and defence Public health and educational services Other services Adjustment for financial services Residual error	964 744 8,974 1,768 839 1,766 522 3,145 1,771 1,149 1,551 1,183 3,172 -696 35	3·6 2·8 33·4 6·6 3·1 6·6 1·9 11·7 6·6 4·3 5·8 4·4 11·8 -2·6 0·1	1,113 691 11,996 2,558 1,295 2,349 813 4,062 2,725 1,957 2,268 1,840 4,701 -1,109 74	3·0 1·9 32·1 6·9 3·5 6·3 2·2 10·9 7·3 5·2 6·1 4·9 12·6 -3·0 0·2	1,876 868 19,103 4,429 1,939 3,837 1,623 6,122 5,774 3,668 4,266 3,726 6,908 -2,552 589	3·0 1·4 30·7 7·1 3·1 6·2 2·6 9·8 9·3 5·9 6·0 11·1 -4·1 0·9
Gross domestic product at factor cost Net property income	26,887	100-0	37,333	100.0	62,176	100-0
from abroad Gross national product at factor cost	398 27,285		335 37,668		1,095	

Source: National Income and Expenditure 1963-73

<sup>&</sup>lt;sup>a</sup> Before provision for depreciation but after deducting stock appreciation. Discrepancies between totals and their constituent parts are due to rounding.

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 10 summarises the contribution of each industry group.

Use of Resources Table 11 shows the distribution of total supplies of goods and services in 1963, 1968 and 1973 at 1970 market prices, divided between personal consumption, public expenditure on goods and services, investment and exports.

TABLE 11: Distribution of Total Supplies of Goods and Services (at 1970 market prices)

	196	3	196	8	197	3
	£m.	per cent	£m.	per cent	£m.	per cent
Consumers' expenditure Public authorities' current	24,427	55.1	30,564	51.8	35,759	51.0
expenditure on goods and services	8,014	16.1	9,103	15.4	10,109	14.4
Gross domestic capital formation <sup>a</sup>	6,686	13.4	9,525	16.1	10,678	15.2
Exports of goods and services	7,649	15.4	9,811	16.6	13,508	19.3
Total final expenditure	49,776	100.0	59,003	100.0	70,054	100.0

Source: National Income and Expenditure 1963-73 a Including value of physical change in stocks and work in progress (£674 million in 1973).

The main trends since 1963 are a fall in the proportion of total available output devoted to personal consumption and to public authorities' current expenditure and a significant rise in the proportion devoted to exports.

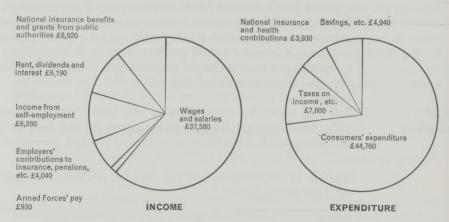
Personal Income and Consumers' Expenditure

Sources of Income Personal incomes before tax at current prices rose rapidly and fairly steadily from under £25,600 million in 1963 to over £61,900 million in 1973—a compound rate of about 9 per cent a year. The increase in consumer expenditure at constant prices has, however, been just under 3 per cent a year. The difference is accounted for mainly by rising prices and to a lesser extent by a higher incidence of direct taxation and increased personal savings.

Income from employment in 1973 totalled £42,890 million and accounted for about 69 per cent of total personal income (compared with about 71 per cent in 1963). The three other main sources of personal income were self-employment (10 per cent), income from rent, dividends and interest (10 per cent), and grants from public authorities (10 per cent). The general pattern of income distribution is thus dominated by income from employment. Of the relatively small amount of income from rent, dividends and interest, almost one-third goes to life assurance and superannuation funds, and benefits, therefore, many people of moderate means. In so far as these forms of income

#### PERSONAL INCOME AND EXPENDITURE, 1973

(In £ million at current prices)



Note: Figures are preliminary estimates (rounded to nearest £10 million) and exclude items under £120 million.

accrue to the more wealthy people, this is to some extent counterbalanced by the effect of grants from public authorities to those in need.

British direct taxation falls heavily on the rich and the combined effect of taxation and transfer payments and benefits in kind is a redistribution of income on more egalitarian lines. According to studies by the Central Statistical Office, the effect in 1972 was to raise the highest income among the poorest fifth of households (that is, the income at the lowest quintile) from 29 to 53 per cent of the median income of all households. There are a number of theoretical and practical limitations to these studies, but the broad result is too marked to be in dispute.

TABLE 12: Changes in Pattern of Consumers' Spending (at current prices)

	1963		197	73	
	£m.	per cent	£m.	per cent	
Food (household expenditure) Alcoholic drink Tobacco Housing (rent, rates, repairs, etc) Fuel and light Clothing and footwear Cars and motorcycles Other durable goods Running costs of motor vehicles Other travel expenditure Catering (meals and accommodation) Other goods Other services Other items <sup>a</sup>	4,689 1,232 1,286 2,160 1,010 1,873 640 948 682 663 1,073 1,849 1,883	23·3 6·1 6·4 10·7 5·0 9·3 3·2 4·7 3·4 3·3 5·3 9·2 9·4 0·6	8,460 3,536 1,945 6,190 1,891 3,774 1,886 2,126 2,409 1,436 2,135 4,372 4,600 95	18·9 7·9 4·3 13·8 4·2 8·4 4·2 4·7 5·4 3·2 4·8 9·7 10·3 0·2	

Source: National Income and Expenditure 1963-73

<sup>a</sup> 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.

Consumers' Expenditure The 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 and tobacco have been falling while the proportion spent on housing has risen. These and other changes are shown in Table 12.

Public Authorities' Current Expenditure

Current expenditure on goods and services by the central Government and local authorities rose by about 26 per cent at 1970 market prices over the period 1963 to 1973 when it amounted to about 21 per cent of the gross domestic product. 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—24 per cent in 1973 compared with 37 per cent in 1963 and a post-war 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. 125 and 179). The Government also makes grants to local authorities to finance about 50 per cent of their current expenditure.

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 48 per cent between 1963 and 1973 when their current replacement value, net of depreciation, was some £197,300 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 1973 (£10,004 million compared with £9,020 million in 1968 at constant prices) private sector investment accounted for 12.9 per cent of the gross domestic product at factor cost (11.4 per cent in 1968) and the public sector for 8.3 per cent (10.2 per cent). The approximate shares of industry groups in total fixed investment in 1973 were (1968 figures in brackets): manufacturing, 19 per cent (20 per cent), gas, electricity and water, 6 per cent (11 per cent), transport and communications, 14 per cent (12 per cent), distributive trades, 6 per cent (5 per cent), dwellings, 18 per cent (19 per cent), social and other public services, 16 per cent (15 per cent), and other industries, 121 per cent (18 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 but rose in 1973. Among the trends over recent years have been increases in investment in agriculture, mining (other than coal mining), shipping and retail distribution.

Saving and Lending

Saving has made a significant contribution to the rising levels of investment in all the main sectors of the economy. The extent to which each sector contributed on balance, by way of lending, to the capital formation of the other sectors (and to net investment abroad) in 1971–73 or drew on the saving of the other sectors is shown by the sector's net acquisition of financial assets (see Table 13).

The main features of 1973 were the large financial deficit of the public sector and the large financial surplus of the overseas sector (which equals net overseas investment in Britain).

<sup>&</sup>lt;sup>1</sup> Includes mining, quarrying, agriculture, forestry, fishing, construction, and other service industries,

TABLE 13: Net Acquisition of Financial Assets

*			23
	1971	1972	1973
Public sector: Saving <sup>a</sup> plus capital transfers (net receipts) less Gross domestic capital formation <sup>b</sup> Net acquisition of financial assets	4,320 -4,623 -303	3,080 -4,762 -1,682	2,996 -5,753 -2,757
All companies: Saving <sup>a</sup> plus capital transfers (net receipts)  less Gross domestic capital formation <sup>b</sup> Net acquisition of financial assets	4,387 -4,779 -392	5,403 -5,351 52	
Personal sector: Saving <sup>a</sup> plus capital transfers (net receipts)  less Gross domestic capital formation <sup>b</sup> Net acquisition of financial assets	3,114 -1,969 1,145	3,816 -2,646 1,170	4,949 -2,982 1,967
Overseas sector <sup>e</sup>	-1,093	-114	1,269
Residual error (in national income accounts)	643	574	589

f. million

Source: National Income and Expenditure 1963-73

<sup>a</sup> Before providing for depreciation, stock appreciation and additions to reserves.

<sup>b</sup> Comprises gross domestic fixed capital formation and increase in value of stocks and work in progress.

<sup>c</sup> Equals, apart from the change in sign, net investment abroad.

The public sector's financial deficit (a negative net acquisition of financial assets) increased substantially in 1973 to some £2,757 million, 64 per cent above 1972. Much of the public sector's deficit in 1973 was financed by borrowing overseas, especially in the euro-currency market. Local authorities and nationalised industries accounted for most of the fi,1,100 million borrowed from overseas under the exchange cover scheme. (The exchange cover scheme, reintroduced in March 1973, safeguards public sector borrowers against the risk of loss resulting from changes in the exchange rate. The previous scheme had been suspended in 1971 following an excessive inflow of dollars). The central Government's borrowing requirement was covered largely by sales of debt to the non-bank public. The public sector's capital formation at current prices was some £1,000 million higher, and saving by central Government was reduced as a result of the rapid increase in current expenditure overtaking a more modest growth in revenue. Both public corporations and local authorities had increased surpluses on current account, although in the case of local authorities this reflected increased central government grants which contributed to the reduction in central government saving. The company sector was in deficit in 1973 (following a surplus in 1972) as company stocks rose sharply and fixed capital formation increased. The personal sector increased its net acquisition of financial assets by increasing its saving. National Savings reached the record end-of-year level of £,10,449 million in 1973, net savings during the year totalling some £362 million (see p. 367).

# 12 Production and Distribution

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 31 per cent and distributive trades 10 per cent. About 55 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 and electricity) see Chapter 13.

#### GENERAL STRUCTURE AND ORGANISATION

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 (211,000 employees) and Imperial Chemical Industries (199,000), and the public corporations such as the National Coal Board with about 330,000 employees, to the many thousands of small firms, some with fewer than 25 employees but accounting for something like one-fifth of the gross national product. Most manufacturing is in the hands of private enterprise. Exceptions include iron, steel and a small range of chemicals from the plants of the British Steel Corporation; aero-engines made by Rolls-Royce (1971) Ltd.; 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 (see p. 230). Certain factories giving employment to the severely disabled are operated by Remploy Ltd., a non-profit-making public company partly financed by the Department of Employment. In addition the Government holds about 49 per cent of the equity of a major oil company, British Petroleum Limited, and has an interest in a number of other companies.

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 1968*. This shows that some 64 per cent (59,000) of the 92,000 or so establishments which submitted returns had fewer than 25 employees each, and accounted for 7 per cent of total employment; some 28,000 establishments, nearly one-third of the total, had between 25–500 employees, and accounted for over two-fifths of the total labour force; 2,400 establishments, each with between 500 and 2,000 employees, were responsible for 28 per cent of employment; while 21 per cent was in the hands of the 409 leading groups each with over 2,000 employees. A high proportion of the biggest establishments were in the heavy industries;

Structure

the average size of establishments in industries making consumer goods was smaller than in manufacturing industries as a whole. Comparisons with results obtained in earlier years suggested a slow but significant trend towards increased average size of establishments.

The size of establishments is not in itself an indication of the size of manufacturing enterprises, as a single enterprise may own several establishments, not all of them necessarily engaged in the same or similar activities. An enterprise, as defined in the 1968 census, normally consists of either a single firm or a parent company together with its subsidiaries. Just over 34 per cent of all employment in British manufacturing industries in 1968 was accounted for by more than 1,000 large private enterprises employing 1,000 or more people, the largest 100 or so accounting roughly for a third. A further indication of company size is the value of capital employed (net assets). In the case of three companies, the Imperial Chemical Industries group, British Petroleum and Shell Transport and Trading, the figure exceeds £2,000 million; about 91 companies registered in Britain have over £100 million net assets. Of the top 20 industrial groups in Europe in terms of annual sales, five are British.

With intensified competition in the economy and, in many branches of industry, the growing dependence of profitable operation on concentration and economies of scale, the trend towards mergers and regrouping has gathered momentum in recent years. 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 very large 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 a great number of 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 large holders to have a controlling interest. For example, more than 40 of the largest public companies each have more than 100,000 shareholders.

# Industrial Association

Private industrial undertakings have increasingly entered into voluntary association 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. Associations for these purposes 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 more than 100 national federations and some 1,400 employers' organisations (mostly regional or local, and members or branches of the national federations) concerned with negotiation of wages and conditions of work (see p. 346). 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 and on a number of official advisory committees and voluntary bodies concerned with matters affecting industry.

The CBI membership consists of some 12,000 companies and about 230 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 industry and commerce. The Association of British Chambers of Commerce, founded in 1860, is the central organisation to which approximately 100 local chambers of commerce (together with 20 British Chambers of Commerce operating abroad) are affiliated. 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 Within the framework of economic and social policy as a whole it has been a continuing aim of government policy to promote the expansion and modernisation of industry and at the same time to develop an effective solution to the problems of regional imbalances. The Government has traditionally sought to influence 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 have been developed to control aspects of employment, monopolies, mergers and restrictive practices and new industrial and office building and changes in land use.

The Department of Industry, which took over the appropriate functions of the former Department of Trade and Industry in March 1974, is responsible for industrial policy as a whole on both a national and regional level. In particular, it is responsible for the sponsorship of individual industries; for industrial development and finance; for the provision of technical services to industry; and for industrial research and development, including the supervision of a number of industrial research establishments. 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.

In addition 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 in Britain is based on the machinery which has been established to scrutinise monopolies, mergers and restrictive trade practices

Competition Policy so as to establish whether structural changes or uncompetitive situations operate against the public interest as defined in the relevant legislation—primarily the Fair Trading Act 1973, which amends or consolidates the Monopolies and Mergers Acts 1948 and 1965 and the Restrictive Trades Practices Acts 1956 and 1968. Under the Fair Trading Act the Director General of Fair Trading carries out functions in relation to monopoly situations, mergers and restrictive trading practices, in addition to his work on consumer protection.

European Community Competition policy in the context of the European Community is designed to remove all restraints on competition between member states of which the economic effects are not likely to be beneficial. The objective of Community rules on competition is to ban restrictive practices which distort competition between members, and to prohibit the abuse of 'dominant positions' within the Community. An important point is that the restraint on trade or the abuse of a dominant position must be likely to have an adverse effect on trade between member states; otherwise the Community rules on competition are inapplicable.

Monopolies and Mergers

The Fair Trading Act replaces, with revised provision, the Monopolies and Mergers Acts 1948 and 1965 and makes several changes to widen the scope within which monopoly and merger situations can be referred—by the Director General of Fair Trading or by the Secretary of State for Prices and Consumer Protection—for investigation by the Monopolies and Mergers Commission. The market share by reference to which monopoly is defined is now reduced from one-third to one-quarter, and there are new powers to refer local monopolies and public sector industries 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 Department of Prices and Consumer Protection has powers to make orders and otherwise to remedy or prevent the harm which the commission considers may result. The Director General 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 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 govern the registration and judicial examination of restrictive agreements. They 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. Proposed agreements of national importance which promote efficiency or provide for new productive capacity can be exempted from this requirement for a specified period by the Secretary of State for Prices and Consumer Protection. The Director General of Fair Trading is responsible for keeping the

register and for bringing agreements before the Restrictive Practices Court set up under the 1956 Act. The Secretary of State can discharge the Director General from this duty if a registered agreement contains restrictions of only little significance. If the parties to an agreement fail to satisfy the court that special circumstances set out in the legislation exist, and that the restriction is not unreasonable, having regard to the balance between the benefit it confers and any public detriment likely to result from its operation, that restriction must be found contrary to the public interest. Agreements are void in respect of restrictions so found. The court can make orders preventing the parties from operating their agreement, or from making new arrangements having the same effect. Agreements relating exclusively to exports are not subject to this procedure but have to be notified to the Director General of Fair Trading and to the Commission of the European Community. Registration and judicial examination applied originally to arrangements relating to goods but were extended to agreements relating to commercial services in 1974 under the provisions of the Fair Trading Act.

Under the 1956 Act collective enforcement of resale price maintenance was prohibited, but individual suppliers remained free to enforce minimum resale prices in the courts. The Resale Prices Act 1964 made resale price maintenance generally unlawful, except in respect of classes of goods exempted by the Restrictive Practices Court. Only two classes of goods (books and medicaments) have been exempted; nearly 500 classes have been refused exemption.

# Encouragement of Investment

Britain has a more generous system of national incentives for industrial development than any other member country of the European Community or the United States. 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 40 per cent initial allowance on new industrial buildings and structures and an annual writing down allowance of 4 per cent. Direct investment from overseas is also encouraged, and overseas firms are offered the same facilities and incentives as those applying to British-owned companies.

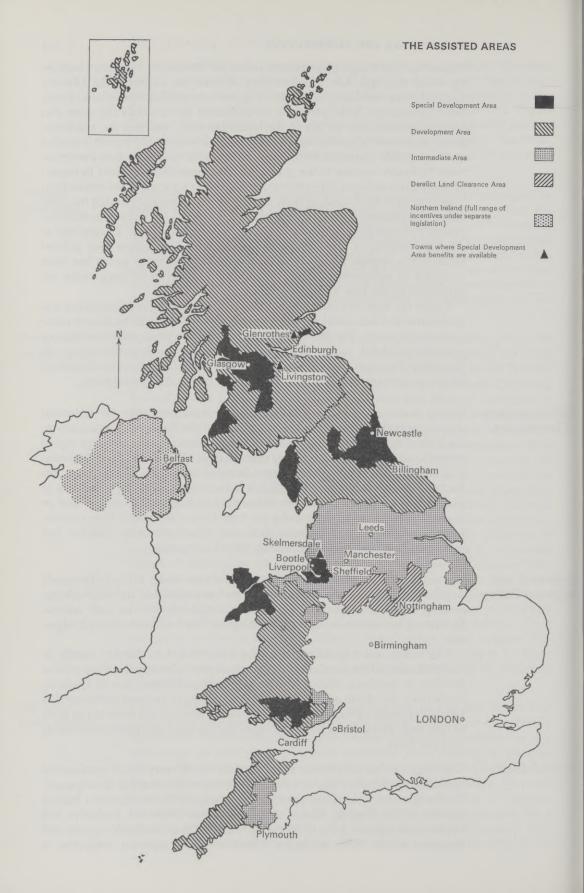
#### Industrial and Regional Policy

Economic imbalance between different parts of the country is due 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.

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 (see p. 206) shows those parts of the country where preferential assistance is offered by the Government to encourage industrial development. The assisted areas consist of the whole of Scotland, Wales, Northern Ireland and the North Region; almost all of the 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 need for jobs is most acute, development areas and intermediate areas. In addition the derelict land clearance areas received, up to March 1974, some of the help available in the intermediate areas.

In the assisted areas, the basic investment incentives were supplemented under the Industry Act 1972 by a new system of regional development grants. These are cash grants towards the cost of plant, machinery, buildings and works on premises used wholly or mainly for specified activities in manufacturing, construction and mining. Unlike the building and operational grants formerly available under the Local Employment Acts, 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 capital allowances for tax purposes.

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 and removal grants. In the year ended 31st March 1974 some £107 million was paid in regional development grants under the Industry Act, together with regional selective assistance of £50 million. By that date over 1,000 projects involving the creation of more than 72,000 new jobs had received assistance under the legislation. Loans are also available on favourable terms from the European Investment Bank and the European Coal and Steel Community.

Some other forms of assistance under the previous system continue to be available. These 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 undertaken on the Department of Industry's behalf by the English, Scottish and Welsh Industrial Estates Corporations; premises administered by the three corporations total over 73 million square feet and give employment to over 230,000 people. In addition to financial incentives, a more direct influence on the location of industry is provided by the control exercised by the Government, through the granting of industrial development certificates (IDCs), on the building of new factories. The purpose of this control is to direct potentially mobile projects towards the areas of greatest employment need.

Within the Department of Industry there is an Industrial Development Executive under a Minister of State with special responsibility for regional policy and regional industrial development. Within the executive an Industrial Development Unit helps with the appraisal, negotiation and monitoring of projects referred to it. The Minister is assisted by an Industrial Development Advisory Board, made up of members prominent in industry, banking, accounting and finance and international industrial investment, to advise generally on industry-wide problems and priorities, and to consider specific major cases for selective assistance.

The department's regional organisation also has been given an important degree of authority for dealing with applications for selective financial assistance. Regional Industrial Development Boards have been set up in Scotland, Wales, 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

Machinery

in their regions. The links between Regional Economic Planning Councils and Boards 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.

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 inclusive of 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 reorganisation. Help under the capital grants legislation is made without regard to how much employment is created as a result.

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 individual 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 some 300 new firms have been established in Northern Ireland with government assistance, and the number of people now employed in grant-aided industry totals over 83,000. A Finance Corporation with an initial capital of £50 million was formed in 1972 to aid industrial and commercial concerns which have short-term liquidity problems but long-term prospects of viability.

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. The Development Corporation for Wales, founded in 1959, being the most prominent. In Scotland, the Highlands and Islands Development Board, a statutory body, works to stimulate the economic and social development of the seven 'crofting' counties (see p. 291). 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 voluntary association, works to promote the general economic development of Scotland.

Rural Industries

Encouragement is also given to the development of rural industries. Much of this work is done under the aegis of the Development Commission. In England and Wales this service is provided by the Council for Small Industries in Rural Areas acting in consultation with the Rural Community Councils through their Small Industries Committees in the counties; by the Small Industries Council for Rural Areas of Scotland; and in Northern Ireland by the Local Enterprise Development Unit of the Department of Commerce. All these agencies provide advice and guidance to small businesses in rural areas

and country towns, finance for small factories to stimulate rural industries and loans for assistance to tourism in the rural parts of development areas.

**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 the regions, which work in co-operation with Chambers of Commerce, trade associations and other organisations and are linked with a central data bank in London in order to guide small firms towards appropriate sources of information and assistance.

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 probably still the world's most important financial centre. 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 in manufacturing industry in London, due mainly to increasing shortages of labour and the rising cost of land.

Towards the periphery of Greater London (estimated population 7,281,000)¹ 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 (population 114,200), 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.

A great part of the Channel coast eastwards from Southampton (population 212,000) consists of built-up areas, which from Brighton (160,300) eastwards are partly dormitories for people working in London. Holiday resorts fringe the coast. Portsmouth (200,400) is a naval port with some shipbuilding and general manufactures. Southampton is Britain's largest port for ocean-going liners; its industries include ship repairing, oil refining, cable-making,

<sup>&</sup>lt;sup>1</sup> Because of the reorganisation of local government population figures are not available for all the places mentioned in this section. Many of the population figures are also much larger than previously, as they refer to the larger local government districts.

electronics and synthetic rubber. Dover (102,400), Folkestone and Newhaven are ferry ports.

South-West England Though famous for its tourism, leisure industries and agriculture, the southwest of England has a busy manufacturing sector. In the Camborne, Redruth, Falmouth and St. Austell areas, Cornwall has china clay and tin mining, and machinery manufacture, ship repairing and other forms of engineering. Plymouth (249,800) with the naval dockyard and electrical and other industries, is an important manufacturing centre. The towns of Gloucester (90,600), Cheltenham (86,200) and Bath (85,300) are major producers of machinery, instrumentation and other engineering products. Swindon (90,700) has vehicle, electrical and electronic engineering. Clothing, footwear, and other textile products are made at several centres. Bristol (421,800), the region's administrative and commercial centre, is a leading port and the largest industrial city, having food processing, tobacco, packaging materials, printing, aerospace, machinery and a wide range of other industries; there are extensive modern docks at Avonmouth, an industrialised suburb with important basic chemicals and non-ferrous metal plants.

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, of local produce. Cambridge (103,700) is a leading centre of research-based industry; Ipswich (122,700) and Peterborough (109,000) are noted for diesel engines, agricultural machinery and engineering generally; and Norwich (120,000) for footwear and food manufacture. The east coast ports of Great Yarmouth (75,800) and Lowestoft have become important bases for companies associated with oil and natural gas exploitation in the North Sea.

West Midlands

The main concentration of industry in the West Midlands is in the conurbation which includes Birmingham (1,087,600), Wolverhampton (269,500), Dudley (297,800), Walsall (271,800), and Solihull (198,700) and in Coventry (336,000). The economy of the conurbation and Coventry is dominated by the metal-using industries, in particular by motor vehicle manufacture which itself draws substantially from the mechanical and electrical engineering industries. Other notable industries include jewellery, rubber products, chemicals and domestic metalware.

The manufacture of pottery and china is the most important industry in the smaller conurbation of north Staffordshire centred upon Stoke on Trent (260,100). Other manufactures such as rubber and electrical products have developed in the area in recent years, but coalmining has contracted.

Other industrial centres include Stafford (113,200), heavy electrical and other engineering; Worcester (74,100), engineering; Burton on Trent, brewing and rubber; Kidderminster, carpets; and Rugby (87,700), electrical engineering. Stratford-upon-Avon (98,400), the birthplace of William Shakespeare, is an important tourist centre.

East Midlands

The industrial cities and towns of the East Midlands include Leicester (287,500), noted for hosiery and knitwear, boots and shoes and machinery for making these products; Derby (217,900) for general engineering, aero-engines and man-made fibres; Nottingham (294,700) for hosiery, cycles and a variety of other engineering products, lace, pharmaceutical products and tobacco;

Northampton (135,800), footwear and engineering; and Chesterfield (95,500), engineering. Northampton was designated a new town in 1968. Corby (53,600), a new town in Northamptonshire, has a large integrated steel works. Part of Britain's richest and most highly mechanised coalfield lies under the northeast of the area. Some of the towns on the coalfield, such as Mansfield (96,700), have important manufacturing industries, particularly textiles. Lincoln (73,300) is noted as an engineering centre.

North-West England The North-West comprises the metropolitan counties of Greater Manchester (2.7 million) and Merseyside (1.6 million) and the counties of Lancashire (1.4 million) and Cheshire (0.9 million). Manchester (530,800) is Britain's second most important commercial and financial centre and a major port. It is the commercial hub of the textile industry and one of the chief industrial centres for electrical and heavy engineering and for the production of a wide range of goods including machine tools, petrochemicals, dyestuffs, and pharmaceuticals. The traditional cotton-manufacturing towns circling Manchester, while adapting to the increasing use of man-made fibres, have seen engineering outgrow the textile industry. The largest towns are Bolton (261,300), Stockport (294,700), Oldham (225,400), Blackburn (141,800), Preston (132,800), Rochdale (208,000) and Bury (178,700), which have diversified into printing, paper making, textile and electrical machinery and heavy commercial vehicles (Chorley-Leyland area). The ten remaining Lancashire coal mines lie in South Lancashire, but employ only about 10,000 people.

The Manchester Ship Canal, which carries a substantial volume of export traffic, links Manchester and Merseyside. It passes through Warrington, (163,800) with its metal industries (such as wire-drawing), Widnes, Runcorn with the chemical industry, and Ellesmere Port (82,000) with its oil refinery installations, before reaching the Mersey estuary. St. Helens (192,100), to the north of the canal, is famous for glass manufacture. Liverpool (575,000) 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). While it has grown to be a significant service centre its industrial strengths have changed from the older industries such as shipbuilding and repair across the river at Birkenhead (135,800) to the newer industries, including electrical engineering, heavy industrial plant and motor

vehicles.

The North-West has international airports at Manchester (Ringway) and Liverpool (Speke) and a well-developed rail and motorway system, which not only links the conurbations to the more northerly industrial towns and the local tourist resorts such as Blackpool (150,900), but also provides access to the rest of the country and to Europe. There are also four new towns in the region

Yorkshire and Humberside

Yorkshire and Humberside (total population 4.9 million) is centrally placed in Britain and is served by advanced road and rail communications. Though some parts are heavily industrialised, more than four-fifths of the region is open country, including the Yorkshire Dales, the Yorkshire Moors National Parks and part of the Peak District.

The region's industrial structure is diverse. Important industries include textiles, mechanical engineering, metals and metal goods, coalmining, food-processing, drink, clothing, vehicle components, chemicals and glass containers. About 70 per cent of Britain's worsted and woollen industry is located in West Yorkshire. Bradford (463,000) is the commercial centre of the wool trade. The metropolitan district of Leeds (746,400) includes about half a million people in the city of Leeds, which 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 high-quality 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 Europe. Kingston-upon-Hull, the other principal city in the region (283,200), 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 Humber Bridge in 1977 should further assist the region's development.

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 Tyne to the Tees. Within this area the main centres are Newcastle upon Tyne (299,800), Sunderland (295,200), Stockton (162,600) and Hartlepool (99,400). The main towns of Cumbria are Carlisle (99,800) and Barrow-in-Furness (75,500).

The whole 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), which together employ about one-quarter of the male workers. 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.

Wales

Nearly two-thirds of the population (which totals 2.7 million) live in industrial South Wales. Coalmining remains a major industry; although the numbers employed have declined substantially, the area still produces virtually all Britain's anthracite and much of its steam and other specialised coals. There are plans for the further rationalisation and modernisation of steel, the other traditional industry of South Wales, which already supplies all of Britain's output of tinplate and much of its sheet steel. In the past 35 years 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 (285,800), Newport (135,900) and Swansea (190,400) 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 steelmaking plants and a new, deepwater harbour

for importing iron ore. Inland the main concentrations of population are Rhondda (87,700) and Merthyr Tydfil (61,500), the largest centres in the coalmining area.

The other main industrial area is in 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 (106,800) area, newer light industries, including domestic electrical appliances, have been introduced and on Deeside there is a large aircraft manufacturing plant.

The remainder of Wales is predominantly rural, and sparsely populated, although light industry has been introduced in many areas. Milford Haven (14,000) 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. Wales as a whole is important as a holiday and recreational centre.

Scotland

About three-quarters of Scotland's population of 5.2 million is concentrated in the central Lowlands between the Firth of Clyde and the Firth of Forth. The principal cities in this area are Glasgow (835,600), a major commercial centre, and Edinburgh (448,700), 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 and is also an important centre for food, drink and tobacco manufactures. The steel industry, sited mainly in north Lanarkshire, produces a wide range of products. The widely dispersed electronics equipment industry is represented by a growing number of firms in such centres as Glasgow, north Lanarkshire, Dundee and central Fife, 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 Renfrewshire and commercial vehicles in West Lothian are now well established, while heavy earth-moving equipment and tracked vehicles are produced in north Lanarkshire. The Firth of Clyde provides central Scotland with valuable deepwater facilities.

Outside the central Lowland belt there is considerable industrial concentration in and around Dundee (180,700) and Aberdeen (180,800) and a number of towns outside these areas have attracted light industries in recent years. Dundee's traditional manufacture, jute, has been supplemented by office machinery, clocks and watches, refrigerators and electronic products.

North-east Scotland has the largest concentration of whisky distilleries, while the paper industry and food and fish processing are also important. The major oil discoveries in the North Sea (see p. 261) have led to many oil-related projects being set up in the region: Aberdeen in particular has become a major oil centre.

Most of northern Scotland is mountainous and much of southern Scotland is hilly and rugged. These regions are sparsely populated, but the Scottish Highlands possess significant resources of hydro-electric power (see p. 269). There are high-quality tweed and knitwear industries both in the valley towns of the Borders and in the Highlands and Islands. Small engineering and electronics industries have recently been established in towns in the Borders and the south-west. Small-scale manufacturing has also been introduced in the Highlands, and larger enterprises include the experimental and prototype fast

nuclear reactor at Dounreay and the aluminium smelter at Invergordon. There is also large-scale development in oil-related industries—particularly the construction of oil production platforms—in the Moray Firth and Cromarty Firth areas.

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 (362,000). Britain's largest single shipyard incorporating the world's biggest shipbuilding berth is in Belfast; other wellestablished activities include the manufacture of aircraft, textile machinery and other engineering products, ropes, twine, 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; 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, shoes, carpets and synthetic rubber.

Production

Industrial production as a whole (mining and quarrying, manufacturing, construction, and gas, electricity and water) was in 1973 some 7 per cent higher than a year previously, 10 per cent higher than in 1970 and more than double the level in 1948. For manufacturing industry the increase in 1973 was 8 per cent; since 1970 manufacturing production has grown by 10 per cent and since 1948 by more than 130 per cent.

TABLE 14: Index of Industrial Production 1948–73 (1970 = 100)

Industry Group	1948	1958	1968	1970	1972	1973	1948–73 change %
All industries	50.5	67.5	97.2	100	102.4	109.8	117
Mining/quarrying	129.1	133.6	111.4	100	84.0	93.6	-28
Total manufacturing	47.8	65.5	95.8	100	102.0	110.3	131
Food/drink/tobacco	58.4	73.3	96.5	100	105.0	109.3	87
Coal/petroleum products	21.4	51.9	84.0	100	102.6	120.9	414 374
Chemical/allied industries	25.5	45·7 77·4	97.5	100	108.0	99.5	61
Metal manufacture	61.8	55.6	91.1	100	100.5	112.3	224
Engineering industries	34·7 110·3	111.6	95.1	100	91.8	95.1	-14
Shipbuilding	39.0	78.7	101.1	100	101.6	101.6	161
Vehicles (inc. aircraft)	64.1	77.1	98.3	100	94.2	102.8	60
Other metal goods	73.4	76.1	98.9	100	104.6	102.6	49
Textiles/clothing	54.4	62.7	102.2	100	114.2	126.3	132
Bricks, pottery, etc.	45.4	66.7	106.5	100	113.5	130.2	187
Timber, furniture, etc.	42.7	69.8	96.2	100	101.9	112.8	164
Paper/printing/publishing Other manufacturing	30.5	45.4	95.7	100	104.6	111.3	265
Construction	56.3	68.7	103.5	100	105.2	107.5	91
Gas/electricity/water	31.4	54.5	91.6	100	111.2	117.8	275

Source: Economic Trends; Monthly Digest of Statistics

Among manufacturing industries output rose fastest between 1963 and 1973 in chemicals and allied industries (93 per cent), in coal and petroleum products (71 per cent) and in engineering (59 per cent, comprising mechanical engineering 42 per cent; instrument engineering 77 per cent; and electrical engineering 81 per cent). In the period 1970–73 output grew fastest in chemicals and allied industries (21 per cent), engineering (12 per cent, the fastest growing sector

being electrical engineering 26 per cent), timber, furniture, etc. (30 per cent) and bricks, pottery, glass, etc. (26 per cent).

#### **Productivity**

The size of the labour force employed in industry has fallen steadily in the last six or seven years and substantially in the period 1970–73. The increases in production have been due mainly to a variety of factors influencing productivity, including advances in products, machinery, processes and methods of work; the rate of fixed capital formation; more intensive competition and sales promotion; and improved management. Output per head (a basic measure of labour productivity) increased by 15 per cent in production industries as a whole in the period 1970–73, the increase for manufacturing industry being 17 per cent.

TABLE 15: Output per head (1970 = 100)

	Employed	All production industries			Manufacturing industries			
	labour force		Employ- ment	Output per head	Output	Employ- ment	Output per head	
1964 1965 1966 1967 1968 1969 1970 1971 1972 1973	101·4 102·3 102·6 101·2 100·7 100·6 100·0 98·0 98·7 100·7	86·5 89·1 90·6 91·7 97·2 99·9 100·0 100·4 102·4 109·8	104·9 106·1 105·8 103·0 101·5 101·6 100·0 96·8 94·6 95·7	82·5 84·0 85·6 89·0 95·8 98·3 100·0 103·7 108·2 114·7	85·1 87·6 89·2 89·8 95·8 99·6 100·0 99·6 102·0 110·3	101·5 102·7 102·7 99·8 99·1 100·4 100·0 96·8 93·6 94·2	83·8 85·3 86·9 90·0 96·7 99·2 100·0 103·0 109·0 117·1	

Source: Monthly Digest of Statistics

Both the long-term and the short-term growth of productivity depend most directly on the decisions of individual undertakings. However, government departments and educational and research establishments also make an important contribution. The Department of Industry is responsible for the coordination of activities related to the improvement of industrial productivity. It is represented on the EDCs (see p. 203) which are concerned with the removal of obstacles to efficiency. The department also works to forward 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.

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 specialist institutions, both public and private, concerned with various aspects of productivity. The council gives primary attention to manufacturing industry through a national network of more than 60 local associations and provides information and advisory services, seminars, conferences and courses, inter-firm visits and industrial films among its services.

#### 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 the third quarter of 1961 to a low point at the beginning of 1963, then rose to a new peak in early 1966. It then fell again in 1967 before rising to a new peak at the end of 1970, when the present cycle began. Details of investment in the period 1965-73 are contained in Table 16. In 1973 fixed capital expenditure in manufacturing industry (at 1970 prices) totalled £1,920 million, a 6.5 per cent increase on the previous year. Analysed by industry group, investment in the food, drink and tobacco group was £286 million, an increase of over 7 per cent on the previous year; coal and petroleum products totalled £68 million; chemicals £216.5 million; metal manufacture £223 million; engineering, shipbuilding and metal goods £,467 million (an increase of 30 per cent); vehicles £124 million (24 per cent); textiles, leather and clothing f.170 million (37 per cent); paper, printing and publishing £110 million (7 per cent); and other manufacturing industries £256 million (12.5 per cent).

Of the 1973 total some £1,469 million (77 per cent) represented investment in plant and machinery. Part of this rising investment is associated with the introduction of new techniques and equipment and in particular of machines and instruments which lessen the demand for human supervision, though they may require more skill from fewer people. This 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 which, in the long run, are likely to be very large. Much investment, however, still consists of replacements, additions and improvements of a more traditional kind.

TABLE 16: Manufacturing Industry's Fixed Capital Expenditure 1965–73 (1970 prices)

£ million

	Total all manufacturing industries	New building work	Vehicles	Plant and machinery
1965	1,732-2	390.2	102-2	1,239.8
1966	1.780.1	369.8	98.3	1,312.0
1967	1,735.2	317.1	99.5	1,318.6
1968	1,846·1 <sup>a</sup> (1,795·1)	330.8	109-2	1,406·1 <sup>a</sup> (1,355·1)
1969	$ \begin{array}{c c} 1,976 \cdot 1^{a} \\ (2,027 \cdot 1) \end{array} $	388.7	115.9	$1,471\cdot5^a$ $(1,522\cdot5)$
1970	2,129.8	391.2	114.7	1,623.9
1971 1972	1,995.9 1,801.7	357·8 316·2	114·3 119·6	1,523·8 1,365·9
1973	1,919.8	321.4	129.0	1,469.4

Source: Trade and Industry

<sup>a</sup> After allowing for expenditure brought forward into 1968 from 1969 to secure the higher rate of investment grants, estimated at £51 million.

#### Management

In Britain, as elsewhere, management is recognised as a subject requiring special skills and training, as is reflected in the increased educational qualifications of managerial recruits and in the spread of systematic education for management. The growing number of professional people working as management consultants—now about 6,500—and the use of the services of independent management selection firms in the appointment of senior staff are further indications of the concern for improved management performance.

The British Institute of Management (BIM) is the central national management body, independent, non-political and non-profit-making. Its purpose is to study and promote scientific management, including management education and training, throughout industry, commerce and public administration. The BIM receives an annual government grant of about £100,000 to help it expand services to industry. The Industrial Society 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. 150). 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: more than 20 universities now offer graduate management courses and 19 have courses at undergraduate level. The Council of Industry for Management, 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 Office Management and the Institute of Marketing.

The improvement of industrial design is also recognised as an important factor. The Design Council is sponsored by the Government with the purpose of improving the design of goods manufactured by British industry. The council receives an annual grant from the Department of Industry and members are appointed by the Secretary of State. They include industrialists, engineers, retailers, architects, designers, educationists and trade unionists. In Scotland the council's activities are guided by a separate Scottish committee whose members are similarly appointed.

The council's work in promoting good design takes a number of forms. The council keeps in close contact with British industry through officers who analyse and advise on design. A designer selection service for companies who wish to contact experienced industrial designers is also operated.

Permanent displays of modern British consumer products are maintained at the Design Centres in London, Glasgow and Cardiff. All products on display in the Design Centres are drawn from Design Index, the council's photographic and sample record of some 10,000 current British products selected by independent committees for their good design, safety and performance. The Design Centres also mount special exhibitions on particular design themes, and the council also helps manufacturers who wish to exhibit their products overseas at trade fairs or special displays of British design. Manufacturers of outstanding products in both the consumer and engineering industries may receive one of a number of annual Design Council Awards. These cover the consumer goods, engineering products and components, medical equipment and motor vehicle industries.

In addition, the council organises a comprehensive programme of courses,

Design

conferences and seminars on design for various audiences and it also plays an important part in promoting better design education. It publishes two monthly magazines *Design* and *Engineering* and a range of books, leaflets and catalogues, including a series of design guides for engineers and paperbacks on

design in the home. It also has a photographic slide library.

Other bodies concerned with industrial design include the Royal Society of Arts (see p. 399), the Society of Industrial Artists and Designers, which is the representative professional body in Great Britain of designers engaged in industry and commerce, 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. It prepares and promulgates standards in respect of, among other things, quality, performance, dimensions, testing methods and codes of practice. Voluntary acceptance of such standards by manufacturers, buyers and sellers reduces unnecessary variety and simplifies the specification of requirements. The BSI is governed by a council consisting of representatives of the main organisations of employers and workers, professional institutions and the larger government departments.

#### MANUFACTURING INDUSTRIES

The following sections describe individual manufacturing industries in more detail. (For coal and petroleum products see Chapter 13.) Production figures in Table 17 and on p. 214 show the relative importance of broad sectors of manufacturing industry. 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. At the same time other longestablished industries, such as shipbuilding and marine engineering and electrical engineering, have been undertaking continuing reorganisation, reequipment and modernisation. A major stimulus has been provided by the various needs of the offshore oil and gas industries.

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. 44), 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 over 5,000 commodities. Annual Census of Production Reports give total industrial figures for production, capital expenditure, stocks, wages, salaries and employment. Information is also available in a number of other publications. 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.

In the subsequent sections, employment statistics refer to numbers in Great Britain at June 1973, sales and output figures are taken from the latest available *Business Monitor* and export figures from the *Overseas Trade Statistics*. Some production figures are given in metric terms, where statistics for an industry are normally published in this form. Conversion tables are on p. 457.

#### METAL MANUFACTURE

The metal manufacturing industries employ 517,600 people. Of these, 250,000 are in the iron and steel industry, and 87,800 in the manufacture of iron castings, 53,900 in the manufacture of aluminium and aluminium alloys, and 75,100 in the copper, brass and other base metal industries. Exports of iron and steel products and non-ferrous metals in 1973 had an aggregate value of £971 million.

#### Iron and Steel

Britain, responsible for most of the early developments in iron and steel production, is today the world's fifth largest steel producing nation. Output of crude steel in 1973 totalled 26.6 million ingot tonnes, 5 per cent more than in

TABLE 17: Manufacturing Industry: Net output 1970-72

Industry Group	£ million			Per- centage of total	per head £		
	1970	1971	1972	1972	1970	1971	1972
Food, drink and tobacco	2,348	2,685	3,058	13.6	2,975	3,345	3,848
Coal and petroleum products	239	259	235	1.1	6,530	6,952	6,371
Chemicals and allied industries	1,694	1,838	2,070	9.2	3,981	4,462	5,147
Metal manufacture	1,464	1,289	1,371	6.1	2,541	2,352	2,680
Mechanical engineering	2,402	2,621	2,617	11.7	2,293	2,589	2,785
Instrument engineering	350	381	415	1.9	1,979	2,163	2,441
Electrical engineering	1,639	1,783	2,051	9.1	2,120	2,357	2,732
Shipbuilding and marine engineering	315	349	414	1.9	1,722	1,881	2,253
Vehicles	1,651	1,743	2,172	9.7	2,058	2,216	2,795
Metal goods not elsewhere specified	1,162	1,264	1,380	6.2	2,087	2,284	2,526
Textiles	1,145	1,206	1,317	5.6	1,754	1,960	2,242
Leather, leather goods and fur	80	91	111	0.5	1,740	2,002	2,396
Clothing and footwear	571	649	699	3.1	1,269	1,419	1,551
Bricks, pottery, glass, cement, etc.	684	836	942	4.2	2,308	2,871	3,213
Timber, furniture, etc.	536	655	791	3.5	1,997	2,416	2,916
Paper, printing and publishing	1,462	1,633	1,837	8.2	2,409	2,745	3,149
Other manufacturing industries	760	842	949	4.2	2,212	2,480	2,786
All manufacturing industries	18,502	20,123	22,427	100	2,304	2,551	2,918

Source: Census of Production Reports 1970, 1971, 1972 (1972 Provisional Results) Discrepancies between totals and their constituent parts are due to rounding.

1972. Pig iron production in 1973 totalled 16.8 million tonnes, while net deliveries of finished steel amounted to 23.3 million tonnes in 1973. Exports of iron and steel products (including iron castings) were worth £437 million; the United States (£74.5 million), Sweden (£27.2 million), the Irish Republic (£21 million), Canada (£18.7 million) and the Federal Republic of Germany

(£17.4 million) were the main overseas buyers.

The Iron and Steel Act 1967 brought into public ownership 13 major steel companies (together producing about 90 per cent of Britain's crude steel and employing some 70 per cent of the manpower in the industry) and created the British Steel Corporation (BSC). The remaining privately owned companies are represented by the British Independent Steel Producers' Association. The main producing districts are: Wales (32 per cent of total crude steel output in 1973); Yorkshire and Humberside (24 per cent); Northern (17 per cent); and Scotland (12 per cent). Wales concentrates mainly on the manufacture of flat products, especially sheet steel and tinplate; the output of the north-east coast and Scotland is predominantly of heavy steel products (plates, sections and rails), but a wide strip mill for sheet production is also in operation in Scotland. Production of special alloy and stainless steels is centred on Sheffield, while Scunthorpe concentrates on heavy and medium products. The emphasis in investment by the BSC has been on improving efficiency rather than raising total capacity by phasing out old open-hearth furnaces in favour of the lower cost basic oxygen steelmaking (BOS) process. Between 1967 and 1973 steel production by the BOS process increased from 28 per cent of output to 48 per cent; by electric furnaces from 14 per cent to 20 per cent, while the share from older open-hearth processes fell from 58 per cent to 32 per cent. Output per blast furnace has risen markedly in recent years through improvements in efficiency, such as better preparation of raw materials and improvements to blast furnace design. Total annual research and development expenditure by the industry is about £15 million, most of which is incurred by the BSC in its divisional and corporate laboratories.

The corporation has in hand a ten-year development programme for the modernisation and expansion of its activities. Expansion will take place at five existing sites—two in Wales at Llanwern and Port Talbot, one at Ravenscraig in Scotland, one at Scunthorpe and one in the Teesside area where a new BOS plant will be constructed and the existing Lackenby works expanded to create one of the largest and most modern steelmaking complexes in Europe. Development projects completed in the last few years include a large-scale basic oxygen steelmaking plant and a deep-water harbour/ore terminal at Port Talbot, and a basic oxygen steelmaking plant at Lackenby, Cleveland. A major new steelmaking and finishing complex at Scunthorpe commenced

operations in 1973.

**Iron Castings** 

More than 900 firms are engaged in the production of iron castings, five employing more than 2,000 people and responsible for more than a quarter of total output. In 1973 output of castings (3.44 million tonnes) was 5 per cent higher than in the previous year. The main users of iron castings are the motor vehicle industry, accounting for nearly one-third of the total tonnage sold, the general engineering industry, the manufacturers of pressure pipes and fittings, the building and associated industries and the steel industry. Exports (included in the total for iron and steel in the previous section) totalled £14.2 million in 1973.

Non-ferrous Metals Britain's non-ferrous metals industry is the largest in Europe. Output in 1973 included: aluminium, 251,760 tonnes of virgin metal and 210,000 tonnes of

secondary metal; refined copper, 76,800 tonnes of virgin copper and 116,400 tonnes of secondary metal; lead, 144,960 tonnes; and zinc, 83,880 tonnes of slab metal. Britain is also a major producer of the newer specialised metals including uranium, zirconium and beryllium for the nuclear energy industry; niobium for aircraft production; and selenium, silicon, germanium and tantalum for electronic apparatus.

Nearly half of the industry is situated in the Midlands; other centres include south Wales, London, Tyneside and Avonmouth, where one of the world's largest zinc smelters with a capacity of 120,000 tonnes a year is operational. Three major new aluminium smelters provide over half of Britain's requirements. Mining is confined to the relatively small-scale working of tin in Cornwall. Firms are engaged in smelting, casting and fabrication by rolling, extrusion and drawing and advanced techniques of powder metallurgy and pressure diecasting are also employed. Scientific and technological research for the industry as a whole is conducted by the British Non-Ferrous Metals Research Association.

In 1973 exports of non-ferrous base metals were valued at £360 million. Exports of silver, platinum and other metals of the platinum group totalled £178 million. The main products exported, including alloys and semi-finished products, were copper (£154 million), nickel (£73.6 million), aluminium (£46.4 million), lead (£26.2 million), tin (£34.8 million) and zinc (£10 million). The United States (£90.1 million), the Federal Republic of Germany (£68.4 million), and France (£36.7 million) were the largest purchasing countries.

#### MECHANICAL ENGINEERING

Mechanical engineering, employing some 955,500 people, comprises a group of industries including all types of machinery, machine tools, industrial engines, mechanical handling equipment, construction equipment and industrial plant. The aggregate value of sales was over £4,000 million in 1973. Exports of non-electric machinery were valued at £2,412 million in 1973.

#### Agricultural Machinery

There are over 560 firms, employing 27,800 people, in the agricultural machinery industry, including six large firms employing well over 1,500 workers each. The industry produces all types of soil preparation and cultivation machinery, harvesting, threshing, feed processing and milking machinery. (For tractors see p. 227.) In 1973 sales were valued at £104 million and exports were worth £58 million; European Community countries form the main overseas markets.

#### Machine Tools

Britain was the birthplace of the modern machine tool industry and the British industry is, today, one of the most advanced in the world. Output ranges from watchmakers' lathes weighing a few pounds to boring machines weighing hundreds of tons, and to numerically controlled machine tools for every type of requirement, including systems for complete machining centres. Equipment using new electrical machining techniques is also widely produced. The seven major groupings in the industry's 600 or so firms provide over half of total deliveries, although because of the high degree of specialisation small firms are numerically predominant. Centred mainly in London, the Midlands, Yorkshire and Lancashire, the industry employs about 67,500 people. The Machine Tool Trades Association is the representative body of most manufacturers and importers, and is responsible for the international machine tool exhibition held in Britain every four years, the next being due in 1976. The industry is also served by its own research body, the Machine Tool Industry Research Association.

The pattern of machine tool production is highly cyclical; sales in 1973 were valued at £213 million, including numerically controlled tools worth £14 million. Exports of metal working machine tools in 1973 had a value of £84 million, and of the orders on hand at the end of 1973 (£203 million), 44 per cent were for export; the United States (£8.9 million), the Soviet Union (£8.8 million), the Federal Republic of Germany (£7.8 million), France  $(f_06\cdot 3 \text{ million})$  and South Africa  $(f_03\cdot 9 \text{ million})$ , were the main overseas markets in 1973. Exports of other metal working machinery, including converters, casting machines, rolling mills and welding and cutting machinery, totalled £28 million.

#### Pumps, Valves and Compressors

Industrial pumps and valves controlling the movement of liquids and gases are vital components in many industrial processes particularly in the chemicals, oil and electric power industries. The total work force is some 79,300 and there are 470 companies of which 13 employ more than 1,000 people. In 1973 sales of pumps and valves were estimated at £206 million and those of air and gas compressors and fluid power equipment at £64 million and £96 million respectively. Exports of all types of equipment totalled £152 million.

#### Industrial **Engines**

Britain manufactures a wide range of industrial internal combustion engines and other prime movers. Sales (including parts) had a value of £,168.7 million in 1973; export sales of industrial internal combustion engines (excluding parts) were worth £55.7 million. Production is concentrated among the ten large firms in the industry, and a total of 27,000 people are employed.

#### Textile Machinery

The textile machinery industry produces machines and accessories for the manufacture and processing of yarns and fabrics from all types of natural and man-made fibres. Comprising about 500 firms, five of which account for about one-third of total output, the industry has some 35,000 employees and is situated mainly in Lancashire, Yorkshire, Northern Ireland, Leicester and Nottingham. In 1973, the industry's sales totalled £198.8 million and exports £166 million. Principal markets were the European Community (£38.3) million), the United States (£26.9 million) and Commonwealth countries (f.21.3 million). Exports of sewing machines totalled a further f.20.5 million.

### Earth-moving Equipment

Construction and Almost the whole range of plant required by the construction industry is produced, including crawler tractors, motor graders, scrapers, trenchers, dozer equipment, dumpers, excavators, and crushing, pulverising and screening plant. Five large firms are responsible for more than a third of total output; the labour force numbers 37,200.

> The value of sales by the industry was £380.4 million in 1973. Exports of construction and mining machinery totalled £127.8 million. France (£12.3 million), the Federal Republic of Germany (£7.7 million) and Australia (f, 5.6 million) are important markets.

#### Mechanical Handling Equipment

Almost every industry makes use of mechanical handling equipment, which extends from individual units and accessories to complete operating systems. There are some 540 firms in the industry, the ten largest being responsible for over a quarter of total output; the labour force totals 62,300. The value of output in 1973 was some £389 million, the main products being cranes and bridge transporters, lifts, escalators, conveyors, elevators, hoists and powered industrial trucks. Exports of mechanical handling equipment (including industrial and works trucks) in 1973 were valued at £108.4 million, European Community countries forming the largest market (£31.8 million).

Office Machinery The office machinery industry comprises some 100 firms, seven of which account for about three-quarters of total output. British subsidiaries or associates of overseas firms are prominent in some sectors of the industry. There are 28,900 people employed.

Sales have been expanding rapidly and in 1973 were valued at £130 million (including non-electronic data processing and handling equipment and electronic calculators). Exports of all office machinery (excluding electronic computers and data processing equipment, see p. 226) were valued at £77.2 million. The most important overseas purchasers were European Community countries (£14.6 million) and the United States (£17.6 million).

Industrial Plant and Steelwork

British industry manufactures almost every type of industrial (including process) plant and steelwork. The industry, which comprises both equipment manufacturers and contractors responsible for the design, engineering, construction and commissioning of complete plants for process industries, has many large-scale enterprises, including nine with over 2,000 workers responsible for about one-quarter of total output, and in all employs 159,100 people. For nuclear power station construction see Chapter 13. In 1973 the estimated value of equipment sales was £623 million, of which £91 million was for overseas markets. Of particular importance are chemical and oil refining (process) plant, steam-raising boilers, 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.

In 1973 sales of boilers and boilerhouse plant totalled £120.5 million; exports totalled £23.2 million. Water tube boilers of advanced design and of large steam-raising capacity are produced for power stations, together with shell boilers for steam-raising and heating in factories and other buildings. Sales of fabricated iron and steelwork totalled £166.6 million in 1973 and constructional steelwork £192.1 million; exports totalled £24 million and £15.2 million respectively. A wide range of other industrial plant is also produced including furnaces and kilns (£47.1 million), refuse disposal and other plant (£36.3 million), and water, effluent and sewage treatment plant (£33.7 million). Exports amounted to £26.5 million in 1973.

The design, engineering, construction and commissioning of complete process plants for the chemical, petrochemical, oil refining and gas industries has expanded rapidly in recent years. There are some 30 process plant contracting groups in Britain, half of which are United States subsidiaries. In 1973 expenditure on complete process plants and constructional steelwork totalled £315 million. British firms are carrying out major plant projects in many over-

seas countries.

Other Machinery In addition to the mechanical engineering products described in the preceding sections there are some 2,600 enterprises producing other types of machinery and employing some 228,900 workers. The main products include: mining machinery (sales worth £134.9 million in 1973); printing, bookbinding and paper goods machinery (£84.7 million); non-domestic refrigerating machinery (£64.1 million); space-heating, ventilating and air-conditioning equipment (£192.5 million); food and drink processing machinery (£64.9 million); packaging and bottling machinery (£51.8 million); scales and weighing

machinery (£20·2 million); portable power tools (£60·5 million); and miscellaneous non-electrical machinery (some £382·5 million).

#### General Mechanical Engineering

Behind the firms manufacturing the major products outlined in this section are about 5,100 enterprises, employing 186,000 people, whose main functions are to supply parts and components and to undertake general sub-contracting, fabricating and repair work. (Some enterprises are included because the mixed character of their work precludes their classification under any single mechanical engineering group.) The sector includes 12 large undertakings with more than 2,000 employees and responsible for about one-quarter of total output. Ball, roller, needle and similar bearings and transmission and other precision chains, are particularly important products. In 1973 sales of ball and other bearings totalled £145.6 million and precision chains and other mechanical engineering products £295.3 million. Exports of bearings totalled £36.7 million and chains and other mechanical engineering products £134.9 million.

#### INSTRUMENT ENGINEERING

With products extending from scientific and industrial instruments to photographic equipment and timepieces, instrument engineering is a particularly important sector of the engineering industry. Electronic techniques, particularly in the industrial instrument sector, are of growing importance. Aggregate output was valued in 1973 at some £620 million and has increased, in value terms, by 169 per cent since 1963. In all, some 159,300 people are employed in this sector.

# Scientific and Industrial Instruments

There are some 940 firms in the scientific and industrial instruments industry, which has a labour force numbering 105,000. Twenty-one large firms, with more than 1,000 employees, are responsible for over one-third of output. The industry is represented by the Scientific Instruments Manufacturers Association (the Sira Institute conducts research on behalf of the industry). Output of scientific instruments in 1973 totalled £402 million, including optical instruments and appliances (£29.3 million), process measuring and control instruments (£162 million) and electrical measuring and control instruments (£52.4 million). Exports totalled £175.2 million.

#### Photographic Equipment

Sales of photographic and cinematographic equipment (including document copying machines) in 1973 totalled £89.4 million, and exports totalled £99 million.

# Watches and Clocks

There are some 70 firms in the watches and clocks industry, which employs 13,200 people; five relatively large employers are responsible for more than half of total output. Deliveries in 1973 included watches and parts (£19·3 million), clocks and parts (£11·6 million) and time recorders (£1·5 million) and the industry's total sales were valued at £34·2 million; export sales, including parts, were valued at £19·2 million.

#### Surgical Instruments and Appliances

With nearly 800 firms in the industry (five relatively large employers being responsible for about one-sixth of output) deliveries of surgical instruments and appliances and related products totalled £89·3 million in 1973; exports totalled £42·2 million.

#### ELECTRICAL AND ELECTRONIC ENGINEERING

The electrical engineering industry, with a labour force of 795,300 is engaged in the manufacture and installation of a wide variety of electrical and electronic equipment, including all types of generating, transmission and distribution equipment; motors; telecommunications and broadcasting apparatus,

television and radio receivers; computers; specialised electronic equipment; and domestic electrical appliances. The total value of production in 1973 was almost  $f_{4,200}$  million.

Exports of electrical machinery, apparatus and appliances (not including electronics products such as computers, see p. 226) in 1973 were valued at £807 million. Products are exported to all parts of the world; in 1973 the Federal Republic of Germany (£52 million), South Africa (£49 million), the United States (£47.6 million), France (£43.7 million) and Canada (£36.1 million) were among the principal markets.

The industry's leading representative organisations are the British Electrical and Allied Manufacturers' Association and the Electronic Engineering Association; industry-wide scientific and technological research is carried out by the

Electrical Research Association.

#### Electrical Machinery

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. Although about 660 firms manufacture machinery mergers have led to the creation of one of the leading electrical and electronic engineering groups in Europe for generating, transmitting and distributing electric power, while a number of smaller firms have been reorganised into larger units. Eight firms with more than 2,000 employees are responsible for about one-third of total output. The total labour force numbers 133,200.

In 1973 output of electrical machinery was valued at £635 million, including £166 million worth of generating equipment, and £188 million worth of switchgear and control gear. Exports of electric power machinery (generators, motors, converters, transformers and rectifiers) amounted to £,104.3 million in 1973. Switchgear, starting and control gear exports were valued at £34.9

million. The main purchasers were South Africa, Canada and Australia.

#### **Insulated Wires** and Cables

The industry produces cables and wires for the distribution of electric power, for telecommunications networks and for many other purposes; its products include submarine cables and cables insulated by a great variety of materials. About half of the industry's labour force of 42,100 are employed in four major groups responsible for more than half of total output. The value of output in 1973 was £411 million. Exports of insulated wire and cable and electrical insulating equipment were worth £58.3 million; Commonwealth countries are the largest purchasers.

#### **Electrical Goods** and Domestic **Appliances**

Output of other electrical goods in 1973 included domestic electric appliances, £362 million; electrical equipment for motor vehicles and aircraft, £218 million; accumulators, £74 million; and electric lamps and light fittings, f,231.3 million. In terms of volume, sales included: 2 million electric blankets, 1.7 million domestic vacuum cleaners, 1.2 million domestic washing machines, 2.1 million electric irons and 3.2 million kettles. In 1973 exports of domestic electrical equipment were valued at £60.8 million, including washing machines and parts (£,14.9 million), refrigerators and parts (£,10 million) and vacuum cleaners and parts (£15 million); the main markets were European Community countries, particularly the Federal Republic of Germany, the Netherlands and the Irish Republic. Exports of batteries and accumulators in 1973 were valued at £23.6 million, electric lamps and light fittings £72.9 million, and electrical equipment for motor vehicles, cycles and aircraft £,24.8 million. There are about 260 firms producing domestic electric appliances

(four large employers producing over one-third of output) and about 1,000 firms producing other electrical goods (three very large firms producing about one-quarter of total output). The industry has a labour force of 201,200,

# Electronic Equipment

Production of electronic equipment is one of the most rapidly expanding industries in Britain. British scientists and companies have made a number of important contributions to the industry's technology. There are numerous firms in the industry, although in most sectors—telecommunications, components, consumer goods, computers and communications and capital equipment—there are a few large-scale enterprises. Total deliveries in 1973 were valued at over £2,100 million (not including electronic process control and industrial instrumentation, see p. 224) and export deliveries at £600 million. The industry employs some 418,800 people.

Only a part of the telecommunications industry is concerned with electronic equipment, but it is normally considered as a sector of the electronics industry. The degree of involvement in electronics is, however, increasing and will continue to do so with the advent of new switching systems. Total sales of telegraph and telephone apparatus were valued at £391.8 million in 1973, including sales to the Post Office of £278 million. Britain is a major exporter of telecommunications equipment, with overseas sales valued in 1973 at £53.3 million. Research and development work is done by firms in the industry, in co-operation with the Post Office. The industry employs 88,300 people, and three firms are responsible for almost all the output.

The components sector (in which there is a large number of firms) manufactures the whole range of active and passive electronics components, including integrated circuits (in which many circuits are accommodated on a single chip of silicon), mainly for the electronics equipment industry. Deliveries of components in 1973 comprised active components valued at £158 million and passive components valued at £370 million: output of integrated circuits totalled £28.7 million. Exports were valued at £191.6 million.

The consumer goods sector of the industry manufactures radio and television sets, radiograms, high fidelity audio equipment, tape recorders and similar products. The industry is dominated by several large firms. The sector's output had a total value of £420·3 million in 1973; output included 3 million televisions, I million radios and I million radiograms and record players. Exports were valued at £23·4 million.

The computer sector manufactures complete 'hardware' and peripherals, including mini-computers for use in control and automation systems and in communications-related applications, providing in addition the full range of associated services ('software'). The sector is dominated by a number of large concerns, including subsidiaries of overseas companies. Total output in 1973 was valued at £348.9 million and exports at £204.9 million.

The other major sector of the electronics industry manufactures radio communications equipment, radar and navigational aids, public broadcasting equipment and other capital equipment. Such British equipment is extensively used throughout the world. The sector's total output in 1973 was valued at £388.5 million, including radio communication equipment £72.9 million, radar equipment £82.9 million and navigational aids £40.1 million. Exports totalled £107.9 million.

VEHICLES, AIRCRAFT AND SHIPS The industries which manufacture vehicles and aircraft are a particularly important source of overseas earnings; exports of transport equipment in 1973, valued at £1,556 million, formed some 12.5 per cent of total exports. The

labour force numbers 965,200 and includes: 508,100 in motor vehicle manufacture, 195,400 in aerospace construction and repairing, 177,300 in shipbuilding and marine engineering, 40,800 in the manufacture of locomotives and railway wagons and carriages, 27,900 in wheeled tractor manufacturing and 16,800 in the making of cycles and motor cycles.

**Motor Vehicles** 

The largest section of the vehicle industry comprises the manufacture of cars and commercial vehicles. Car and commercial vehicle output is dominated by four large firms—the British Leyland Motor Corporation, Ford, Chrysler United Kingdom and Vauxhall—which account for over 95 per cent of car and commercial vehicle production; the remainder is in the hands of smaller, specialist producers of heavy commercial vehicles, buses, coaches, limousines and sports cars. At one time located mainly in the Midlands and the London area, the industry, during the last decade, has built manufacturing and assembly plants on Merseyside, in Wales and in Scotland. The principal trade association is the Society of Motor Manufacturers and Traders, which holds a motor show annually in London and a commercial vehicle exhibition every two years. The Motor Industry Research Association carries out collective research on vehicles and components.

Cars

Output of passenger cars in 1973 totalled 1.747 million units, compared with 1.921 million in the previous year. Exports in 1973 amounted to 601,545 cars valued at £376.6 million. The United States (£79.5 million) was the largest single purchaser, followed by Belgium (£34.5 million), South Africa (£21.5 million), New Zealand (£19.3 million) and Iran (£18.8 million).

Commercial Vehicles

Production of commercial vehicles totalled 416,600 in 1973. Britain is one of the world's largest exporters of commercial vehicles. Exports in 1973 numbered 147,700 worth £198.5 million. South Africa (£17.3 million), the Irish Republic (£,12.7 million), Nigeria (£9.3 million) and Australia (£7.9 million) were the main markets.

Chassis. Parts, etc. Exports of bodies, chassis and parts for cars and commercial vehicles had a value of some £504.4 million in 1973; internal combustion engines and parts £94.5 million; and caravan and trailer exports totalled £38.3 million.

Tractors

The bulk of British tractor output and exports consists of agricultural tractors. In addition to the major motor vehicle manufacturers, production is dominated by three large organisations. Some 119,300 agricultural and industrial wheeled tractors were delivered in 1973. Exports of tractors were valued at £163.5 million in 1973; Turkey (£11.5 million), Australia (£11.1 million), South Africa (f,10·1 million), Canada (f,9 million) and the United States (f.8.7 million) were the major buyers.

Motor Cycles and Cycles

Sales of motor cycles and parts amounted to £24.8 million in 1973. Manufacture of motor cycles is dominated by one large group. Exports of motor cycles and parts totalled £22.2 million in 1973, with the United States (£15 million) much the biggest market.

Deliveries of bicycles amounted in 1973 to 2 million. Most of British manufacturing capacity is in the hands of a single group of companies concentrated in the Nottingham area. Some 1.07 million cycles worth £19.3 million were sent overseas in 1973; the United States (£9 million) was the largest single market, followed by Nigeria (£3.5 million).

Railway Vehicles The British Railways Board (see p. 312) 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. Output in 1973 had a total value of £159 million. The value of exports of railway vehicles and parts was £15.7 million; Commonwealth countries were the largest purchasers.

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 and space vehicles. The construction of aircraft is 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. Almost all aero-engine manufacture is in the hands of Rolls-Royce (1971) Ltd., a publicly owned company to which the essential assets of Rolls-Royce Ltd. were transferred in 1971. Besides extensive research and development work by the industry itself, research on a substantial scale is carried out by a number of government research establishments. The industry is represented by the Society of British Aerospace Companies which, in addition to the provision of other services, organises a major air-show and exhibition at Farnborough, Hampshire, every two years.

Total sales of aerospace products and work done in 1973 were valued at £1,002 million, including £278 million for aircraft and parts, £296 million for engines and parts and some £65 million for guided weapons and parts. Sales to final buyers were estimated at £800 million. Exports had a total value of £520 million, including £246.7 million for aircraft and parts and £241.2 million for engines and parts. The leading markets in 1973 were the United States (£162.2 million), France (£70.4 million) and the Federal Republic of Germany (£45.1 million). Sales to the People's Republic of China were also

prominent.

Current production includes such civil aircraft as the Hawker Siddeley HS 748 and Trident, the BAC One-Eleven and the Skyvan and Islander | Trislander light transports. The Anglo-French Concorde supersonic transport is at an advanced stage: new projects include the Hawker Siddeley HS 146, a quiet feeder-line aircraft and the Short's SD3-30, an enlarged version of the Skyvan. Military programmes include the unique Hawker Siddeley Harrier vertical/short take-off and landing aircraft (which has achieved extensive sales to the United States) and the Multi-Role Combat Aircraft, a collaborative development by Britain, the Federal Republic of Germany and Italy, together with a number of guided-missile projects. The industry is also extensively involved in space activities, including satellites for communications and other purposes and a number of European collaborative programmes. Britain is in addition the world's leading producer of hovercraft, the Winchester (SRN6) and Mountbatten (SRN4) classes having been sold extensively overseas. British aero-engines are also in world-wide use, recent developments including the Pegasus vectored-thrust engine for the Harrier and similar aircraft and the advanced technology RB 211 ultra-quiet engine, an area of continuing development by the industry.

Shipbuilding and Marine Engineering Britain's shipbuilding industry is one of the largest in the world. In the past decade the major shipyards have embarked on extensive programmes of reorganisation and modernisation, including the introduction of advanced, often computer-aided, production techniques, covered yards and the series production of standardised vessels. A series of mergers has led to the creation of two major groups on Clydeside, three in north-east England, one in eastern Scotland and one in southern England. Together with one firm on Merseyside and one in Belfast—where the world's largest building dock is

operational—they account for more than nine-tenths by gross tonnage of the industry's merchant shipbuilding operations. In addition numerous yards around the coast build smaller vessels such as naval ships, fishing and harbour craft, and oilrig supply vessels, this being a particularly rapidly growing area of activity. Co-operative research into shipbuilding and marine engineering is undertaken by the British Ship Research Association.

In 1973 completions of merchant ships of 100 gross tons and over totalled 137 vessels of 1,069 thousand gross tons and an estimated value of £230 million, of which 26 vessels of 327 thousand gross tons with an estimated value of £61 million were for overseas registration. At the end of that year orders were on hand for 375 ships of 7,265 thousand gross tons with an estimated value of  $f_{1,402}$  million, of which 88 vessels of 1,093 thousand gross tons and an estimated value of  $f_{251}$  million were for overseas registration. Deliveries of pleasure craft were valued at £25.3 million. Exports of ships and boats had a total value of  $f_{3}123.7$  million in 1973.

Some of the larger shipbuilding firms also carry out repair work in addition to a number of specialist ship repair firms. Ship repair, maintenance, conversion and refitting by the whole industry had a value of £193.4 million in 1973. A number of specialist firms construct and fit various types of marine diesel engines, steam turbines and gas turbines. Completions and deliveries of marine engines and machinery totalled £118.6 million in 1973. Direct exports

of marine propulsion diesels had a value of £12.5 million.

METAL **PRODUCTS**  The group of industries manufacturing metal products not already described consists of a very large number of firms with a total labour force of 563,000 in 1973; the main groups are engineers' small tools and gauges (64,000 persons), bolts, nuts and screws (39,300), wire and wire manufactures (38,200), cans and metal boxes (28,300), jewellery, plate, and the refining of precious metals (19,300), hand tools and implements (20,200), cutlery (14,400), and other metal industries (339,100). The total value of exports in 1973 was about £400 million.

Engineers' Small Tools The manufacture of engineers' small tools (used with metal-working machine tools) and gauges is an expanding industry. Small firms predominate. Sales totalled £184 million in 1973, including jigs and fixtures (£16 million), press tools and moulds (£41 million), hard metal-tipped tools (£21 million) and other metal cutting tools (£63 million). Exports totalled £48 million.

Cutlery

The production of cutlery and tableware (including safety razors and blades) is centred mainly in Sheffield and the Midlands. The industry's reputation has been built on the skill of its craftsmen, although, except in the case of the highest quality wares, mass-production methods are extensively used. Although small firms predominate, six relatively large employers are responsible for over half of output. The value of sales of cutlery in 1973 was £13 million and of safety razors and blades £25 million. Exports of cutlery, razors and razor blades totalled £26.1 million.

Hollow-ware

About 250 firms produce a wide range of domestic utensils, such as saucepans, buckets and dustbins, mainly from aluminium and wrought steel, together with industrial hollow-ware such as kegs, drums and barrels. The value of sales in 1973 was £,102 million, of which £8 million were sales for export.

Hand Tools and **Implements** 

The manufacture of hand tools, such as files, saws, hammers, axes and spades, is a long-established industry. There are about 350 firms, seven relatively large employers being responsible for about one-third of output. Sheffield, Birmingham and other Midland towns are the most important centres. The value of sales of hand tools and implements was £69·3 million in 1973: exports totalled £30·2 million.

# Jewellery, Gold and Silver Ware

The making of jewellery, gold and silver ware and the refining of precious metals is an industry in which British craftsmen are world renowned. Most firms in the industry, which is mainly centred on Birmingham, are small, although four relatively large firms are responsible for three-fifths of total output. The total value of sales of jewellery, goldsmiths' and silversmiths' wares, including coins and medals, and electro-plated nickel silver wares in 1973 was £94 million, of which £14·9 million was for export.

#### CHEMICALS

The chemicals industry, with a labour force of 424,500 comprises the manufacture of: general chemicals (134,800 employees), pharmaceutical chemicals and preparations (74,200), toilet preparations (26,200), paint (26,800), soap and detergents (14,900), synthetic resins, plastics materials and synthetic rubber (46,600), dyestuffs and pigments (21,800), fertilisers (10,700), and other chemical products (68,600). This is one of the fastest growing sectors of British industry, and an important contributor to overseas earnings. The value of exports in 1973 was £1,272 million, or 10 per cent of total British exports.

#### General Chemicals

About one-third 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, produced in very large quantities and 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 has the largest production of any chemical and 3·9 million tonnes were produced in 1973. The remaining output of this sector consists of a very wide range of chemicals of varying complexity. The chemical industry is highly capital intensive, so that employment figures for firms do not adequately reflect the size of undertakings. Four large firms are responsible for almost half of total output of inorganic chemicals.

Petroleum-based chemicals account for over four-fifths of the total output of organic chemicals; deliveries of feedstock for the petroleum chemical plants totalled 7 million tonnes in 1973. The most important products (by weight) in 1973 were ethylene (1,246 thousand tonnes), propylene (641,000 tonnes) and benzene (768,000 tonnes). The main outlets for organic chemicals are plastics materials, solvents, synthetic rubber, man-made fibres and detergents. Three large firms are responsible for almost two-thirds of total output of organic chemicals.

of organic chemicals.

Output of general chemicals totalled £1,552 million in 1973, and exports £522 million; European Community countries and the United States are the principal purchasers.

Sales of radioisotopes from the Radiochemical Centre Ltd. in 1973 were valued at over £9 million of which 69 per cent represented exports.

#### 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, vaccines, sera and naturally occurring drugs.

Thirteen large firms are responsible for almost half of total output; several of the larger pharmaceutical companies are subsidiaries of overseas firms.



# Teaching hospital

Ninewells teaching hospital and medical school, recently completed at Dundee, Scotland, showing: lecture theatre; students' common room; and ward area and nurses' station.







# New medical equipment

Right: Versatile, compact and economic anaesthetic table.

Far right: Chrome cobalt artificial hip joint.

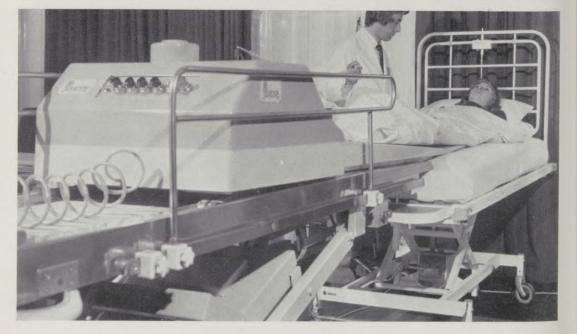






Intermittent compression bags for reducing post-operative thrombosis.

Trolley-mounted equipment enabling patients to be moved in and out of bed without handling.





Left: Computerised scanner for diagnosing brain diseases gives 100 times more information than conventional X-ray methods.

Below: Wide-field magnifying ophthalmic spectacles give 2x or 4x magnification and three different working distances.

Bottom right: A tracheotome that is simple and safe to use.

Bottom left: Clean air enclosure system for operating theatres.









## Drug research

One of the world's most sophisticated medical and veterinary research establishments at Alderley Park, Cheshire, showing: work on a blood sample; and the research library.





In 1973 sales of pharmaceutical chemicals and preparations totalled £582 million. Exports of medicinal and pharmaceutical products and goods totalled £221·2 million, of which £28·9 million worth were antibiotics. The largest purchasers were the Irish Republic (£12·9 million), Japan (£11 million) and Italy (£11·4 million).

## 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 packagingnotably 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. There are about 250 firms in the industry; five large enterprises are responsible for about two-fifths of output. In 1973 sales of synthetic resin and plastics materials totalled £,631.7 million; sales of synthetic rubber a further £65.2 million. Exports of synthetic resins and plastics materials totalled £225.2 million, the main purchasers being Australia (£18·1 million), Sweden (£16·5 million), the Irish Republic (£,16·1 million) and South Africa (£,15·4 million). Exports of synthetic rubber totalled  $f_{34\cdot3}$  million.

# Fertilisers

The development of artificial fertilisers owes much to the pioneer work of British scientists. Production is dominated by three 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. Sales of fertilisers were valued at £200.8 million in 1973. The use of ammonium nitrate (35 per cent nitrogen), ammonium phosphate, and urea (mostly 45 per cent nitrogen), is resulting in more concentrated fertilisers. The value of exports of manufactured fertilisers, was £14.8 million in 1973, European Community countries forming the largest market.

## Crop Protection Products

Notable discoveries by the British crop protection industry include the insecticidal activity of BHC (benzene hexachloride), the first selective hormone weed-killer, MCPA, and more recently *Gramoxone*, a non-residual general herbicide. Three relatively large firms are responsible for more than a third of total output. Sales of pesticides and allied products were valued at £79.5 million in 1973; herbicides (£31.5 million) were the largest single category. Exports of insecticides, fungicides and disinfectants in 1973 totalled £42 million.

#### **Paints**

Manufacturers' sales of paint and varnish during 1973 amounted to some 591·2 million litres (including 151·1 million litres of emulsion paint) valued at £267 million. In recent years many improved techniques have been introduced, including new ranges of synthetic resins and pigments, non-drip, quick-drying paints and paints needing only one application. About 340 firms are involved in this sector, six relatively large firms being responsible for

almost half of total output. Britain is one of the largest exporters of paints in the world; exports of pigments, paints, varnishes and related products in 1973 amounted to £68·1 million.

Toilet and Soap Preparations Sales of toilet preparations totalled £240 million in 1973 and sales of soap and detergents £222 million. About 220 firms, including three large enterprises, are involved in the toilet preparations industry and about 190 in the soap and detergents industry. Exports of perfumery and toilet preparations, soap and associated products were valued at £73.9 million.

Other Chemical Products

Sales of other chemical products in 1973 included formulated adhesives (£60·1 million), printing ink (£46·1 million) and photographic chemical materials (£122·5 million). Sales of polishes in 1973 were valued at £43 million, including floor and furniture polishes worth £12 million.

**TEXTILES** 

The boundaries between the various fibre-based sectors of the textile industry have now become indistinct and considerable vertical integration has taken place, connected with the rapidly developing technology of man-made fibres. Large multi-fibre, multi-process groups have been formed, four of which control the bulk of spinning and warp knitting. The industry's main research bodies are the Cotton, Silk and Man-made Fibres Research Association, the Wool Industries Research Association, and the Hosiery and Allied Trades Research Association.

The industry has a labour force of 555,000, half of whom are women; 35,700 are engaged in the production of man-made fibres, 61,700 in the spinning and doubling of cotton, flax and man-made fibres, 48,800 in the weaving of cotton, linen and man-made fibres, 106,700 in the woollen and worsted trades, 127,000 in hosiery and knitted goods, 51,400 in textile finishing and 43,000 in carpets. The total value of textile exports in 1973 was £589.6 million.

Man-made Fibres Much of the early development of man-made fibres took place in Britain. Production is spread throughout the country with Northern Ireland of growing importance. Large firms predominate in the industry. Two main types of manmade fibres are manufactured: those made from cellulose (such as rayon) and those produced by fully synthetic processes from chemical substances (the polyamides, such as nylon, the acrylics and the polyesters). Viscose rayon is still the most widely used of all man-made fibres and is almost all made by a single company and its subsidiaries. Several types of nylon are produced, together with Terylene, a polyester fibre, invented in Britain during the second world war. It is resistant to fading and is particularly suited to blending with wool. Acrylic fibres, including Courtelle (a British discovery) and Acrilan, are of growing importance. Synthetic elastomerics or spandex fibres, which are man-made textile fibres having inherent properties of stretch and recovery, are also produced, together with another British development, melded or nonwoven fibres and fabrics. There has been a rapid expansion of output in recent years. Output totalled 717,000 tonnes valued at £397.3 million in 1973, consisting of 453,800 tonnes of staple fibre and 263,600 tonnes of filament yarn. Of the continuous filament yarn 133,283 tonnes were polyamide yarns. Output of woven man-made fibre cloth totalled 539.4 million linear yards valued at  $f_{158.9}$  million.

Exports of synthetic and artificial yarns had a value of £128.6 million in 1973, and synthetic and artificial fabrics £49.9 million. The Irish Republic

(£15 million), Denmark (£13·1 million), the United States (£12·2 million) and Sweden (£11.3 million) are among the most important purchasers.

Wool

The British wool textile industry, important since medieval times, is one of the largest in the world. There are two main branches-woollen and worsted and in recent years an increasing amount of man-made fibre has been blended with wool. The small or medium-sized business predominates, with only a few large firms. While West Yorkshire is by far the most important producing area, Scotland and the west of England remain famous as specialised producers of high-quality cloth.

In 1973 sales of woollen and worsted products had a total value of £758.1 million. Output included 138 million kg. of wool, tops and related products and 92 million kg. of woollen and mixed yarn. Deliveries of worsted and semiworsted yarn amounted to 100 million kg. and of woven fabrics to 212 million square yards of which woollen comprised 126 million square yards and worsted 86 million square yards. In addition, large, but declining, quantities of raw wool are scoured and cleaned in Britain. Consumption of raw wool in 1973 was 137 million kg. Exports in 1973 included wool yarns (£37 million) and fabrics (£91.5 million). The main buyers of woollen and worsted fabrics were Japan (£20.7 million), the Federal Republic of Germany (£6.5 million) and Canada (£6.4 million). Raw wool (cleaned or scoured in Britain) and other animal hair and tops exported had a value of £82.3 million.

Cotton

Cotton was Britain's chief consumer goods industry and cotton piece-goods its largest export during the nineteenth century. Increasing low-cost competition has cut progressively into British markets but the industry has responded with extensive reorganisation, modernisation and the introduction of new techniques. Most of the industry is located in Lancashire, the north-east of the county being mainly concerned with weaving and the south-east with spinning.

Output in 1973 consisted of: 203 million lb. of single cotton yarn, 204 million lb. of spun man-made fibre and mixture single yarn, 181 million lb. of doubled cotton yarn, 496 million linear yards of woven cotton cloth, and 539 million linear yards of man-made fibre and mixture cloth. In 1973 exports of cotton yarn were worth £19.7 million, exports of woven cotton fabrics were valued at £39.5 million, with the Irish Republic and Commonwealth coun-

tries the most important markets.

Hosiery and Knitwear

The hosiery and knitwear industry is predominantly one of small-scale enterprises. Although widely distributed, the industry is centred in the east Midlands, the north-west of England and in Scotland. Sales of hosiery and other knitted goods totalled £524 million in 1973 including £208 million worth of outerwear, £103 million worth of socks, tights and stockings and £138 million worth of knitted fabrics. Exports of knitted or crocheted clothing and accessories were valued at £70·1 million in 1973; the largest buyers were the United States (£9 million), the Irish Republic (£5.7 million) and Switzerland (£,6 million). Exports of knitted and crocheted fabrics amounted to £43.2 million.

Other Textiles

Linen

The linen industry is centred in Northern Ireland which concentrates on yarns and the lighter types of fabrics, with most of the remainder in Scotland. Northern Ireland manufacturers produced 21 million linear yards of cloth in 1973, while weavers in Britain delivered 33.1 million square yards, including 9.4 million square yards of sailcloth and canvas. Textile exports in 1973

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included £7.7 million worth of linen fabrics and £5.2 million worth of flax yarns and linen thread.

Fute

Jute products are manufactured on a large scale in the Dundee area; jute yarn is used in the manufacture of carpets, cordage, ropes and woven into fabrics for a wide range of applications in the packaging, carpet, upholstery, building and motor car industries. New uses for jute, as a plastics reinforcement for example, have also been developed. In 1973 output included 54,833 tons of jute yarn and 161.4 million square yards of woven jute cloth. Total sales of the main products of the jute industry were valued at £54.3 million including exports of £3.1 million.

Lace

Sales of finished lace goods amounted to £20 million in 1973. The most important lace product is manufactured on warp knitting machines, with sales valued at £8.7 million. Exports of principal products were worth £4.9 million in 1973.

Miscellaneous Textile Manufactures In addition to the products mentioned above, British textile firms manufacture a wide range of other goods, including many special yarns and fabrics, net, household textiles such as blankets, tablecloths and curtains, and carpets and other floor coverings. Sales of floor coverings of linoleum, vinyl and other synthetic materials were valued at nearly £107 million in 1973; just under one-sixth was for export. The cordage industry is one of the largest in Europe. Exports of ropes, cordage, nets and netting in 1973 were valued at £5.4 million.

Carpets

Some 140 enterprises are engaged in the manufacture of carpets and rugs, including six large groups. The principal manufacturing centres include Kidderminster, Halifax and Bradford, Glasgow and Kilmarnock and several towns in Northern Ireland. About one-quarter of the carpets produced (by quantity) are made predominantly of wool and a growing proportion of traditional woven carpets contain some man-made fibre. Total sales in 1973 amounted to some 193 million square yards worth about £360 million. Almost two-thirds of output is accounted for by 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, make up most of the remainder of sales, and form the bulk of exports which totalled £62.8 million in 1973.

CLOTHING, LEATHER AND FOOTWEAR There are 461,600 employees in the clothing, leather and footwear industries. Some 332,200 are in the clothing industry, 85,400 in the footwear trade and 44,000 in leather, leather goods and fur manufacture. The aggregate value of their exports in 1973 was £210.7 million.

Clothing

The British clothing industry is the largest in Europe. The typical firm in the industry is small, although there are some large firms employing mass-production methods on an extensive scale. The principal manufacturing centres are London, Leeds and Manchester, but some firms are also situated on industrial estates throughout the country. The Clothing Export Council, representing some 220 companies, organises promotions for various sectors of the industry. Exports of clothing in 1973, including knitted goods but excluding fur clothing, were valued at £175·2 million; the Irish Republic (£20·6 million) was the main purchaser.

Leather

Leather tanning and leather goods manufacturing is another of Britain's long-established industries.

Tanneries are situated in most parts of Britain, but there are important concentrations in Lancashire, Cheshire, Yorkshire, the north Midlands and the London area. 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. In 1973 the industry's output totalled £143 million; exports were valued at £49 million. The United States (£10.5 million) is the largest single market, followed by Canada (£5.2 million).

Footwear

The British footwear industry is among the largest in the world. There are almost 600 firms in the industry, with three large firms being responsible for about one-fifth of total output. Factories are located throughout Britain. Some areas concentrate on production of particular types; for example, the Rossendale valley region of Lancashire on slippers, and Leicester and Norwich on women's and girls' shoes. In 1973 manufacturers' sales of footwear totalled 190 million pairs with a value of £343·3 million. Exports of all types had a value of £35·6 million; the Irish Republic (£6·2 million), the United States (£3·8 million) and Canada (£3 million) were the largest markets.

FOOD, DRINK AND TOBACCO The food, drink and tobacco industries employ 728,100 people in the production of a great variety of goods. The value of their combined exports in 1973 was £816.8 million. Exports of alcoholic and other beverages accounted for £305 million; sugar, sugar preparations and honey for £61.5 million; cereal and cereal preparations for £54.6 million; fruit and vegetables for £43.3 million; and coffee, cocoa, tea and spices for £61.4 million.

Many of the industry's leading firms have been involved in mergers in

recent years.

Bread

The trend in bread production is towards concentrating production in large mechanised bakeries most of them using a British process developed by the industry's main research organisation (the Flour Milling and Baking Research Association) now also widely used in other countries. About two-thirds of bread is made in these bakeries, which specialise in sliced and wrapped loaves and mass production of flour confectionery. Three groups have a dominant position. In the smaller bakeries production of cakes and other flour confectionery is usually allied to bread production. There are 118,600 employees in the bread and flour confectionery industry and a further 23,300 in grain-milling. Output of bread totalled 2.26 million tons in 1973; sales of bread, flour confectionery and other bakery products had a total value of £569.6 million.

There are 44,000 employees producing biscuits and related products. Output of biscuits totalled 610,000 tons in 1973; sales of biscuits and related products had a total value of £229 million. British biscuits have gained a world-wide reputation, and exports in 1973 were valued at £17.8 million.

Confectionery

The cocoa, chocolate and sugar confectionery industry, which has 74,200 employees, is composed of a small number of very large manufacturers and many medium-sized and small firms. The main ingredients used by the industry are sugar, cocoa beans, glucose, milk, nuts and fats. Production of cocoa, chocolate and sugar confectionery and related products totalled 924,000 tons in 1973, with a total value of £472·3 million. An estimated 30 per cent of

total world exports of chocolate and sugar confectionery come from Britain, the world's largest exporter of these products; exports totalled £55.2 million in 1973.

## Fruit and Vegetable Products

Fruit and vegetable products include canned, frozen and dried fruit and vegetables, jam, marmalade and pickles. The labour force numbers 58,400. Output of jams and marmalade totalled 181,000 tons in 1973. Raspberry, strawberry, apricot and blackcurrant jams are the most popular. Exports of jams and marmalade in 1973 were valued at £2.9 million. In 1973, 775,000 tons of canned vegetables were produced. Beans in tomato sauce (293,000 tons in 1973) and processed and fresh peas (248,000 tons) are the vegetables most in demand as canned products. In addition, output in 1973 included 74,000 tons of canned and bottled fruit. Strawberries, rhubarb and plums account for a large part of the canned fruits, followed by prunes, gooseberries and fruit salad. Sales of prepared fruit pie fillings are increasing. Nearly 321,000 tons of vegetables were processed by quick freezing in 1973.

## 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. The labour force numbers 111,000. Output of canned meat and canned meat products in 1973 totalled 151,000 tons, and the quantity of bacon and ham cured was 245,000 tons. Quick-frozen fish output amounted to some 118,000 tons in 1973; small quantities (7,400 tons in 1973) are also canned. Exports of fish and fish preparations had a value of £43.1 million in 1973 and those of meat and meat products were worth £80 million.

# Beverages

The industries producing beer, spirits, wines, cider and soft drinks have a labour force of 127,300.

# Whisky

Exports of whisky (almost all of it Scotch whisky) totalled 78 million proof gallons with a value of £260 million in 1973; almost half went to the United States which imported £113·3 million worth of distilled alcoholic beverages from Britain in 1973. Scotch whisky was first distilled in the fifteenth century. It is blended from 20 or more different types, some from malted barley and some from other grains. Whisky requires several years to mature, and the Scotch whisky produced in the 1973 distilling year will not be on sale for some years. Stocks of whisky amount to more than 600 million proof gallons, representing 10 years' consumption. About four-fifths of annual sales are to overseas buyers.

Gin

Production of gin in Britain has risen steadily since the early 1950s. The main distillers are in London and one company accounts for a large proportion of total output. Although the larger manufacturers also own distilleries abroad, exports had a value of  $f_{\cdot}$ 15·8 million in 1973.

# Brewing and Malting

There are 67,900 employees in the brewing and malting industry. There are seven major brewery groups which market their products throughout the country together with a number of smaller enterprises. Firms have introduced new production methods, including continuous brewing processes, and automated batch production plants are well established. In 1973, 37 million bulk barrels of beer were produced. Exports in 1973 of malt beer were 450,789 bulk barrels, worth £6.7 million.

The main raw materials used in brewing are malt, hops and some sugar. Malt is made almost entirely from home-grown barley. Some brewers make all

or part of their own malt, others purchase it from independent maltsters who also supply distillers, vinegar brewers and malt extract manufacturers. British malt is used by brewers throughout the world, and exports in 1973 amounted to 122,800 tons, worth £7.6 million.

Soft Drinks

The soft drinks industry has expanded markedly in the last decade. Total exports of non-alcoholic beverages were  $\pounds^{2\cdot5}$  million in 1973. There are two very large firms among about 20 producing widely advertised brands which are marketed on a national scale together with about 250 firms supplying regional markets. There is also some degree of specialisation by firms in the production of various types, such as carbonated drinks, cola-based drinks, squashes and cordials, tonic waters and 'mixers', and comminuted drinks (in which the whole fruit is used). Sales in 1973 included 84 million gallons of concentrated soft drinks, and 356 million gallons of unconcentrated drinks.

Tobacco

The tobacco industry manufactures almost all the cigarettes and other tobacco goods sold in Britain. The main centres of production are in and around Bristol, Liverpool, London, Manchester, Newcastle, Nottingham, Glasgow and Belfast. The two biggest manufacturing groups account for over 90 per cent of total output and the industry has 33,200 employees. In 1973 the industry's total sales were valued at £1,623 million. Exports worth £58·1 million (of which cigarettes accounted for nearly 90 per cent) were shipped to a large number of overseas markets; Saudi Arabia (£7·4 million), the Netherlands (£7·4 million) and Belgium (£4·1 million) being the most important. The tobacco industry used 328·1 million lb. of imported tobacco in 1973, the main sources being the United States, Canada and India. The industry's output included 280·6 million lb. of cigarettes, including 223·7 million lb. of tipped cigarettes; 5·4 million lb. of cigars; and 33·5 million lb. of pipe and other tobacco.

BRICKS, CEMENT, POTTERY AND GLASS This group comprises the manufacture of bricks, fireclay, refractory goods, pottery, glass, cement, abrasives, asbestos and other building materials. The industries have a combined labour force of 299,100 which includes 48,400 in the bricks, fireclay and refractory goods trades, 73,100 in the glass industry and 56,200 in the pottery industry.

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. In 1973 about 7,183 million building bricks were produced in Great Britain, made mainly in the Bedford and Peterborough areas. Sales of bricks and other non-refractory goods had a total value of £171.4 million in 1973. Refractory goods are manufactured mainly for home use: output of firebricks, silica bricks, magnesite bricks, chrome-magnesite bricks and alumina bricks in 1973 totalled 932,870 tonnes valued at £38 million and output of other refractory goods amounted to £55.2 million.

Cement

The cement industry, with 14,500 employees, 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 expanded substantially in recent years. Output totalled 20 million tonnes in 1973 and the industry's total sales were valued at £198.4 million.

Pottery

The pottery industry, supplying almost all home needs for domestic and industrial pottery, is a long-established industry, in which there has been considerable re-equipment; 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 are also manufactured. Among famous makes of British pottery are Wedgwood, Spode, Royal Worcester, Royal Doulton, Minton, Coalport and Royal Crown Derby. Total sales of pottery were £167 million in 1973 including export sales of £60 million; the United States and Canada are among the leading markets.

Glass

Britain's glass industry is one of the largest in the world. The section of the industry devoted to the manufacture of plate and sheet glass in their various forms is organised for quantity production, much of it in the form of 'float' glass (the process for the manufacture of which was developed in Britain and perhaps the most marked advance in the history of glass-making) has been licensed to glass makers 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 (produced on a large scale), 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 Glass Technology of Sheffield University.

Total sales of glass and glass products were valued at £341 million in 1973. Direct exports of glass and glassware totalled £64.8 million in 1973. Those of glass were worth £39.2 million, the most important markets being European Community countries. The figure included £13.5 million of float glass.

PAPER, PRINTING AND PUBLISHING The paper, printing and publishing industries have 567,700 employees, including 68,700 in the manufacture of paper and board, 85,200 in the production of packaging materials, 138,100 in the printing and publishing of newspapers and periodicals, and 212,300 in other types of printing and publishing.

Paper and Board The British paper and board industry is one of the largest in Europe. There are a few very large groups in the industry and many medium-sized and small firms. The large groups hold considerable interests abroad, including pulp and paper producing mills in the United States, Canada, other parts of the Commonwealth and Europe. Research is undertaken by The Research Association for the Paper and Board, Printing and Packaging Industries.

The main raw materials are woodpulp and waste paper. Woodpulp produced in Britain is of increasing importance although it still represents only a small percentage of total supplies. Salvaged waste paper is of increasing importance, and a number of new techniques for its use are being developed.

Total sales in 1973 of all types of paper and board amounted to £638 million. Of this, newsprint accounted for £38.5 million and other printing and writing papers for £238.4 million; £129.2 million was board and the

remainder was made up chiefly of wrapping papers, industrial and special purpose papers and tissues. Sales of household paper products, including facial tissues, and other paper and board products totalled £191.9 million. Sales of packaging products, such as cardboard boxes, cartons and fibreboard packing cases, totalled £424.2 million, while sales of manufactured stationery were valued at £241.6 million. Sales of wall coverings (where a major innovation has been the introduction of plastics coated coverings) totalled £71 million. Exports of paper and board reached a new record level of £87.7 million in 1973 and exports of manufactured paper items were valued at £41.1 million. The Irish Republic (£11.7 million), France (£9.3 million), the Federal Republic of Germany (£8.9 million) and the Netherlands (£6.3 million) are among the leading purchasers.

# Printing and Publishing

The printing and publishing industry produces an immense range of goods, from national newspapers and periodicals to books, business stationery and greetings cards. Mergers in recent years have led to the formation of large groups in the newspaper, magazine and book publishing sections. Three large firms each employ more than 15,000 people. General printing, publishing, engraving and bookbinding remains essentially an industry 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 newspapers are set by computer techniques. Total sales and receipts of newspapers and periodicals were valued at £992 million in 1973, including £597.4 million for newspapers (sales £,229.1 million, advertising revenue £367.7 million) and £259 million for periodicals (sales £131.9 million, advertising revenue £127.1 million). Sales in the general printing and publishing industry totalled £845.6 million, of which sales of books totalled £228 million. Exports of printed matter were valued at £136.8 million in 1973, including books and pamphlets (£76 million), and newspapers and periodicals (£21.4 million), but these figures do not include parcel post shipments, which are possibly as large again as the recorded totals. The United States (£25.2 million), Australia (£18.8 million) and the Netherlands (£7.5 million) are among the most important overseas markets. The Book Development Council of the Publishers' Association promotes the supply and use of British books overseas.

#### OTHER MANUFACTURING INDUSTRIES

Other manufacturing industries include the timber and furniture group, with 286,500 employees, rubber manufacture, with 116,400 employees, and a group of miscellaneous manufactures employs some 227,800 including 122,200 in plastics moulding and fabricating.

#### Rubber

Tyres and tubes represent more than half the output of the industry but firms also make a variety of goods, the most important being rubber footwear, 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.

In 1973 the industry's consumption of rubber totalled 443,600 tonnes, comprising 161,500 tonnes of natural rubber, 264,100 tonnes of synthetic rubber and 18,000 tonnes of recycled rubber. In 1973, 234,700 tonnes of

rubber were used in the production of tyres and tyre products. Direct exports of rubber and rubber manufactures in 1973 were worth £121·2 million, with Sweden, the United States and Australia as the main markets. This figure included tyres and tubes valued at £68·4 million, but excluded large indirect exports on vehicles. In addition, the industry exported about £6·3 million worth of rubber or plastic footwear and £4·3 million of rubber gloves and other clothing.

Furniture, Brushes and Timber Numerous enterprises manufacture furniture in Britain (including domestic, upholstered, office, school and other furniture) and the labour force is of the order of 88,000. Sales of wooden furniture and upholstery totalled £507·I million in 1973, while sales of metal furniture were valued at £110·3 million. Exports of all furniture were worth £44·2 million in 1973. The bedding industry employs 22,700 people; sales of bedding and soft furnishings in 1973 were valued at £108 million. 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 embraces highly mechanised establishments as well as small craft units. The value of sales in 1973 was £39.4 million, of which £4.4 million was for export.

The timber industry employs 97,500 people. Britain is mainly dependent on imported supplies of timber although domestic production has been steadily increasing. Sales of timber, plywood and chipboard and builders' woodwork totalled £605.2 million in 1973.

Toys, Games and Sports Equipment The number of people engaged in manufacturing toys and sports equipment and children's carriages in Britain is 43,400. Sales of toys, games and children's carriages in 1973 were worth £140.9 million and exports had a value of £46.3 million. The Federal Republic of Germany and the United States are the main overseas markets. The value of sales of sports equipment was £41.4 million: exports totalled £18.5 million.

#### 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, 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 1.9 million people are engaged on construction, including the self-employed, and they represent some 8 per cent of the employed labour force. About 19 per cent are employed by public authorities. Some 30 per cent of output consists of maintenance work, and about 44 per cent of all new work is commissioned by public authorities.

Structure

Constructional work is carried out both by private contractors and by public authorities which employ their own labour. About 80 per cent of the work is done by private firms. Although there are over 66,000 firms employing two or more people over 80 per cent of them employ fewer than 25 people.

Public authorities as a whole employ about 240,000 operatives but a very large proportion of these are engaged on repair and maintenance work which local authorities, for example, carry out with their own labour.

Over 38 per cent of operatives are occupied on building maintenance, valued at over £2,700 million annually. The total labour force includes about 700,000 skilled craftsmen, most of whom have been trained for four or five years under the industry's apprenticeship schemes. A further 81,000 are employed as

apprentices.

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 constructional work by the contractor.

The Property Services Agency, which is an integral part of the Department of the Environment (see p. 49) is responsible for the construction programmes undertaken directly by the Government (except for health and education projects), including work for the armed services, both at home 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.

Output

The value of work done in 1973 amounted to £9,221 million, of which £829 million represented work carried out by the labour employed directly by public authorities. Private contractors carried out the remaining £8,393 million (£6,305 million on new work and £2,088 million on repair work).

Housing

Some 337,000 houses were started in 1973 and 304,000 were completed, of which 191,000 were for private owners. Of the £2,464 million of new housing carried out by private contractors, £1,656 million, or over half, was for private owners and the remainder for public authorities. Industrialised building methods employing prefabricated components are used in much of the work.

The National Building Agency is an independent advisory body, managed by a board of directors appointed by the Department of the Environment and the Secretaries of State 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.

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. Prominent figures in the early development of civil engineering included John McAdam pioneer in road construction; Thomas Telford, builder of roads, bridges, canals, docks and railways; George and Robert Stephenson and Isambard Kingdom Brunel, pioneers of railway building.

Among important construction projects in hand in Britain in 1974 were several major conventional power stations and nuclear power stations (see p. 268), offshore production platforms for North Sea oil, hospitals, large-scale housing developments, a scheme to extend the London underground railway system to London Airport (Heathrow) and the first stage of the new Fleet underground line across London. Projects for road construction, bridges and tunnels included about 197 miles (317 kilometres) of motorways under con-

struction at the end of March 1974 in England alone (see p. 317), and a £26 million bridge across the river Humber (see p. 317).

Overseas Constructional Work Among important new construction projects being undertaken by British contractors in overseas countries were: a £91 million dry dock and ship-repairing scheme and a £20 million cement works contract in Dubai; a £30 million contract for construction of three airfields in Zaire; a £2.5 million road scheme in Nigeria; and a £23 million tower block project in Australia.

Recently the value of new overseas contracts obtained by British construction firms, in a large number of different countries, has been running at about £350 million a year. 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. British members of the Association of Consulting Engineers had projects worth about £4,225 million in hand on 1st January 1974, bringing in some £58 million net in invisible export earnings.

Research

The Director-General of Research in the Department of the Environment works closely with the building industry on many aspects of construction research. The Building Research Establishment is concerned with all aspects of building and provides a technical advisory service for construction firms. An Agrément Board, set up by the Government, tests and certifies new 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 Heating and Ventilating Research Association deals with heating and air-conditioning 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, vehicle components) 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. 199.)

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 a number of official statistical inquiries into the distributive trades. The latest censuses taken in Great Britain refer to the wholesale trades in 1965 and the retail and certain service trades in 1971. Sample monthly and annual inquiries are also undertaken.

WHOLESALE TRADE Only a proportion of the trade in consumer goods passes through wholesalers: sales are also made 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. The 1965 inquiry into wholesale trades showed that a total of 23,643 business units were engaged in wholesale distribution in Great Britain; 3,435 dealt in clothing, footwear and textiles, 2,007 in grocery and provisions, 2,630 in vegetables and fruit, and 3,469 in other food and in drink. In addition, there were 8,282 dealers (wholesale or retail) in coal, builders' materials, grain or agricultural supplies, and 9,117 dealers in other industrial materials and machinery. The book value of stocks held by wholesalers and dealers at the end of 1973 was £2,478 million; fixed capital expenditure by wholesale distributors amounted to £181 million in 1973 (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 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 by growers to commission agents (who dispose of the produce either to wholesalers or direct to retailers) or the grower may deal only with wholesale firms. The sale of some agricultural products is regulated

by statutory marketing boards (see p. 292).

London's wholesale markets play a leading part in the distribution of food-stuffs, particularly imported supplies. Every year Covent Garden (see p. 293) handles over 1 million tons of fruit and vegetables, and about 200,000 tons of carcase meat and 53,000 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 £775 million in 1973. This includes some sales by

the Scottish Co-operative Society before it merged with the CWS in June 1973. Since the early 1950s, many wholesalers have joined, either singly or in groups, with numbers of retailers to form voluntary groups to help to preserve the existence of retail outlets for the wholesaler and to give to smaller retailers the advantages of the lower costs of large-scale trading without significant loss of independence. The 1966 Census of Distribution showed that about 41 per cent of the turnover of independent grocers was attributable to wholesaler-sponsored voluntary groups and chains. About 28,000 shops, nearly a quarter of all independent grocers, are members of voluntary groups.

The number of Cash and Carry wholesale warehouses has increased in recent years. By bulk purchasing and limiting their expenditure on premises or credit and delivery facilities they can offer large price discounts to their customers. There are about 600 stores of this type with total sales of over £900 million a year. Cash and Carry wholesalers account for about half of all grocery ware-

housing by turnover.

RETAIL TRADE

Types of Retailers 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 houses (see p. 246).

Provisional results of the 1971 Census of Distribution covering retail and

certain service trades in Great Britain 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 (Table 18). Independent shops account for about half of the value of Britain's retail trade, although they make up more than four-fifths of the number of shops.

A very wide range is covered in the size of retailing establishments. Four shops had sales in 1966 exceeding £10 million (equivalent to takings of more than £4,000 an hour). At the other extreme there were more than 16,000 shops with sales of less than £1,000 a year. In addition there were market and street traders, whose volume of business may be very small.

Fixed capital expenditure by retail distributors in 1973 amounted to £408 million (at 1970 prices), an increase of 10 per cent over 1972.

Multiples and Large Establishments According to the provisional results of the 1971 Census of Distribution there were over 67,000 shops owned by multiples (including multiple department stores) in 1971 with a total turnover of over £6,000 million. In 1966 there had been nearly 74,000 shops with sales of just under £4,000 million. The fall in numbers, combined with the increase in sales, reflects the trend for individual shops to become larger and handle a greater volume of sales. In 1971 the multiples' share of total turnover was about 40 per cent, compared with 34.5 per cent in 1966.

Retail Co-operative Societies The share in total retail turnover of co-operative stores dropped from 11 to 9 per cent between 1961 and 1966 and fell again between 1966 and 1971 when it was 7 per cent. Their share of sales from food shops was 12 per cent compared with 18 per cent in 1961 and 15 per cent in 1966. Total sales of the retail co-operative societies in 1971 amounted to about £1,100 million.

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  $\mathfrak{L}_{1,000}$  (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. Recently 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.

In March 1974 there were about 239 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 with a turnover of £167 million in 1973.

Independent Shops

Independent shops have been giving ground gradually in the face of increased competition from the larger undertakings. The number of independent shops fell by about 9 per cent between 1961 and 1966, but the decline has been partly reduced by the existence of voluntary buying groups (see p. 243) and between 1966 and 1971 there was little change in numbers. Although the independent shops' share of trade continued to fall—to 53 per cent—they continue to 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 914 department stores in Britain in 1971 with a turnover of £938 million; 296 were owned by multiples; 369 by independents; and 249, with a turnover of £156 million, by co-operative societies. Between 1966 and 1971 sales by department stores rose by some 44 per cent.

### Retail Trade Organisation

Out of a total of some 485,000 establishments recorded by the 1971 Census of Distribution, and shown in Table 18, grocery and other food retailing groups numbered nearly 202,000 establishments and the clothing and footwear group over 81,000.

Though the total value of retail trade in Great Britain (inclusive of electricity and gas showrooms and mail order business) rose by nearly 37 per cent between 1966 and 1971, 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, gas and electricity showroom sales, household goods, groceries and provisions, and 'other nonfoods'. However, the actual trends are blurred by the introduction into specialised shops of other specialities, for example, clothing multiples opening food sections, and vice versa. Though gas and electricity showroom business has been buoyant in recent years, their combined turnover is relatively small, amounting in 1971 to £283 million.

The expansion in the value of all retail sales in Great Britain between 1971 and 1973, when they were valued at over £20,000 million, was about 27 per cent. Taking into account the general increase in prices over this period, the real expansion of sales by all kinds of retail businesses between 1971 and 1973 was 11 per cent.

TABLE 18: Retail Trades by Type of Business

Type of Trade	Establishments		Turnover	
	Number 1971	Percent- age change 1966–71	£ million 1971	Percent- age change 1966-71
Grocers and provision dealers Other food retailers	107,563 94,281	-12·8 -9·7	3,993 2,606	+37·3 +25·2
Confectioners, tobacconists and newsagents Clothing and footwear shops Household goods shops Other non-food retailers General stores	54,024 81,139 73,664 70,371 4,304	$ \begin{array}{r} -14.7 \\ -2.4 \\ +11.9 \\ +14.6 \\ +43.0 \end{array} $	1,297 2,248 1,939 1,573 1,562	+24·1 +30·7 +50·1 +54·3 +46·5
Total	485,346	-3.8	15,217	+36.7
Electricity and gas showrooms Mail order businesses <sup>a</sup>	2,359 676	$-21.7 \\ +36.6$	283 619	+52·5 +44·3
Automatic vending machine operators <sup>a</sup>	60	+7·1	11	

Source: Provisional Results 1971 Census of Distribution

<sup>a</sup> Number of organisations.

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

The Northern Ireland 1965 Census of Retail Distribution and Other Services shows total sales of £385 million through 22,000 establishments. The value increased by 53 per cent between 1965 and 1973 to reach an estimated figure of £589 million.

# Development in 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 less 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 not necessarily increased.

Supermarkets

Supermarkets are defined as self-service shops with a minimum selling area of 2,000 square feet. There were about 870 supermarkets in 1961, according to the Census of Distribution; by 1971 it was estimated that there were some 4,800, handling nearly one-third of all retail food.

Automatic Vending Machines

New forms of automatic vending machines have come to the fore since 1955. About 400,000 machines are in use. Organisations operating automatic vending machines (not otherwise engaged in retail trade) numbered 60 in 1971, and sales from machines totalled nearly £11 million. In 1966 the turnover consisted of £6 million on sales of cigarettes and tobacco, £2 million on confectionery, £2.5 million on hot and cold beverages and £0.5 million on prepared foodstuffs and other commodities.

Mobile Shops

Some 24,300 mobile shops and market stalls were reported in the Census of Distribution for 1971, with sales amounting to £98 million. Scotland (where the density of population is lower than in England) accounted for nearly a quarter of this turnover, compared with a tenth of all retail sales. Co-operative societies accounted for 39 per cent of sales through mobile food shops, against 16 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 non-food shops, and these specialised mainly in paraffin supplies and hardware.

Hypermarkets

The number of very large stores, generally known as 'hypermarkets' or 'superstores', is increasing. With over 50,000 square feet of selling space they operate on supermarket lines but with a much wider range of goods. They are generally associated with exclusive car-parking facilities and situated away from established central shopping areas.

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.

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.

Mail Order Sales Mail order trading which was one of the most rapidly growing forms of selling in Britain between 1961 and 1966 slowed its growth rate between 1966 and 1971, although the increase in sales over that period was still strong (44 per cent). Turnover was £619 million in 1971, when it accounted for nearly 4 per cent of total retail sales.

Direct Selling

Sales by the 25 manufacturing and importing companies which sell all their products directly to consumers amounted to about £350 million in 1973.

SERVICE TRADES

About 2·1 million people were employed in trades offering a service directly to the public in 1973.

Catering

There were over 120,000 establishments concerned with catering (defined to include public houses, canteens and fish and chip shops, as well as licensed hotels and restaurants) in 1969. There were 203 catering organisations and over 18,000 industrial and office canteens. In addition, about 100,000 offices and factories have installed coin-operated beverage and snack machines.

The value of total turnover of all caterers in 1973 was £3,750 million, an increase of 48 per cent over the 1969 figure. Turnover of hotels and holiday camps increased by 62 per cent to £660 million and that of public houses by 49 per cent to £2,010 million.

Laundries and Dry Cleaning In 1971 there were over 8,000 laundry, launderette, dry cleaning and towel, linen and overalls hiring organisations. Turnover in 1971 amounted to nearly £200 million.

**Motor Trades** 

There were nearly 43,000 businesses in the motor trades in Britain in 1967 with 51,000 establishments. Total turnover amounted to £4,234 million, of which sales of new vehicles accounted for £1,510 million and sales of used vehicles for £766 million. The value of sales of accessories, receipts from repairs and servicing and sales of petrol and oil amounted to £1,958 million. Between 1967 and 1973 the motor trades' total turnover increased rapidly by about 92 per cent and in 1973 was 11 per cent more than in 1972. Of the total turnover of about £8,100 million in 1973, sales of new vehicles accounted for some 40 per cent, sales of second-hand vehicles for 15 per cent and other sales for the remainder.

Hairdressing

The 1971 census recorded over 47,000 hairdressing establishments with a total turnover of £165 million. About two-thirds of the number are ladies' hairdressers.

Shoe Repairs

In 1971 there were some 6,300 boot and shoe repair establishments, the number having fallen by over a quarter since 1966; takings in 1971 were £25 million, slightly below the 1966 level.

Other Trades

Other establishments offering a service to the public include those of radio and television rental companies (over 3,300 specialist shops), and about 14,800 licensed betting offices.

Packaging

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 sweeping changes which have taken place in packaging methods. Packaging products of paper and board remain the most extensively used (turnover of some £769 million a year), the fastest growing sector being paper sacks (£52 million in 1973). Other important materials are timplate, plastics and glass. New uses are being found for timplate, 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 107,000 tons and 125,000 tons

respectively, while the annual sales of low-density polyethylene bottles has risen to about 671 million, providing further competition for the traditional glass bottle.

#### 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 purchase. Total new credit extended in 1973 amounted to £2,873 million, over 15 per cent more than in 1972; about half was advanced by finance companies and half by retailers.

Hire-purchase in Northern Ireland directly financed by the major finance houses operating from offices in Northern Ireland amounted in 1973 to £30·3 million.

#### Advertising

About £874 million is estimated to have been spent on all forms of advertising in 1973; as a proportion of the gross national product (1·4 per cent) and of consumer expenditure (2 per cent), it is about the same as it was ten years ago. About £572 million was spent on display advertising and £213 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. Public relations consultancy firms and the public relations departments of advertising agencies provide general services, apart from the increasing employment by industrial organisations and trade associations of staff specialists in public relations. Their professional body, founded in 1948, is The Institute of Public Relations which has members in commerce, industry, the professions, national associations, and central and local government.

# CONSUMER PROTECTION

There is in Britain a comprehensive system of legislation and machinery to protect the consumer's economic and other interests. The importance attached to this is indicated by the establishment under the Fair Trading Act 1973 of the office of Director General of Fair Trading, and in 1974 of a new Department of Prices and Consumer Protection (see p. 53). One of the main tasks of the Director General is to keep consumer affairs continuously under review so that any trading practices which adversely affect the consumer can be speedily regulated or prohibited and thus to ensure that the protection provided by the law is up to date. The Director General also has an important role in the context of competition policy (see p. 204). 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 description and are of merchantable quality and fit for their purpose. The Consumer Credit Act 1974 provides comprehensive protection for the consumer in every type of credit and hiring transaction and the Director General is responsible for enforcing the law and for advising on any steps necessary to keep it up to date. Other important legislation includes the Weights and Measures Acts 1878-1963 which establish a uniform system of weights and measures and provide protection against short weight and short measure in commodities; the Food and Drugs Acts 1955 and 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. 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.

Where necessary consumers can gain legal redress through the simplified procedure introduced in 1973 in the county courts (see p. 87). Steps are being taken to ensure that information and advice are more readily available to consumers throughout the country; this service is provided by the Citizens' Advice Bureaux (see p. 120) 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 with a membership of over 600,000. The association conducts an extensive programme of comparative testing of goods bought on the open market; its views and test reports are published in a series of bulletins issued to members, the main monthly bulletin being entitled *Which*?. The association also provides an advice service on subscription. Work of this kind is also carried out by local groups, whose representative body is the National Federation of Consumer Groups. Other private consumer organisations include the Housewife's Trust and the Research Institute for Consumer Affairs.

# 13 Energy and Natural Resources

About 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 1973 was £1,486 million, of which coal contributed 65 per cent and natural gas 8 per cent. The discovery of commercial oil fields on the British Continental Shelf is likely to increase 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 in terms of both value and quantity.

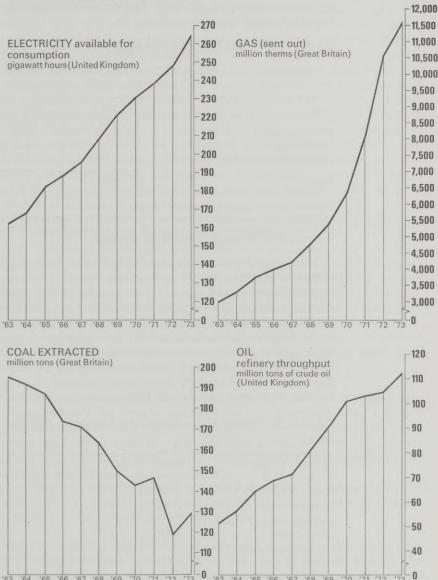
Water resources are sufficient for domestic and industrial requirements; supplies are obtained partly from surface sources such as mountain lakes and partly from underground sources by such means as wells and boreholes.

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 limited liability 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, town gas and coke. About half of all primary energy consumed comes from indigenous sources. Coal, almost all of it mined within the country, accounts for over 38 per cent of primary energy consumption, the amount of coal used and its share of the total energy market having risen in 1973 for the first time in recent years. Natural gas produced from the British sector of the Continental Shelf under the North Sea accounted for 11.5 per cent of the energy market in 1973, supplies from the North Sea discoveries having expanded rapidly since natural gas was first piped ashore in 1967. 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, although less than 3 per cent of total energy requirements. Water power resources are very small. The share of oil-almost all of it imported—in total energy consumption expanded rapidly from under 10 per cent in 1950 to over 48 per cent in 1972, but fell slightly to some 46 per cent in 1973. The first supplies of oil from the British sector of the North Sea are expected by the end of 1974 and it is expected that North Sea oil will supply

#### **ENERGY TRENDS 1963-1973**



or even exceed Britain's oil requirements by 1980, when almost all the energy consumed in Britain could be derived from indigenous sources. Trends in primary energy consumption are shown in Table 19 and in the diagram above.

'63 '64 '65 '66 '67 '68 '69

'65 '66 '67 '68 '69 '70 '71 '72

Inland consumption of energy reached a level of about 342 million tons of coal equivalent in 1973, an increase of over 4 per cent over the 1972 figure. In recent years a I per cent rise in gross domestic product has on average been associated with a rise of about 0.7 per cent in energy consumption, which illustrates the major importance of the energy sector in Britain's economy.

Energy consumption by final users in 1973 amounted to some 61,000 million therms on a 'heat supplied' basis. Industrial users consumed about 40 per cent of the total, domestic users 25 per cent, transport—including road, rail, water and air transport—over 20 per cent, public services about 6 per cent and agriculture nearly 1.5 per cent. Energy consumption figures for the main industrial groups are given in Table 20.

TABLE 19: Inland Energy Consumption (in terms of primary sources)

Million tons coal equivalent

	1950	1960	1973
Coal	202.6	196.7	131·3a
Oil	22.2	65.5	159·4a
Nuclear energy	_	0.9	9.9
Natural gas	_	0.1	43.5
Hydro-electric power	0.9	1.7	2.0
Total	225.7	264.9	346.1

Source: United Kingdom Energy Statistics

The fuel and power industries, with the exception of petroleum and the extraction of natural gas, are under public ownership. In 1974 the Department of Energy (see p. 48) was set up to assume general responsibility for the effective and co-ordinated development of fuel and power resources in Great Britain; in Scotland the Secretary of State for Scotland is responsible for electricity. The Government's energy policy has been to ensure the best use of indigenous resources and so reduce the dependence on imported oil. The importance of this approach was illustrated by the shortfall in oil supplies in late 1973 and reinforced by the effect of increased oil prices in 1973–74 on the balance of trade and the cost of living (see pp. 385 and 193).

TABLE 20: Energy Consumption by Industrial Groups<sup>a</sup> (Heat Supplied Basis)

million therms

Industry Group	1960	1970	1971	1972	1973
Food, drink and tobacco	1,580	1,948	1,965	2,028	2,105
Iron and steel	7,092	7,198	6,570	6,312	6,524
Engineering and other metal trades	2,983	3,857	3,640	3,703	4,224
Chemicals and allied trades	2,642	3,017	3,463	3,671	4,281
Textiles, leather and clothing	1,647	1,536	1,358	1,357	1,419
Paper, printing and stationery	1,205	1,520	1,460	1,464	1,465
Bricks and other building materials	1,006	797	744	743	675
China, earthenware and glass	668	695	716	692	701
Cement	890	1,124	1,077	1,073	1,274
Other trades	1,638	2,989	3,071	3,227	3,114
	21,351	24,681	24,064	24,270	25,782

Source: United Kingdom Energy Statistics

a Excluding the fuel industries.

<sup>&</sup>lt;sup>a</sup> Consumption was depressed somewhat in the last quarter of 1973 by the reduction in coal and oil supplies due respectively to the industrial dispute in the coal industry and the cutback in oil supplies by producer countries.

The nationalised fuel and power industries in Britain employ in total some 650,000 people, or 2.5 per cent of the working population; their capital investment in 1973 was over £,700 million; their annual turnover is about £,4,000 million; and the value of their net output is about 4 per cent of the national product. The nationalised industry boards' investment is financed through internal resources and borrowing from the Government (long term), the clearing banks (short term), and from overseas sources (long term). Research is undertaken by the fuel and fuel-using industries. The Secretary of State for Energy also has an Advisory Council on Research and Development. An Energy Technology Support Unit was set up in 1974 to help the Secretary of State to assess the need for further research into non-nuclear forms of energy. A Nuclear Safety Advisory Committee advises on nuclear safety issues and a Nuclear Power Advisory Board advises on other nuclear power matters. In each of the nationalised fuel industries there are statutory bodies set up to protect the interests of consumers.

Following Britain's entry into the European Community in January 1973 its fuel industries are co-operating to an increasing extent with those of the other member countries. The coal industry now conforms to the rules of the European Coal and Steel Community (ECSC, see p. 77); under the arrangements for British accession to the ECSC tariff barriers between the coal markets of Britain and the other members were removed on 1st January 1973. Britain's entry meant a doubling of the Community's coal industry to a

combined annual production of some 266 million tons in 1973.

A Community energy policy is in the early stages of development with the basic aim of guaranteeing certain and lasting energy supplies under satis-

factory economic conditions.

Coal has been worked in Britain for over 700 years and an organised coalmining 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

COAL

The National Coal Board (NCB) consists of a chairman and between eight and fourteen members appointed by the Secretary of State for Energy. 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 pits and open-cast 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, came into operation in April 1973, taking over the NCB's non-mining activities. NCB (Ancillaries) Limited took over responsibility for certain retail fuel distribution operations, computer services, non-operational land and brickworks (the brickmaking interests were disposed of in the course of 1973-74). NCB (Coal Products) Limited took over responsibility for solid smokeless fuel manufacture, chemical and by-products plants and North Sea exploration.

The NCB is responsible for the day-to-day running and the commercial management of the industry, but is answerable to the Secretary of State (and



through him, to Parliament) for its efficiency. The Secretary of State has power to issue general directives on matters affecting the national interest, and to authorise borrowings to finance capital investment.

At the end of March 1974 there were 259 NCB collieries in operation, each on average producing some 375,000<sup>1</sup> tons of coal, compared with 192,000 in 1947. Of these, 256 were grouped into 15 areas (reduced to 12 at the beginning of 1974–75) each controlled by a director responsible to the NCB. The remaining three collieries (in Kent) are controlled by a general manager who is also responsible to the NCB.

#### Consumption

Total consumption of coal was over 121 million tons in the year ended March 1974, a decrease of 5.5 per cent over the previous year. This reduction stemmed from fuel conservation measures introduced during a labour dispute in the industry. Consumption in the previous year had been 131 million tons, an increase of 8.5 per cent over 1971–72. This increase came after a period of about 15 years during which coal consumption declined steadily. Between 1947 and 1956 coal consumption in Britain increased by an average annual rate of nearly 4 million tons; sales fell sharply, however, between 1956 and 1959 and the decline in demand continued throughout the 1960s and early 1970s. Growing competition from oil, increasing efficiency in the use of coal and reduced requirements of the gas, steel, railway transport and other industries contributed to the fall in demand. The competitiveness of coal in the domestic energy market has been improved by the greatly increased price of oil at the end of 1973 (see p. 193).

Consumption by the electricity industry has increased by about 35 per cent since 1960 to 70·3 million tons in 1973-74 when the industry accounted for about 57 per cent of total coal consumption. The requirements of most other classes of consumer have declined. Coke ovens consume over 15 per cent but only a further 19·9 per cent is consumed by industrial and domestic users combined. Consumption by the gas industry has fallen rapidly to less than 0·3 per cent of the total. The fall in consumption of coal by domestic users has been slightly offset by increased purchases of solid smokeless fuels.

Coal exports in 1973-74 were 2·1 million tons, the largest customer being the Federal Republic of Germany; almost all of the exports go to Western European countries. In 1973 imports amounted to 1·6 million tons.

# Production and Productivity

Total output in 1973-74 was 107.2 million tons, a decrease of over 22 per cent compared with 1972-73. 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 from some 700,000 to about 242,500 at the end of 1973-74, about 21,100 fewer workers than at the end of 1972-73. Productivity as a whole has risen by over a half since 1961 to 2.1 tons per manshift in 1973-74; at the coal face it has more than doubled over the last 20 years to 7.2 tons per manshift in 1973-74. The increases have been obtained largely by concentration on the more productive mines and faces, by increasing mechanisation at the face, and by the use of multi-shift working. Mechanised faces account for more than 90 per cent of output. About 90 per cent of all faces are equipped with powered supports.

Other important measures which have contributed to increased productivity include new techniques for obtaining information about the reserves before they are worked, intensive training of management and men to obtain

<sup>&</sup>lt;sup>1</sup> Output was affected by an industrial dispute. In 1972–73, collieries produced on average about 462,000 tons.

the maximum utilisation of equipment on highly mechanised faces, the increasing use of underground communications systems, the use of higher horse-power machines and improvements in the mechanised handling of coal below ground and on the surface.

Table 21 shows the main trends in the industry since 1960.

TABLE 21: Coal Statistics 1960-73

	Unit	1960-64 (average)	1965-69 (average)	1972–73 (53 weeks)	1973–74¢
Total output of which, open-cast	million tons	194·2 7·4	176·0 7·0	140·5 10·7	107·2 8·9
Total consumption of which, export	"	198·1 5·9	177·1 3·3	133·1 2·3	123·2 2·1
Total labour forcea	'000	549.0	418.9	263.6	242.5
All underground workersa	,,,	437-2	331.8	207.7	
Output per manshift <sup>a</sup> : at coal face overall	tons	4·5 1·5	5·7 1·9	7·4 2·3	7·2 2·1
Output mechanically loaded <sup>a</sup>	per cent	56 <sup>b</sup>	84·1	93.0	n.a.

Source: National Coal Board

a NCB mines only. b Estimate. c Affected by industrial dispute.

n.a. = not available.

Although many good seams of coal have now been worked out due to the early development of the industry, there are still abundant reserves estimated at 160,000 million tons of which about 4,000 million tons were estimated to be economically viable at the last assessment in 1973 and there is considerable scope for opening up new collieries. A new mine is planned to exploit the Selby coalfield in North Yorkshire where total reserves are estimated at 1,000 million tons. Exploration in the Selby area is part of a national programme to prove new reserves either for the establishment of new mines or to extend existing collieries as part of the NCB's plan to maintain total output. There are also development plans to exploit north-east England's offshore coalfields. The main coal-bearing areas are shown in the map on p. 254.

Capital Investment and Financial Structure The NCB raises capital, including working capital, by borrowing from the Secretary of State for Energy or with his consent and the approval of the Treasury from overseas sources. Within certain limits the board may also, with the permission of the Secretary of State for Energy, borrow temporarily (by way of overdraft or otherwise). The greater proportion of investment is financed from internal resources.

Under the Coal Industry Act 1973 some £450 million, being the NCB's accumulated deficit at the end of March 1973 together with the amount by which the board's capital assets were overvalued, was written off; the statutory limit on the NCB's borrowing was set at £550 million in the first instance, with provision for extension to £700 million if necessary and a limit of £50 million was imposed on the NCB's accumulated deficit to be increased to £100 million if necessary. The Act also provided for government assistance to the industry in the form of improved redundancy terms, contribution to better pensions and various operational grants. In 1973–74 these grants were: social

costs £12.7 million, contribution to increased pensions £8.3 million, promotion of coal sales to generating boards £15.4 million, coking coal subsidies £15 million, regional grants £75 million. However, in the year ending March 1974 the NCB made an operating loss of about £112 million following the labour dispute in 1973–74. This deficit has been met by additional government and the same transfer.

ment grants.

A major investment programme is planned by the NCB, with government support, to end the contraction of the coal industry. The programme, called Plan for Coal, involves new capital investment of some £600 million over the period to 1985 in order to provide 42 million tons of new capacity to replace that lost by depletion. This investment is over and above the requirements of some £70 million to £80 million a year for ordinary continuing capital expenditure. The Government has given an assurance that short-term fluctuations in the price and availability of competing fuels should not be allowed to interfere with the implementation of the programme. The Government accepted the NCB's plan after its adoption had been recommended in the interim report of the tripartite examination (by the Government, NCB and trade unions) of the future of the coal industry.

Research

The NCB has two research organisations: a Coal Research Establishment, at Stoke Orchard, near Cheltenham, Gloucestershire, concerned with the processing and utilisation of coal; and a Mining Research and Development Establishment, near Bretby, Derbyshire, for research on mining methods and equipment, the underground environment and coal preparation. There are also scientific control staff throughout the coalfields and a large operational research organisation.

The NCB, with the British Steel Corporation and others, supports research on carbonisation at the British Carbonisation Research Association. Much of the work of other bodies, such as the Safety in Mines Research Establishment (SMRE), is closely related to the board's problems; the SMRE carries out research on explosions and fires, pneumoconiosis, engineering and metallurgy.

In 1973-74 the NCB spent £5.2 million on research.

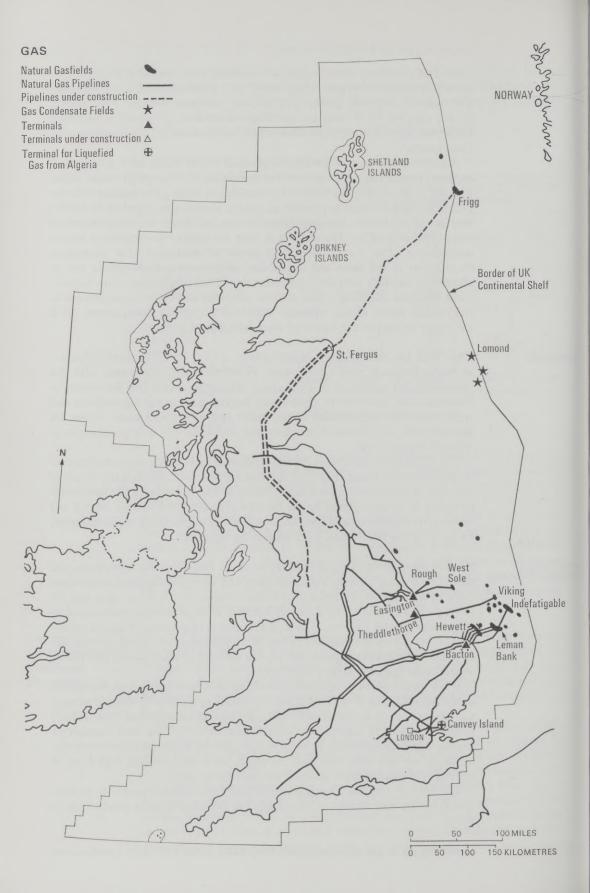
NORTH SEA HYDROCARBONS Seismic prospecting in the British sector of the North Sea for natural gas and oil has been going on since the early 1960s and full-scale exploration activities since 1964, following the enactment of the Continental Shelf Act 1964, and the subsequent award of a first round of licences. Further licences were issued in 1965, 1970–71 and 1971–72. The total area now under licence is 42,234 square miles (109,413 square kilometres) out of a total area, over which Britain has exercised its rights to explore and exploit the seabed and subsoil, of 171,000 square miles (443,000 square kilometres).

Work on the development and production of natural gas and oil discovered in the British sector of the North Sea is proceeding rapidly. By the end of 1973 342 exploration or appraisal wells and 198 production wells had been drilled; of these 61 and 21 respectively were drilled in 1973. The total number of drilling rigs used rose from 19 to 25 in 1973 and the maximum number of rigs in use at any one time rose from 14 to 18. As a result of this high level of

activity five oilfields were declared commercial in 1973.

The first oil from the British sector of the North Sea is expected to be produced by the end of 1974. Other fields are expected to start production in

1975.



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, provided by a growing number of company and municipal undertakings. However, between the two world wars it was displaced from this function by electricity and it is now mainly used for heating purposes, supplying over 13.5 million customers. The discovery and subsequent use of natural gas was preceded by a switch from coal-based to cheaper oil-based town gas.

Structure

The Gas Act of 1948 brought the industry in Great Britain, in which about 100,000 people are at present 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. Members of the corporation are appointed by the Secretary of State for Energy. 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 to extract any petroleum discovered in the course of searching for gas; to manufacture or acquire, transmit and distribute gas; to manufacture, supply, or sell byproducts; and to manufacture, install, maintain or remove gas plant and fittings.

A National Gas Consumers' Council, and 12 Regional Gas Consumers' Councils, are appointed by the Secretary of State for Energy to protect consumer interests.

In Northern Ireland the gas supply industry remains in the hands of a number of municipal undertakings and statutory and non-statutory companies.

Production

The main single source of gas in Britain is now natural gas, supplied either directly (over 80 per cent) or as feedstock for town gas manufacture, and accounting for about 90 per cent of total consumption. Between 1960 and 1973 the quantity of gas available increased by about 450 per cent to reach a figure of 11,600 million therms.<sup>1</sup>

The first commercial gas discovery in the British sector of the North Sea was made in 1965. Five major gasfields are now in production: Leman Bank, West Sole, Hewett, Indefatigable and Viking. Two other fields, Rough and Frigg, the large field which straddles the boundary between the British and Norwegian sectors, are expected to come into production in 1975 and 1976 respectively. A number of smaller structures have also been found and exploration continues. Total proven gas reserves from British discoveries already made amount to 27.8 million million cubic feet and total possible reserves amount to 41.5 million million cubic feet.

The first pipeline to pump natural gas to the shore, at Easington in Yorkshire, was put on flow early in 1967. Since then further pipelines have been laid to bring natural gas to the terminals at Bacton, Norfolk, and Theddlethorpe, Lincolnshire.

During 1973-74 the aggregate quantity of gas available in Great Britain

<sup>&</sup>lt;sup>1</sup> I therm = 100,000 British thermal units = 25,200 kilocalories.

amounted to 12,282 million therms, an increase of 1,284 million therms (12 per cent) over the previous year.

In 1973-74 the quantity of gas produced in Northern Ireland was about 34 million therms, most of it for household use.

#### Transmission

The pipeline system commissioned in 1964 for the delivery of liquefied natural gas from Algeria has been expanded to form a national high-pressure pipeline system for distribution of natural gas derived mainly from British fields in the North Sea. By March 1974 some 2,239 miles (3,603 kilometres) of pipeline were in operation. This virtually completed the system required for handling natural gas from fields off the eastern coast of England. The central distribution system is supplied by eight feeder mains from the three North Sea shore terminals, and from the Canvey Island terminal for liquefied Algerian gas.

#### 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 then rapidly rose by over 84 per cent between 1970 and 1973. Sales reached a level of 10,770 million therms in 1973.

#### 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 as a chemical feedstock and in bulk fuel markets. In 1973 sales of gas to industry totalled 4,832 million therms, 13 per cent more than in 1972; sales to commercial users increased by nearly 9 per cent to reach nearly 1,100 million therms.

#### Domestic Use

About 45 per cent of the domestic load is used for central heating, with gas fires and cookers accounting for a further 45 per cent. There are some 11 million gas cookers, 10 million space heaters, 3 million central heating installations, over 3½ million water heaters, and over 1 million refrigerators. In 1973, 4,815 million therms were sold to domestic users.

#### Capital Investment

The borrowing limit for the British Gas 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. Within this limit the corporation may borrow (long term) from overseas sources.

The industry had been spending about £50 million a year on capital investment in the period 1955 to 1961 but since 1961-62 expenditure has increased sharply. Capital needs over the four years to March 1975 are estimated at over £1,200 million, of which the largest items are £531 million on bulk transmission and distribution and £371 million on conversion to natural gas. About half of the total is being met from internal resources.

# Lines of Development

The British Gas Corporation is constructing a terminal at St Fergus near Peterhead in Scotland for the reception of gas from the Frigg field and a new transmission pipeline will be laid to bring the gas into the national network. First supplies are expected in 1976.

A phased programme of converting the 40 million gas appliances is in progress. Some 75 per cent of consumers had had their appliances converted at the end of March 1974. It is expected that the switch over to natural gas will

be completed by 1978. 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, Scotland, and other facilities are under construction or planned.

### Research

The British Gas Corporation has a research committee which advises on research policy at four research centres. The engineering research station at Killingworth, Northumberland, has concentrated on large-scale distribution problems. Research is also done on behalf of the corporation at a number of universities and colleges. Work is being carried out on processes for manufacture of substitute natural gas, in which there is wide interest overseas, especially in areas where natural gas is running short. The corporation's total expenditure on research, development and testing amounts to over £8 million a year.

#### 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 first worked in 1858 and ceased production in 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 has the opportunity to reduce or even eliminate this dependence.

### North Sea Fields

The first important find of oil in the British sector, the Forties field, was made in 1970. Oil from the field, believed to be one of the largest in the world, is to be brought ashore by a 111-mile (177-kilometre) submarine pipeline. A further nine commercial fields have been discovered and several other significant finds may prove to be commercial after further appraisal. First oil from the British sector is expected to be brought ashore by tanker from the Argyll field before the end of 1974. The Forties, Piper, Beryl and Auk fields are expected to start production in 1975.

Latest government estimates indicate a production rate in 1980 of between 100 million and 140 million tons a year from existing fields and allowing for further discoveries. Proven reserves of the commercial fields amount to 895 million tons but possible reserves from present and future finds under existing licentees total a 250 million tons.

licences total 2,950 million tons.

# Land-based Fields

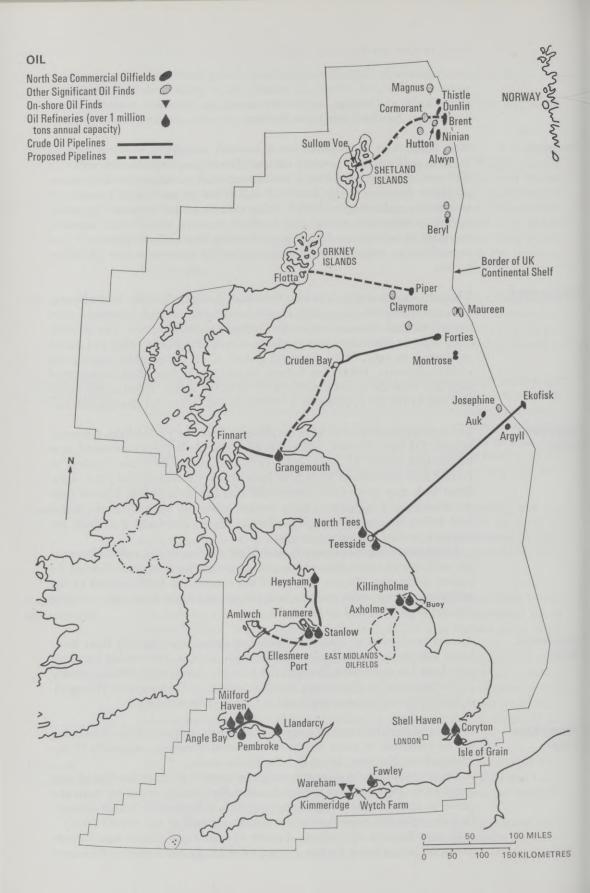
Annual production of crude oil (including natural gas liquids) from land-based oilfields in Britain now totals about 87,000 tons. Prospecting for crude petroleum has so far led to the establishment of several small oilfields, notably in Nottinghamshire (Egmanton and Bothamsell), in Leicestershire (Plungar), in Lincolnshire (Gainsborough) and in Dorset (Kimmeridge).

# 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.

Today production by these companies amounts to about 17 per cent of total world production and they operate a tanker fleet (partly owned by them and partly on charter) amounting to over one-fifth of the world's tanker tonnage. (British registered tanker tonnage is over 12 per cent of the world's total.)

In 1973 Britain's net imports of crude oil were 112.6 million tons (despite a shortfall in supplies in the last quarter) valued at £1,297.6 million, the largest



single item among imported products. Saudi Arabia supplied approximately 23 per cent, Iran 19 per cent, Kuwait 18 per cent and Libya 11 per cent. Other major suppliers were Nigeria, Qatar and Venezuela.

### Consumption

Deliveries of petroleum products for inland consumption (excluding refinery consumption) in 1973 totalled about 97.8 million tons, having more than doubled since 1960. Fuel oil consumption in 1973 constituted about 40 per cent of the total. Demand for gas and diesel oils (including derv fuel used in road vehicles) remained fairly constant at over 20 million tons between 1972-73. Sales of motor spirit expanded by nearly one million tons to 16.6 million tons in 1973.

The most important uses of gas and diesel oils in 1972 were for nonindustrial central heating, electricity generation, building and the railways. Electricity generation accounted for 41 per cent of fuel oil consumption, followed by the iron and steel industry with 11 per cent, and non-industrial central heating with a further 7 per cent. Of the remainder, the largest users were the

chemical, paper-making, glass, engineering and textile industries.

### Refineries

Before 1939 three-quarters of Britain's supply of petroleum products was refined overseas, as it was considered more economic to refine at the source of production. Following the second world war refineries were mostly sited in the consuming areas, but there have recently been proposals for the construction of large refineries in some producer countries.

In 1974, refinery capacity in Britain amounted to 146 million tons a year. Of the 21 refineries in operation, four have a capacity of under 0.6 million tons. The 15 largest are situated at Fawley, near Southampton (19.5 million tons); Stanlow, in Cheshire (18 million tons); Isle of Grain (10.4 million tons), Shell Haven (10 million tons), and Coryton (8.3 million tons), all three on the Thames Estuary; Teesport, North Yorkshire (6 million tons), North Tees, Cleveland (5 million tons); Grangemouth, east Scotland (8.7 million tons); three at Milford Haven (15.2 million tons, 5.1 million tons and 3.9 million tons) and one at Pembroke (9.3 million tons) in Dyfed; Llandarcy near Swansea (8.2 million tons); and two at Killingholme near Grimsby (8.6 million tons and 4.2 million tons). The other two refineries are at Ellesmere, Merseyside (1.6 million tons) and Heysham in Lancashire (2 million tons). Further refineries are planned in Scotland, Kent and on Canvey Island, Essex.

Output of refined products (excluding refineries' own consumption) has risen steadily to over 104 million tons in 1973. 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 European countries, were valued at £316 million (f.o.b.) in 1973. Imports of refined products

amounted to £344 million (c.i.f.).

# Oil Pipelines

Four main crude oil pipelines are in operation in Britain between harbours capable of berthing very large tankers and refineries: in west 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 fifth, from an off-shore mooring, off Amlwch, Gwynedd, to Stanlow is under construction (see p. 310). A 131-mile (211-kilometre) pipeline is to be built from Cruden Bay, Scotland, to Grangemouth, for oil from the Forties oilfield in the North Sea (see p. 261). 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, 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. The pipeline from Fawley to Severnmouth originally used for ethylene has been extended to Avonmouth and is now used for refined products. 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 (the British Petroleum Company), Thornton, in Cheshire, and Woodstock, in Kent (Shell), and Abingdon, in Oxfordshire (Esso). The first of these covers the full range of petroleum research and development, from geology and production to product utilisation and petroleum chemicals. In general, the remainder are concerned with 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**

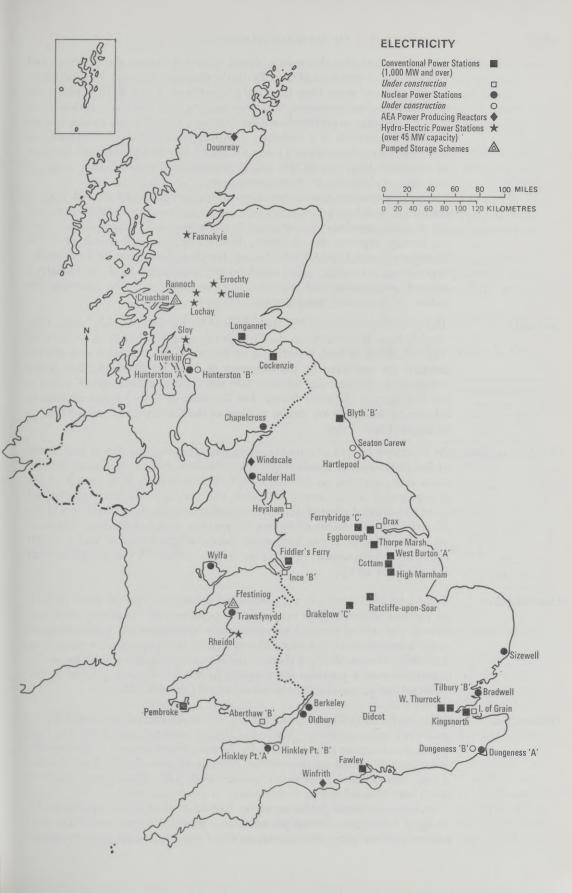
A public supply of electricity was first provided in Britain in 1881, at Godalming, Surrey. From its earliest days a measure of public control has been a feature of the industry. In 1919 the Electricity Commissioners were created as a supervisory body and to promote reorganisation on a national scale 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 195,000 people, including 6,000 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. In Scotland, two boards—the NSHEB and the South of Scotland Electricity Board (SSEB)—both generate and distribute electricity. In Northern Ireland these functions are carried out by the Northern Ireland Electricity Service.

# England and Wales

The Electricity Council is 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.

Area consultative councils were set up under the Electricity Act 1947 in the area of each board to represent the interests of consumers; their chairmen are ex officio members of their respective area boards. The Secretary of State for Energy appoints the chairmen, deputy chairmen and members of the Electricity Council, the CEGB, the area boards and the consultative councils; approves each board's capital development programmes and the industry's research programme; and approves, in consultation with the Treasury, the industry's borrowing requirements.

Scotland

The boundary separating the areas covered by the two Scottish boards runs roughly from Dumbarton on the Firth of Clyde to Newburgh on the Firth of Tay. Members of both boards and of the respective consumer consultative councils are appointed by the Secretary of State for Scotland; each board comprises a chairman and between four and eight members, one of whom is the chairman of the other board. The Secretary of State's responsibilities in relation to the boards are similar to those of the Secretary of State for Energy in England and Wales.

Northern Ireland

In Northern Ireland electricity is generated at power stations in Belfast and at Ballylumford and Coolkeeragh. The Northern Ireland Electricity Service came into operation on 1st April 1973. The new body is the result of the amalgamation of four former electricity undertakings—the Northern Ireland Joint Electricity Authority, the Electricity Board for Northern Ireland, and the Electricity Departments of Belfast Corporation and Londonderry Development Commission. It has fixed assets valued at £211 million and a capital expenditure programme for 1974–75 of £40 million. A consumers' council has also been set up.

Consumption

Total sales of electricity in 1973 amounted to 225,057 gigawatt hours (GWh), an increase of nearly 7 per cent over the previous year. Domestic users took over 40 per cent of the total, industry nearly 39 per cent and commercial and other users about 21 per cent. The electricity industry supplies about 21.5 million consumers of whom about 19 million are in England and Wales; of the remainder over 1.5 million are supplied by the SSEB, over 490,000 by the NSHEB and 500,000 by the Northern Ireland Electricity Service.

Generation

Most of the CEGB's output capacity (over 60 per cent) is accounted for by coal-fired steam generating stations. Oil-fired stations account for about 20 per cent and nuclear power stations for about another 6 per cent. The remainder is made up of natural gas, gas turbine, diesel and hydro-electric plant. Nuclear energy has become increasingly important since 1965. Water power resources are relatively small and in remote areas.

Generation for the public supply in Britain reached nearly 259,000 GWh in 1973; conventional steam power stations provided 89 per cent of the total and nuclear and hydro-electric stations about 9 per cent and 2 per cent respec-

tively. A high rate of expansion of output has been a feature of the industry since its earliest years; though the rate has slackened recently the total of electricity generated in 1973 was still over 13 per cent higher than in 1970.

The output capacity of the generating stations of the electricity boards in Britain at the end of 1973 totalled 67,719 megawatts (MW), an increase of

4 per cent on the previous year.

Between 1965–73 nearly 30,000 MW of generating capacity was commissioned in England and Wales, including 2,882 MW in 1973, bringing total generating capacity to 58,369 MW. The SSEB's total installed capacity in 1973 was 6,260 MW and the NSHEB's total installed capacity is 1,832 MW. In Northern Ireland total generating capacity was 1,509 MW in 1973, of which some 1,025 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 —23,221 GWh in 1973. The major sources outside the fuel industries themselves are the chemical, iron and steel and paper industries and the nuclear power plants of the Atomic Energy Authority.

An analysis of electricity generation in Great Britain is given in Table 22.

TABLE 22: Electricity Generation by the Public Supply System in Great Britain 1973

	Output capacity (end year)		Electricity sent out	
	M	W	G'	Wh
Central Electricity Generating Board South of Scotland Electricity Board North of Scotland Hydro-Electric	58,393 5,785		208,999 21,478	
Board	1,821		4,724	
Steam and oil engines Hydro plant Pumped storage Nuclear plant	60,207 1,286 760 3,746		211,608 2,343 668 20,582	
Total		65,999		235,201

Source: Department of Energy

Conventional Thermal Stations The electricity authorities account for 57 per cent of the British consumption of coal and about 18 per cent of the consumption of oil.

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, South Wales, and others are under construction at Inverkip, Renfrewshire (1,980 MW), Isle of Grain, Kent (3,300 MW) and Ince, Cheshire (1,000 MW). Preparatory work on the sites of two other oil-fired stations started at Peterhead, Aberdeenshire (1,320 MW) in 1973 and Littlebrook, Kent (1,980 MW) in 1974.

A dual-fired station to burn either coal or oil has been commissioned at Kingsnorth, Kent, and two stations involving some 1,500 MW of plant have been converted to dual natural gas/coal-firing. 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 29.84 per cent in 1973-74 as new plant was

brought into use. The 20 most efficient stations, containing much of the newest plant, had an average thermal efficiency of 33.68 per cent in 1973-74.

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. Ten stations, each with capacities of 2,000 MW, with four 500 MW single-shaft generating units, are now in service. Twenty-three 660 MW single-shaft generating units are on order for installation; three for Drax I, North Yorkshire, where two have already been synchronised; five for Isle of Grain, Kent; three for Inverkip, Renfrew; two for Peterhead, Aberdeenshire; and two each for five nuclear power stations under construction (for locations see map, p. 265). Units of 1,300 MW are under consideration. A 2,400 MW station at Longannet, Fife, with four 600 MW cross-compound units, was commissioned in 1970.

Large gas turbine units of 55 MW and 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 and a further 3,400 MW are planned. Many others of 17 to 35 MW capacity are being used in new stations to safeguard the auxiliary supplies to the large new steam units, and also to provide capacity for peak operation. Auxiliary units of this kind in service at the end of 1973 totalled 1,174 MW.

Nuclear Power Stations In 1973 nuclear power stations provided some 23,657 GWh of electricity or 9 per cent of Britain's electricity generation by the public supply system. Britain accounts for about 17 per cent of world nuclear generation (excluding the Soviet Union). Since 1962 Britain has produced over 260,000 gigawatthours of nuclear-generated electricity, as much as the United States and much more than any other country, and about 34 per cent of total world generation from nuclear sources. Nuclear capacity forms about 6 per cent of total output capacity of the public supply system.

The stations that generate nuclear electricity are owned by various authorities. The original prototypes built by the Atomic Energy Authority (AEA) at Calder Hall, Cumbria (198 MW)—the first in the world to operate on a commercial scale—and at Chapelcross, Dumfriesshire (198 MW), are owned and operated by British Nuclear Fuels Ltd. (see p. 406). This company, which along with the Radiochemical Centre Ltd. was set up in 1971 and took over from the AEA the manufacture and reprocessing of nuclear fuels for Britain and other countries, is closely associated with the new single company set up by the Government to design and construct steam supply systems for nuclear power stations (see p. 406).

The AEA has four experimental or prototype stations which also produce electricity for the national grid: the Advanced Gas-Cooled Reactor (AGR) at Windscale, Cumbria (14 MW electrical output); the experimental fast breeder station (14 MW) and the prototype fast breeder station (250 MW) at Dounreay, Caithness; and the Steam Generating Heavy Water Moderated Reactor (SGHWR) at Winfrith, Dorset (100 MW).

Most of Britain's nuclear-generated electricity is, however, supplied by stations owned and operated by the electricity authorities. These, like Calder Hall and Chapelcross, are all magnox stations—graphite-moderated, carbon-dioxide cooled, using natural uranium metal fuel elements canned in magnesium alloy. Under the first commercial programme, originally announced in 1955 but since twice modified, nine magnox stations with a total design capacity of 4,500 MW were in operation by 1972: Berkeley, in Gloucestershire (276 MW design capacity), and Bradwell, in Essex (300 MW), were both com-

missioned in 1962; Hunterston 'A', in Scotland (300 MW), in 1964; and in the following year Hinkley Point 'A', in Somerset, Trawsfynydd, in Wales (both 500 MW), and Dungeness 'A', in Kent (550 MW); Sizewell, in Suffolk (580 MW), was commissioned in 1966; and Oldbury, in Gloucestershire (600 MW), in 1968. A ninth station, Wylfa, in Anglesey (1,180 MW), was commissioned in 1971.

Under a second programme announced in 1964 and extended in 1965, a further 8,000 MW of nuclear capacity was planned, of which about 6,500 MW will be commissioned by 1978. 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 five AGR stations under construction are Dungeness 'B' (1,200 MW); and Hinkley Point 'B', Hunterston 'B', Hartlepool, County Durham, and Heysham, Lancashire (each of 1,320 MW capacity).

A third programme using the SGHWR was announced in July 1974. In the initial four-year phase a further 4,000 MW of nuclear capacity, based on reactor units of 600–660 MW to reduce the problems of scaling-up from the prototype at Winfrith, is planned. Thereafter it is intended to build up orders for further nuclear plant as rapidly as progress with the initial stations allows.

A large prototype fast reactor (PFR) of 250 MW capacity was commissioned by the AEA in 1974 at Dounreay (where in 1962 the experimental fast reactor became the first of such type to produce electricity for public use and to operate at a high power level). It is expected that the first full-scale order for a Sodium Cooled Fast Reactor will be placed in the late 1970s, and that from the mid-1980s a major part of nuclear orders will be for this type of station.

In 1973 a new single nuclear design and construction company, the National Nuclear Corporation, was set up to replace the two construction consortia set up in 1968.

Hydro-electric generation is at present confined 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 1973-74, 3,197 GWh were sent out by the NSHEB from water-power, compared with 322 GWh in 1949. At the end of March 1974 there were 53 main hydro-electric conventional stations in operation in the north of Scotland with a total installed capacity of 1,053 MW and the largest—the Loch Sloy station—has a capacity of 130 MW. The Cruachan pumped storage section of the Awe scheme, with an installed capacity of 400 MW from four reversible-pump-turbines, came into full operation at the end of 1967. (In pumped-storage schemes electricity generated in off-peak periods is used to pump water to higher levels from which it descends at peak periods to operate turbogenerators.)

Construction of a 300 MW pumped-storage project, with two 150 MW reversible-pump-turbines, at Foyers, Loch Ness, began in 1969. In addition, there are stations generating electricity by water power in the south of Scotland (123 MW) and in Wales (470 MW). The latter includes the 360 MW pumped-storage station at Ffestiniog. Work has started on a 1,500 MW pumped-storage station at Dinorwic, North Wales.

Transmission and Distribution

Main electricity transmission lines—the national grid—supply most of the country. By 31st March 1973 those of the CEGB totalled over 9,000 circuit

Hydro-electric Generation miles (14,500 kilometres), of which 6,600 miles (10,600 kilometres) were at 400,000 volts, and 2,400 miles (3,900 kilometres) at 275,000 volts. Primary distribution in England and Wales is at 132,000 volts, comprising 11,000 circuit miles (18,000 kilometres) of lines, with secondary distribution at 33,000 volts, tertiary at 11,000 volts and general low voltage distribution at 415/240 volts (standardisation of supply to consumers at 240 volts is almost completed). In Scotland there were some 5,000 circuit miles (8,000 kilometres) of main transmission lines at the end of March 1973, of which 1,700 circuit miles (2,800 kilometres) operated 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 operational 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.

In England and Wales the area electricity boards distribute to consumers electricity acquired mainly from the CEGB, supplemented from other sources, such as industrial plants, and the nuclear power stations of the AEA. There are 19 million consumers. The NSHEB has about 488,000 consumers, many in remote areas. The SSEB supplies more than 1.5 million consumers. Industrial concerns are the biggest users of electricity. The principal domestic uses of electricity are for lighting, cooking and for space and water heating, but the demand for numerous other domestic purposes is rising steadily.

# Capital Investment

Some 4 per cent of Britain's annual gross fixed capital formation in 1973 was attributable to the electricity supply industry. The industry's plans for new capital investment are based on a growth in demand estimated at an annual

average rate of about 4.5 per cent up to 1979-80.

Capital expenditure of the electricity supply industry expanded rapidly from £249 million in 1956 to £720 million in 1966 but has since fallen to £500 million in 1973–74. About one-half of the industry's capital requirements has been financed from internal resources. The statutory limit to borrowings by the industry in Great Britain is £6,150 million, with provision for extension to £7,700 million. The Gas and Electricity Act 1968 empowered the industry to borrow (long term) from overseas sources.

### 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 themselves, supported by co-operative research with selected industrial research associations and by research contracts placed with universities and other organisations. The council itself is empowered to conduct research. It 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 set up in 1966.

The main research establishments of the industry are run by the CEGB 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 either on their own or in co-operation with other electricity authorities. The SSEB undertakes a wide range of research and development work, both independently and in conjunction with the universities and manufacturers and, with the NSHEB, is associated with the activities of the Electricity Council and CEGB.

#### ENERGY CONSERVATION

An energy conservation programme was announced by the Government in June 1974. The programme includes the following measures: the establishment of an Advisory Council on Energy Conservation to advise the Secretary of State for Energy on the promotion of energy efficiency; the commissioning of a feasibility study of the use of sea-wave power to generate electricity; an examination of the economies of combined generation of heat and electricity; the monitoring of overseas work on new and alternative sources of energy by the Energy Technology Support Unit (see p. 253); amendments to building regulations to double the thermal insulation requirements of new buildings; consideration of the use of house improvement grants (see p. 182) to encourage high standards of insulation in existing buildings; extension of the use of more efficient heating systems in government buildings; exploration of prospects for more efficient vehicles to give lower fuel consumption; promotion of informed public debate with special encouragement to universities and professional institutions to include fuel efficiency more prominently in their syllabuses; a programme of consultation with major engineering and trade institutions, the fuel industries and other interested bodies to stimulate greater action on energy economy; the establishment of an 'energy thrift' committee by the Department of Industry to co-ordinate research and development work aimed at a more efficient use of energy in manufacturing industry; and the pursuit of an active policy of international co-operation on major issues of energy policy.

Efficiency in the use of fuel, among both industrial and domestic users, has been assisted by various bodies representing producers and consumers and

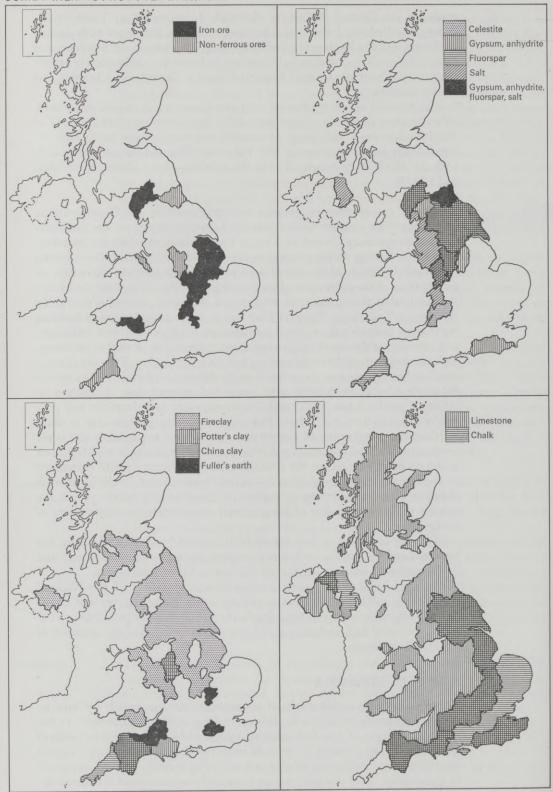
by the technical advisory services of the fuel and power industries.

The Coal Utilisation Council consists of representatives of the National Coal Board, solid fuel distributors and appliance manufacturers and distributors. Originally formed in 1932, it informs and advises domestic users on the best use of solid fuel, including the choice of installation and the operation of solid fuel appliances.

### NON-FUEL MINERALS

Although Britain's requirements of 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 increased by 69 per cent in terms of quantity and 127 per cent in terms of value between 1963 and 1973. Capital expenditure in the non-fuel mining and quarrying industry in 1972 amounted to £37 million, most of which was on plant and machinery and the remainder on land and buildings. The total number of employees in the industry was

### SOME MINERALS PRODUCED IN BRITAIN



The maps above are based on county boundaries (at 1971) and not those of geological outcrops.

41,700 in 1973. The geographical locations of some of the more important minerals produced in Britain are shown on the maps on p. 272.

### **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 1974, 30 companies had sought assistance totalling £13 million in respect of 124 exploration projects, mainly for non-ferrous metals. Work on 36 projects has been completed. The assistance is to be repaid with interest if a project leads to the extraction of minerals in commercial quantities.

An exploration programme aimed at providing preliminary information on areas with potentially economic mineral deposits in Great Britain is being undertaken by the Natural Environment Research Council (NERC) on behalf of the Department of Industry. Under a three-year programme costing £1.3 million the Institute of Geological Sciences, a component body of NERC, is carrying out work aimed at providing basic geological information on five

identified areas which may yield economic deposits of minerals.

# **International** Trade

In 1973 Britain imported £815 million worth of non-ferrous metals (ores, concentrates and scrap), an increase of 40 per cent over the previous year, reflecting mainly the sharp rise in world commodity prices. Britain's imports of unwrought metals in 1973 were worth £559 million, an increase of 46 per cent over 1972. Imports of semi-manufactures of non-ferrous metals (for example rods, tubes, sheets and bars) were worth £91 million. Exports of minerals were worth £60 million, unwrought metals £386 million and mineralbased semi-manufactures £,145 million in 1973.

### Production

The approximate value of non-fuel minerals produced in Britain in 1973 reached £399 million, an increase of 18 per cent compared with 1972. In quantity terms output increased by 12 per cent.

Sand and Gravel

Sands and gravel are second only to coal in terms of tonnage of minerals produced in Britain. They are primarily used as an aggregate or bulking material, in the main for concrete (accounting for about 75 per cent of total production) and road construction. In 1973 136 million tonnes of common sand and gravel worth over £100 million were produced; 16 million tonnes or 12 per cent of the total were marine-dredged. Britain is the world's largest producer of marine-dredged aggregates. Total past production is about 2,500 million tonnes, of which over half has been raised in the last 15 years. It is estimated that about 4,000 acres (1,600 hectares) are worked each year.

More specialised sands used in glass-making and metal-founding are also produced. In 1973 production of these special silica sands amounted to 6.4 million tonnes. Virtually all glass produced in Britain is made from domesti-

cally produced silica sands.

Other Construction Materials

Limestone, igneous rock, sandstone and chalk are all quarried for use in the construction industry. (Limestone is also used by the steel industry.) Production in 1973 included: 106 million tonnes of limestone, valued at £94 million; 49 million tonnes of igneous rock valued at £58 million; 17 million tonnes of sandstone (including silica stone and ganister) valued at about £21 million; and 23 million tonnes of chalk (including chert and flint) valued at about £12 274

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million. The production of slate has declined steadily in recent years to a level of about 60,000 tonnes a year.

Clays

In 1973 Britain produced 41·1 million tonnes of clays, valued at £49 million. Britain is the world's main producer of china clay, which 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; output in 1973 was 3·4 million tonnes, most of which was for export. Other main types of clay produced included ball clay, used in the pottery and ceramics industries, and fireclays, used for bricks and refractory products.

Iron Ore

Production of iron ore in 1973 was estimated at 7·1 million tonnes. Although indigenous iron ore was important to Britain's industrial development, the remaining low-grade domestic ores are not competitive with high-grade ores and concentrates from overseas and production has been falling in recent years.

Non-ferrous Ores

The most important non-ferrous metal produced in Britain is tin, which was first worked in Cornwall over 2,000 years ago. Production was at its highest in the early 1870s, amounting to about 15,000 tonnes a year of dressed ore, but by the early 1950s production had fallen to about 1,400 tonnes a year. Increasing demand for base metals since then has brought about a recovery in production, which has more than trebled since 1970 to reach 10,138 tonnes of dressed ore in 1973. Cornish mines supplied Britain with nearly 20 per cent of its tin ore requirements in 1973. There are now four mines and a fifth one is being developed. Some copper, zinc 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 6,000–7,000 tonnes of dressed ore a year.

Other Minerals

Among other domestically produced minerals Britain is a major world producer of salt, fluorspar, gypsum, anydrite, and celestite. Britain is virtually self-sufficient in salt, the value of production being nearly £20 million in 1973. The value of fluorspar produced in 1973 was £5 million while that of gypsum and anhydrite combined was £7 million. Potash production started in North Yorkshire towards the end of 1973; output is expected to be over 1 million tonnes by 1975 and to exceed domestic consumption, about 95 per cent of which is accounted for by fertiliser manufacturers.

Britain also produces small amounts of tale, mica clay, diatomite and mineral pigments.

### WATER SUPPLY

Britain's water resources are, with progressive development, sufficient for domestic and industrial requirements. The sources of water are, however, often distant from the areas where supplies are needed. 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.

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.

**Evolution** 

The provision of water supplies became a general public service in Britain in the nineteenth century, largely due to the efforts of Edwin Chadwick (a well-

known social reformer) and his colleagues who demonstrated the dangers to health arising from inadequate water supply and sanitation. Under the Public Health Act of 1848, which laid the basis for a long series of statutes dealing with public health, a number of statutory water undertakings were established to provide water to the expanding urban population and the water supply system developed rapidly although in piecemeal fashion with some overlapping and waste. Where no commercial undertaking was willing and able to do so, the Public Health Act 1875 empowered local authorities to provide water supplies.

The Water Act 1945 laid a structural basis for the water supply industry, and while embodying the principle of mixed public and private ownership of water undertakings, gave more central direction to the industry's development and fostered amalgamations. The Water Resources Act of 1963 created river authorities to administer, and a Water Resources Board to review, national water resources and requirements in England and Wales. There were similar arrangements in Scotland under the Water (Scotland) Act 1967 (see p. 276). Water supply continued to be provided mainly by some 180 statutory water

undertakings.

## Present Organisation

A further radical reconstruction of the administrative arrangements for water supply in England and Wales under the Water Act 1973 came into effect in 1974 alongside the new arrangements for local government (see p. 64). (For the position in Scotland see p. 276 and in Northern Ireland p. 277).

# England and Wales

Responsibility for promoting a national policy for water in England and Wales rests with the Secretary of State for the Environment, the Secretary of State for Wales and the Minister of Agriculture, Fisheries and Food. The Water Resources Board has been abolished and its function taken over by a Central Water Planning Unit.

Water Authorities Under the Act, nine regional water authorities have been set up in England and a Welsh National Water Development Authority in Wales. Each water authority consists of a chairman appointed by the Secretary of State, members appointed by the Secretary of State and the Minister of Agriculture, Fisheries and Food and a majority of members appointed by local authorities. The functions of the water authorities include water conservation; water supply; sewerage and sewage disposal (district and London borough councils usually act as agents, on behalf of their water authorities, for the design, construction, operation and maintenance of public sewers in their areas); control of river pollution; maintenance; development and improvement of fisheries; land drainage; and recreational amenities relating to water.

Statutory Water Companies The Act provides for the continued supply of water by statutory water companies for the water authorities both within and outside their limits of supply. It makes special arrangements governing the relationship of statutory water companies to the water authorities and for control of the latter over them.

National Water Council A National Water Council has been set up 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 Space Amenity Commission A Water Space Amenity Commission has 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.

Supplies

Public water supplies in England and Wales—reaching over 99 per cent of the total population—now total some 3,190 million gallons (14.5 million cubic metres) a day, out of a total estimated abstraction of nearly 5,320 million gallons (24.2 million cubic metres) a day (excluding water used for cooling in connection with electricity generation). Capital expenditure on water supply, sewerage and sewage disposal is estimated at £330 million in 1973–74.

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 1974 schemes costing over £555 million had been completed or were

in progress with the aid of grants under these Acts.

A report of the Water Resources Board on water resources in England and Wales published in 1974 (see Bibliography p. 276) considers that no more than five new strategic reservoirs need be built in England and Wales this century and recommends the development of the Dee Estuary for water storage and the enlargement of a number of existing reservoirs.

Scotland

The administrative arrangements for water supply and distribution in Scotland were reorganised by the Water (Scotland) Act 1967 under which the functions of 200 local water authorities were transferred to 13 regional water boards in 1968. The Act also established the Central Scotland Water Development Board to supply water in bulk to its seven constituent regional water boards; it does not supply direct to individual consumers. All the members of these boards are members of town or county councils.

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 water boards to provide supplies of wholesome water everywhere in their regions, 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. 276). 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. The Rural Water Supplies and Sewerage Act 1944, as amended, makes available to Scottish regional water boards and to local authorities grant assistance up to a maximum of £60 million towards the cost of water supplies and sewerage schemes.

The 12 new regional and island councils to be set up in Scotland in 1975 to carry out local government functions (see p. 65) are to be responsible for water supply and sewerage; separate river purification authorities will continue to be responsible for the regulation of the discharges of effluent to rivers and certain tidal waters. The Central Scotland Water Development Board will

be reconstituted to carry out co-ordinating functions and administer water schemes supplying more than one regional council in central Scotland.

### 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 1973 over £100 million was expended on water and sewerage services—over £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 (NI) Order 1973 requires the Department of Environment to provide these services.

The largest new 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.

# Measurement of Resources

Information on the yield, behaviour and quantity of the nation's water resources is provided in the Surface Water Year Book of Great Britain, and in the Ground Water Year Book for England and Wales published annually by Her Majesty's Stationery Office. Detailed studies of the resources and use of water in specified areas have been published in the series of hydrological surveys which cover approximately half of England and Wales. General information on rainfall, published annually in British Rainfall, is the responsibility of the Meteorological Office.

A Water Research Centre has been set up to co-ordinate water research in the whole of Britain (see p. 396). 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.

### 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. A three-year survey is being carried out into plans for the Wash, and a report has been published on the estuary of the Dee.

# Pollution Control

The regional water authorities in England and the Welsh National Water Development Authority in Wales are responsible for the control of pollution in rivers and certain tidal water in their areas and their approval must be sought before polluting effluents are discharged. In Scotland river pollution is controlled by either river purification boards or local authorities. In Northern Ireland it is the responsibility of the Department of Environment.

The Government's aim is to improve the quality of water in all the main rivers by the early 1980s. *The River Pollution Survey* records in detail progress already made in reducing river pollution.

The Water Pollution Research Laboratory at Stevenage, part of the Water Research Centre, 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.

# 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 largest and most important industries. It occupies 704,000 people or 2.9 per cent of the total in civil employment, provides about 3.3 per cent of the gross national product, and uses 47 million of the 60 million acres (19 million of the 24 million hectares) 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 30 million acres (12·1 million hectares) under crops and grass. Cultivated land, rough grazing, woodlands (ancillary to farming) and other land used for agriculture 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. The ratio of rough grazing—used for stock, mainly sheep—to better quality agricultural land varies considerably throughout Britain. In the southern half of England, for example, it constitutes only about one-sixth of the total acreage, 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 280,000 statistically significant farming units in Britain. Some 41 per cent are very small units, mostly farmed part-time, and accounting for less than a tenth of the industry's total output. Of the 164,000 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 14 per cent of the number of holdings, produce more than half the industry's total output. There are 55,300 medium-sized (two-three men) and 69,300 small farm businesses. The total is falling by about 6 per cent a year.

Amalgamation of small farms into larger, more viable units has been encouraged by successive governments. The average size of full-time holdings in Britain is 237 acres (96 hectares) of crops and grass (including rough grazings).

Some 35,000 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 55 acres

(22 hectares). 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 fulltime 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. Potato and vegetable growing on a substantial scale marks the farming of 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 southwest. 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. 287-91.

Production

The steady expansion in production and in yield per acre of arable land which has taken place since 1936 is summarised in Table 23. Apart from a slight decline between 1961 and 1964, and another in 1968, total cattle stocks have risen each year since 1957, to reach a record figure of nearly 14.7 million at the end of 1973. 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, steady expansion is now evident again. Numbers of pigs have increased by over one-quarter during the past decade, as have those of poultry. Arable production has shown a greater diversification since the second world war. Total cereals production has increased considerably since 1960, reaching over 15 million tons in 1973-74. Potato production is susceptible to weather conditions but, on average, adequate supplies are maintained from a steadily declining area. Between 1963 and 1972-73 output of pigmeat increased by onequarter and eggs by one-tenth; these increases, together with those in beef and milk, resulted in higher consumption of feedingstuffs, mostly from home resources. Between 5 million and 6 million tons 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 has

TABLE 23: Land Use, Produce and Livestock.

Years commencing 1st June

Item and Unit		Averages		1070	1973	1973
		1936–38	1960–62	1972 b	1973	metric equiva- lents
Total crop Temporar Permanen Rough gra Woodland	nt grass	8,907 4,180 18,750 16,476	11,044 6,991 12,683 18,202	12,021 5,825 12,132 16,343 400 326	11,905 5,798 12,143 16,320 406 347	4,818 <sup>d</sup> 2,346 <sup>d</sup> 4,914 <sup>d</sup> 6,605 <sup>d</sup> 164 141
	Total	48,313	48,920	47,047	46,919	18,988
Main Cro	area ('000 acres) harvest ('000 tons)	5,301 4,442	7,709 10,229	9,386 15,270	9,271 15,072°	3,752ª
of which—Wheat: Barley: Oats: Potatoes:	area ('000 acres) harvest ('000 tons) yield (tons per acre) area ('000 acres) harvest ('000 tons) yield (tons per acre) area ('000 acres) harvest ('000 tons) yield (tons per acre) area ('000 acres)	1,856 1,651 0-89 929 765 0-83 2,403 1,940 0-81 724	2,062 3,159 1·53 3,729 4,996 1·34 1,742 1,876 1·09 757	2,786 4,704 1.69 5,653 9,098 1.61 777 1.23° 1.58 584	2,831 4,932° 1·74° 5,603 8,846° 1·58° 695 1,084° 1·56° 555	1,146 <sup>a</sup> 4.37 <sup>e</sup> 2,267 <sup>a</sup> 3.96 <sup>e</sup> 281 <sup>a</sup> 3.91 <sup>e</sup> 225 <sup>a</sup>
Sugar beet:	harvest ('000 tons) yield (tons per acre) area ('000 acres) harvest <sup>a</sup> ('000 tons) yield (tons per acre)	4,873 6·7 335 415 1·24	6,691 8·8 429 819 1·91	6,424 11·0 468 918 2·0	6,501° 11·7° 480 1,075° 2·2°	29·34e 194 <sup>a</sup> 5·5e
	('000 head) tle and calves of which dairy cows beef cows heifers	8,675 } 3,281	11,855 { 3,234 911	13,483 3,325 1,476	14,445 3,436 1,678	
Sheep and Pigs Poultry	in calf	554 25,786 4,466 76,236	818 28,779 6,163 108,775	954 26,877 8,619 140,045	988 27,943 8,979 144,079	
Eggs (mil Beef and Mutton a Pigmeat (	Products llion gallons) lion dozen) veal ('000 tons) and lamb ('000 tons) ('000 tons) heat ('000 tons)	1,555 558 578 195 435 89	2,482 1,145 864 257 745 333	3,023 1,226 911 230 970 645	2.980¢ 1,114¢ 945¢ 238¢ 1,018¢ 677¢	13,583 <sup>f</sup>

Source: Agricultural Departments.

a Raw equivalent basis.

b From 1970 agricultural holdings in Great Britain include statistically significant holdings of one acre or less, previously excluded. From 1973 U.K. figures relate, with some exceptions, to holdings with 40 standard man-days or more.

c Provisional.

d 'ooo hectares.

Tonnes per hectare.

f Million litres.

g Figures not collected before 1972.

risen steadily. By 1953-54 it was some 56 per cent above the immediate prewar 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 110 in 1972-73; 114 is forecast for 1973-74.

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 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), methods of grazing control, improved herbage conservation for winter feed and irrigation. Rough grazings remain as seminatural grassland used for extensively grazed flocks and herds, producing

young animals for fattening elsewhere.

Crops

Cereals

Wheat is grown mainly in the eastern half of England. About 4.9 million tons were harvested in 1973, with average yields estimated at 1.74 tons per acre (4.37 tonnes per hectare). Between one-third and one-half of the wheat crop is used for flour milling, the remainder going mainly for animal feed.

Since 1961 the area under barley has increased by nearly 50 per cent and in general production has risen faster because yields have also increased. The malting and distilling market currently absorbs about one-sixth 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

In Great Britain 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 beans 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 (see p. 289), which also provides technical advice and assistance. The whole crop is mechanically harvested.

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 main crop 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 main-crop potatoes. As yields are increasing, requirements, including the increased demand for processed potatoes, can be met from a declining acreage. The area planted in 1973 was 556,000 acres (237,000 hectares) and the average yield per acre was 11.7 tons. This resulted in an overall balance of supply and demand. Although potato production is becoming increasingly mechanised, much hand labour is still needed.

Dairy Farming

Milk is more valuable when sold on the liquid milk market than when converted into cheese, butter or other milk products. In Great Britain milk is produced primarily for liquid consumption, but in Northern Ireland the greater part of the milk is used for manufactured products. Average consumption of liquid milk per head is 4.8 pints (2.7 litres) a week.

Average yields per dairy cow have increased during the last decade by about 13 per cent and now average some 876 gallons (3,892 litres) a year. Freedom from tuberculosis has reduced herd wastage, and a campaign to eradicate brucellosis is under way. 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 36 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 Great Britain 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 30 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 more genial 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, where numbers have doubled since about 1950. There is an increasing concentration into specialist units and larger herds. The most frequently used breeds are the Large White and the Landrace though considerable crossbreeding takes place. Pig improvements are fostered through research by the Meat and Livestock Commission and by leading commercial firms. Artificial insemination is available nationally.

About 30 per cent of the pig meat is used for bacon and 70 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 to genetic improvements in stock. Only a small proportion of total production is in the hands of the smallest producers—72 per cent of the laying birds on farms are in flocks of 5,000 or more and 72 per cent of the broilers are in flocks of 50,000 or more. The average yield of eggs per bird is about 230 a year and nearly all eggs consumed in Britain are homeproduced. About 340 million broilers and other special table chickens were slaughtered in 1973. Turkey production has been increasing annually.

# Horticultural Industry

The horticultural industry produces a wide variety of fruit, vegetables and flower crops which are together worth nearly II per cent of the total from agriculture as a whole—an estimated £403 million in 1973-74 out of a total of f, 3,773 million.

At the June 1973 census the land on which these crops were grown amounted to nearly 693,000 acres (280,000 hectares), just over 2 per cent of the land used for crops and grass. Of crops in the open, fruit accounted for 185,000 acres (74,900 hectares), vegetables, excluding potatoes, for 462,000 acres (187,000 hectares), and flowers, bulbs and nursery stock for 40,000 acres (16,200 hectares). Crops under glass, including mushrooms, occupied 6,000 acres

(2,400 hectares).

Horticultural crops are largely grown on specialised holdings where soil, climate, skilled labour and water 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 expanding 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. Traditional market gardening, which once flourished around the large centres of population, has declined over the years, mainly due to the growth in the field-scale production of vegetables to meet the demands of the processing industries.

Of the land used for fruit growing in 1973, 45,000 acres (18,200 hectares) were devoted to small fruit and the remainder was under orchards. The acreage of apple orchards (excluding cider apples), some 91,000 acres (36,800 hectares), continues to decline, but yields have increased to some 5 tons per acre on average. Dessert apples are the most widespread fruit crop, grown mainly in Kent and neighbouring counties, in East Anglia and to the north and south of Bristol. Recent plantings are largely of the autumn and winter variety of Cox's Orange Pippin; many 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

are 12,300 acres (5,000 hectares) under varieties of cider apples.

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

suitable for cooking, the best-known of which is Bramley's Seedling. There

processing industry.

Strawberries are the most widespread small fruit, accounting for some 19,000 acres (7,700 hectares), the main-crop areas being in Kent and East Anglia.

Fruit

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 reequipped since the mid-1960s with the aid of grants. There are now, in many parts of the country, large units with automatic control of light, heat, ventilation, water and the carbon dioxide content 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 increasing demand for sweet peppers and aubergines, two crops which were formerly hardly grown or consumed in Britain. Cucumbers are extensively grown in the traditional glasshouse area in the Lee Valley to the north of London. Mushrooms, whose farmgate value is forecast at over £23 million for 1973–74, are grown in specially constructed sheds in several parts of the country. Production in Northern Ireland, in particular, is steadily increasing each year.

Nursery Stock and Bulbs Bulbs and hardy nursery stock each occupied some 18,000 acres (7,300 hectares) in June 1973; flowers in the open took 4,000 acres (1,620 hectares). 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.

Cut flowers are grown and bulbs cultivated in many areas but 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 there 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 West Yorkshire, 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 the intensive horticultural holdings in 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; their production has also extended from the Vale of Evesham into Gloucestershire 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 largely 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 deep soils of southeast Lancashire, Norfolk and the fens of Cambridgeshire. Nearly three-quarters of the early rhubarb is produced in West Yorkshire, 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, Berkshire, Surrey, Hereford and Worcester. They occupy only about 17,000 acres (6,800 hectares) but have a very high yield per acre 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.

# Consumption

Home Production Home production of the principal foods is shown as a percentage by weight of total supplies in Table 24. Table 25 shows how the level of the main food supplies passing into consumption has changed since the end of war-time rationing. Rising living standards have led to increased consumption of high protein foods. More recently the pattern of food consumption has tended to stabilise but with a more pronounced trend towards partly prepared and 'convenience' foods.

TABLE 24: United Kingdom Production as a Percentage of Total Supplies

Food product	1956	1964	1973 (provisional)
Carcase meat and offal	62	69	75
Bacon and ham	42	38	45
Shell eggs	96	98	98
Milk for human consumption (as liquid)	100	100	100
Cheese	43	42	57
Butter	9	6	22
Oils and fats (crude oil equivalent)	16	10	15
Sugar (as refined)	22	27	30
Wheat and flour (as wheat equivalent)	20	47	57
Potatoes for human consumption	93	95	94

Source: Ministry of Agriculture, Fisheries and Food.

TABLE 25: Annual Food Consumption per Head

	1956 lb.	1964	1973	
		lb.	lb.	kg.
Carcase meat and offal	101.5	103.7	94.6	42.9
Bacon and ham	23.3	25.3	22.4	10.2
Poultry meat	7.2	15.8	26.9	12.2
Fish: fresh, frozen and cured	19.3	17.0	13.6	6.2
Eggs in shell <sup>a</sup>	212	249	245	
Liquid milk <sup>b</sup>	323.0	323.3	309.8	176·0¢
Cheese	9.3	10.6	12.7	5.8
Butter	15.5	19.8	17.6	8.0
Margarine	17.1	13.4	12.8	5.8
Oils and fats	21.2	26.0	25.7	11.7
Sugar <sup>d</sup>	109.8	108.0	106.2	48.2
Flour	178.7	156.1	141.8	64.3
Potatoes	224.5	226.9	214.9	97.5
Fresh vegetables (including				
tomatoes)	107.3	115.3	119.3	54.1
Fresh and dried fruit	71.4	79.7	78.3	35.5
Canned and bottled fruit	13.8	19.5	19.3	8.8
Tea	10.1	9.4	7.5	3.4
Coffee	1.5	2.7	5.9	2.7

Source: Ministry of Agriculture, Fisheries and Food.

a Number. b Pints. c Litres.

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 (see Table 26). The aggregate net income of farmers rose from £462 million in 1964-65 to £832 million in 1972-73 and an estimated £1,224 million in

d Including sugar in all home-produced and imported manufactured goods, and in brewing.

TABLE 26: Estimated Farm Output and Input 1973-74

Output	£	As a per- centage of total	Input	£	As a per- centage of total
Farm crops Horticulture Livestock Livestock products Other	790 403 1,524 1,028 28	20·9 10·7 40·4 27·2 0·7	Feedingstuffs Seeds Imported livestock Fertilisers and lime Machinery Farm maintenance	1,117 94 107 225 251 129	51·6 4·3 4·9 10·4 11·6 6·0
Total Output	3,773	100.0	Miscellaneous expenditure	241	11.1
Production grants and sundry receipts	124		Total Expenditure Stocks change	2,163 -18	100.0
Total Receipts  Work in progress	3,897		Gross Product <sup>a</sup> 2,2	2,145 2,207 305	
change  Gross Output	+455 4,352		Net Product Labour Net rent and interest	1,902 561 118	
			Net Income	1,224	

Source: Annual Review of Agriculture 1974.

Figures may not add to the totals shown because of roundings.

<sup>a</sup> Gross product = Gross output less gross input.

1973-74. The figures given in Table 26 show that Britain's farming is predominantly based on livestock enterprises. Over seven-tenths of total farm output is in the form of livestock or livestock products.

Of all farm expenses, purchased feedingstuffs amount to nearly two-fifths, wages to nearly one-fifth and machinery (including depreciation) and equipment to nearly one-fifth. Since 1960 male agricultural earnings have more than doubled, offsetting the manpower economies made possible by mechanisation and larger farms, while labour productivity has risen by about 6 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. In 1973 provisional 'fixed capital' totalling £213 million was added to the value of buildings and works and £219 million was invested in new plant, machinery and vehicles. 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. 290) and private sources.

Accounts of some 3,000 farms in Britain, collected by agricultural economists in 1973, show average valuations of occupiers' capital ranging from about £7 per acre (£17·3 per hectare) on hill farms with extensive rough grazings to over £100 per acre (£247 per hectare) on some lowland farms. On all types of farm investment in machinery is a heavy item: on dairy and arable farms it averages

about £20 per acre (£50 per hectare); on stock-rearing farms it may amount to £8 per acre (£20 per hectare).

### Mechanisation

Britain has one of the heaviest tractor densities in the world, with 506,000 tractors in 1973 or one to every 35 acres (14·2 hectares) of arable land. Power-take-off implements now characterise arable farming; and some 60,000 combine harvesters were in use in 1973. 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, varying 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 £20 to £40 per acre (£49 to £98 per hectare) with the exception of pig and poultry farms and horticultural holdings, which are more intensive in their use of land. Net income per acre on dairy and arable farms has nearly always been higher than on stock-rearing farms, which are generally larger 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 regional managers. 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. 291) 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.

Britain began to take part in the European Community system of agricultural support under the Common Agricultural Policy (CAP) on 1st February 1973. The Intervention Board for Agricultural Produce was set up in 1972 to

administer the system; 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.

### **Annual Review**

In February 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 in Britain). They consider such factors as production trends and market requirements, world market prospects, the cost of subsidies, income trend in the industry as a whole, the increasing efficiency of the industry and changes in production costs. The conclusions drawn from the review form the background for the determination of guaranteed prices in Britain and contribute towards the formulation of policy in respect of the CAP and of other aspects of the Community support system.

The cost of government support to the industry in 1973-74 is estimated at £309 million. Expenditure under the CAP arrangements is estimated at about £102 million, of which some £83 million is likely to be reimbursed from the European Agricultural Guidance and Guarantee Fund (FEOGA).

# Common Agricultural Policy

The objectives of the CAP are to increase agricultural productivity and earnings, to stabilise markets and to provide adequate supplies at reasonable prices to the consumer. For most commodities there is free trade within the Community with a common system of variable levies to regulate imports from third countries, and common price levels within the Community designed to give producers an adequate return from the market. For these products market prices are maintained by variable import levies which keep import prices up to a minimum or 'threshold' price, while in most cases the internal market is supported at an intervention price, slightly below the threshold price, at which any surpluses are bought by the Community's agricultural fund. Britain has introduced intervention prices which will be gradually increased to full Community levels over the five-year transitional period. During this period there will be free trade between Britain and the other Community members in the main agricultural products subject to arrangements to compensate for the differences in price levels and currency values. For fresh fruits and vegetables the market organisation is similar, although third country trade is subject to a common customs tariff and not to variable import levies. Items of particular importance to Community producers are covered by a market intervention system and a form of minimum import prices.

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.

## Price Guarantees

In the light of the Annual Review the agricultural ministers determine guaranteed prices for the coming year for cereals, potatoes, fat sheep, fat pigs, milk and wool. By the end of the transitional period (31st December 1977) the guarantees for all commodities for which the Community has a common market organisation will have been ended. The guarantee for eggs ended on 30th March 1974 and that for sugar beet on 30th June 1974.

The guarantee system operates by means of deficiency payments to stabilise

prices to farmers at appropriate levels. These payments make up the deficit between the open market price of a commodity and the price guaranteed by the Government.

For cereals payment is made by the agricultural departments on the acreage harvested. Deficiency payments for fatstock are made weekly to

producers on certified sales on a liveweight or deadweight basis.

For milk and wool in the United Kingdom, potatoes in Great Britain and fat pigs in Northern Ireland, the Government operates the guarantee through the appropriate marketing boards 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; the Government pays full guaranteed price on a 'standard quantity', which for 1974-75 will be broadly the same as total production. Any milk produced in excess of this would be sold for manufacturing and the returns from these two sources averaged by the boards to give the 'pool price' paid to producers. Recent government decisions to subsidise the retail price have resulted in a deficit which is being met by the Exchequer. For potatoes, ministers fix each year a target acreage designed to achieve selfsufficiency. In Great Britain the Potato Marketing Board ensures, as far as possible, that this acreage is planted and undertakes support buying of any surplus, re-selling as much as possible for stockfeed. In Northern Ireland the Department of Agriculture undertakes any support measures. Most of the cost is met by the Government.

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.

The British Sugar Corporation Ltd. contracts to buy sugar beet from an acreage agreed with the National Farmers' Union. For the 1974 crop this was 488,000 acres (197,500 hectares). For the beet which makes sugar within its maximum quota under the CAP (974,400 long tons [990,000 tonnes] of refined sugar in 1974–75), the corporation must pay not less than the CAP minimum prices. Any additional sugar must, except in case of shortage, be exported outside the European Community and the price paid will reflect prices on the world market.

Under the Commonwealth Sugar Agreement (CSA) the Government is committed to take certain quantities of sugar annually from Commonwealth exporters, mostly in developing countries, at a price negotiated periodically. The sugar is bought by the Sugar Board on the Government's behalf and sold to refiners at the ruling world price. On import into Britain the sugar is adjusted to a fixed price so as not to prejudice the marketing of Community sugar. The CSA is due to expire at the end of 1974 and to be replaced by arrangements negotiated between the European Community and the developing countries concerned.

Other Grants and Subsidies

The relative importance of the price guarantees has declined in recent years. The Government does, however, offer to farmers a wide range of other inducements to increase productivity. The cost amounted to £195 million in 1973–74 and is estimated at £184 million in 1974–75. Of the total for 1974–75 some £94 million was provided to maintain breeding herds of cattle and sheep, particularly in upland areas and to retain calves suitable for beef production.

Agreement was reached under the CAP in 1974 for Britain to introduce certain special consumer and producer subsidies. The cost of the producer

subsidies over a full year for beef and pigmeat is estimated at £38 million and

£30 million respectively.

Grants are available under the Farm Capital Grant Scheme 1973 towards capital expenditure incurred on a wide range of work and facilities, such as farm buildings, farm waste disposal systems, the supply of gas and electricity, and field drainage (any expenditure in respect of egg and poultry enterprises is ineligible for grant and there are special limitations on grant aid for pig enterprises). The standard rate of grant is 20 per cent but for field drainage the maximum rate is 55 per cent on lowland farms. Under the Farm Capital Grant Scheme 1970, which remains in operation for certain hill land applications, the rate for field drainage is 70 per cent and for land improvement 50 per cent. The estimated cost in 1974-75 of grants under the two schemes and earlier schemes which they have replaced is £77.7 million. The Farm and Horticulture Development Scheme, which is assisted from FEOGA funds, makes grants available for farmers and growers where income per labour unit is below the average level in non-agricultural industry and can be raised to that level by a programme of investment. Another form of assistance for the modernisation and improvement of horticulture is the Horticulture Capital Grant Scheme, through which the Government provides grants of 15 or 25 per cent for horticultural investment. Nationally financed grants for horticulture are expected to cost some £,7.3 million in 1974-75. In addition, the Apple and Pear Growers (Special Payments) Scheme provides for payments to commercial producers who wish to give up growing apples and pears. The estimated cost of this scheme for 1974-75 is £500,000.

To promote the improvement of farm structure, grants are available to farmers who carry out approved amalgamations to farms or expand commercial units and to outgoers who give up their holdings for this purpose. The

cost of these grants in 1974-75 is estimated to be £3.6 million.

In 1973 the Community's scheme for subsidising conversion from dairying to beef cattle or sheep came into effect.

The FEOGA also provides grants for certain substantial projects that promote the objectives of the CAP.

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.

Loans for carrying out improvements to agricultural land and buildings are also available to landowners from the Lands Improvement Company.

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.

# **Smallholdings**

In England and Wales, about 10,700 smallholdings are provided by local authorities and about 900 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 416,000 acres (168,000 hectares) of land settlement estates, comprising some 3,080 crofts and holdings.

## Crofting

In the seven Scottish crofting counties—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 £50 a year or have an area not exceeding 75 acres (30 hectares).

The Crofters Commission, with headquarters in Inverness, is responsible for the administration and regulation of crofting. Its functions are to reorganise, develop and regulate crofting in the crofting counties, 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's agent in administering grants to crofters for cropping and land improvement.

# Arterial Drainage and Sea Defence

On 1st April 1974, responsibility for land drainage (including flood prevention) in England and Wales was transferred from the former river authorities and catchment boards to ten new regional water authorities. 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 for this work 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 about 320 internal drainage districts administered by internal drainage boards who carry out work for the special benefit and protection of their districts. These 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 grant 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.

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 at any time 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 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 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 and promotes research and development of value to the cereals market. 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 agent for the Intervention Board. 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.

Grants of up to one-third are available for the modernisation of major wholesale horticultural markets; Covent Garden is being moved to a new site, which is under construction, in south London.

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. For British produce sold on the domestic market they are being phased in over a two-year period ending on 1st February 1975.

Community regulations prescribe grades consisting of a range of up to four classes and specify requirements concerning colour, sizing, 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 similar terms as are available under the schemes for individual producers (see p. 290). 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, centred on London and Edinburgh, which is incorporated in the unified Agricultural Development and Advisory Service. 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. Sheep scab, eradicated in 1952, reappeared in 1973: control measures reduced the disease to a low level by the end of the year. 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. 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 being 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. Newcastle Disease (fowl pest) which had declined considerably since 1963, reappeared in serious epidemic proportions in a series of outbreaks in 1970 and early 1971 in England and Wales and then declined again to a low level.

The work of the 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. Voluntary certification schemes are operated to encourage the development of healthy vigorous and true-to-type planting stocks. The Plant Pathology Laboratory at Harpenden, Hertfordshire, 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 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 Chemicals

Safeguards against the dangers which could arise from uncontrolled use of pesticides have been devised and are operating successfully. Regulations provide protection for workers using the more toxic chemicals. The voluntary Pesticides Safety Precautions Scheme ensures that new pesticides intended for use in agriculture and the home garden, 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 of users, consumers of treated produce, livestock or domestic animals and wild life) to allow the Government to make recommendations for their safe use. Products cleared for safety under the Pesticides Safety Precautions Scheme may then 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.

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 also reports on topics of current concern. In 1969 it concluded that there was no evidence that the use of certain persistent organochlorine pesticides

(including DDT, aldrin and dieldrin) had any adverse effects on human beings, but it is recommended that certain uses of these chemicals for which adequate, less persistent alternatives were available should cease in order to reduce amounts of them in the environment. This recommendation was implemented during 1971.

Veterinary Medicinal Products The Medicines Act 1968 provides through a system of licensing for the control of the manufacture, sale and supply of both human and veterinary medicinal products (including those used in animal feedingstuffs). These controls are being brought into operation in stages. The licensing authority (the British health and agricultural ministers) is advised by the Medicines Commission, the Veterinary Products Committee, 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.

Safety at Work

The Safety Inspectors of the agricultural departments advise farmers and workers about safety, including their obligations under the Agriculture (Safety, Health and Welfare Provisions) Act 1956 and regulations made under it; these 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 technical advice on all agricultural and horticultural matters is available through the Agricultural Development and Advisory Service (ADAS) which operates mainly from the ministry's regional and divisional offices. The service provides free and impartial advice to landowners, farmers and growers, but charges are made for certain laboratory and other services, such as drainage design work. When possible the ADAS concentrates more on group than individual advice.

In Scotland the agricultural advisory service is provided by the three regional independent colleges 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

Economic and Market Research

Agricultural research and development in Britain, including that carried out by the Agricultural Research Council (ARC) and the universities, is mentioned on p. 404. The Ministry of Agriculture, Fisheries and Food carries out research and development at its own laboratories and on the 22 experimental 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. Ten of these conduct work on farm incomes and the economics of particular products for the ministry (see p. 286). In Scotland, agricultural economists are on the staff of the three agricultural colleges and the Department of Agriculture and Fisheries for Scotland.

The Northern Ireland Department of Agriculture has an Economics and Statistics Division and eight other research divisions.

Agricultural Education and Training Eleven 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 pays 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 white fish, herring and shellfish. The major element of the catch (about 78 per cent by weight) is white fish: the catches of herring comprise about 15 per cent and shellfish 7 per cent of the total catch. The principal white fish (in terms of value) are demersal species which live near the sea bed, such as 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 and constitutes a separate fishery. Shell-fish include crustacea (such as lobsters, nephrops and crabs) and molluscs (such as escallops, mussels, cockles, queens and oysters).

The white fish section of the industry is made up of three main groups: the distant water, the near and middle water, and the inshore fisheries. The distant waters are those round Iceland, Greenland, Bear Island, the north coast of Norway, the Barents Sea and in the west Atlantic; the middle water grounds lie around the Faroe Islands and Rockall; and the near water grounds are those in the North Sea, the Irish Sea and in the coastal areas around Britain. The herring fishing grounds are mainly in Scottish waters. The inshore waters also yield considerable quantities of shellfish.

British fishermen have the exclusive right of fishing in the coastal belt around Britain out to the six-mile limit. Under the terms of the Treaty of Accession to the European Community, vessels registered in member states can fish within certain areas of the 6-12 mile (9·7-19·3 km) belt. A number of European countries also enjoy 'historic rights', which allow them to fish for designated species in those areas of the belt where they had traditionally fished before 1964, when the limits for Britain were extended to 12 miles.

**Fishing Ports** 

The principal fishing ports in England and Wales are Hull, Grimsby, Fleetwood, North Shields, Lowestoft and Milford Haven. In Scotland the chief centres for white fish are Aberdeen, Granton, Peterhead, the Moray Firth, the west coast and Shetland Islands; herring landings are made mainly at the east coast port of Fraserburgh, 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, lining and ring netting. Trawling is carried out throughout the year 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. There are about 460 Scottish seiners, and about 195 operating from English ports.

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.

The inshore fisheries comprise a great diversity of types of vessels and methods of capture; in addition, there are extensive fisheries for crabs, lobsters, shrimps, mussels, escallops, 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 about 168. They are over 140 feet (42.5 metres) in length and most of them make voyages lasting from 17 to 40 days to fishing grounds off Iceland, in the Arctic Circle, Newfoundland, Labrador, Greenland and the Norway coast. 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 about 46. Excluding seiners, there are about 325 near and middle water vessels of between 80 and 140 feet (24.5 and 42.5 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 1,400 vessels of over 40 feet (12.3 metres) and over 4,000 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 eight days or more.

In the British fishing industry in 1973 there were about 18,500 fishermen in regular employment and some 4,200 occasionally employed; about two-fifths of the former and one-third of the latter were from Scottish ports. In Northern Ireland there are about 600 regular fishermen and 200 part-time.

Supplies

In 1973 landings of all types of fish (excluding salmon and trout) by British

fishing vessels totalled 997,000 tons (652,000 tons of demersal fish, 275,000 tons of pelagic and 70,000 tons of shellfish), valued at £152·2 million. Cod accounted for 47 per cent of the total value of demersal and pelagic fish landed by British vessels; haddock (20 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 125,000 tons valued at nearly £57 million. Imports of canned and preserved fish and shell-fish amounted to 80,000 tons valued at nearly £74 million. Imports of fish meal amounted to 258,000 tons, worth £51 million, and those of fish oils to 215,000 tons, worth over £27 million. Exports and re-exports of fish and fish products

amounted to 184,000 tons and were worth over £46 million.

Weekly disposals of fresh, frozen and cured fish (excluding shellfish and imported canned fish) in Britain averaged about 14,000 tons landed weight in 1973. 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 approximately 17.6 lb. (7.9 kg.) a head in 1973. Home production provided about 85 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 altered radically 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 almost half 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 underexploited 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 in 1973 was 82,000 tons.

# 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 is approximately £600,000 a year, in Scotland it amounts to about £2.4 million, and in Northern Ireland to some £300,000. In Northern Ireland, eels worth £630,000 were captured in 1973 by long lines and by eel nets placed in river weirs.

#### Distribution System

The principal inland wholesale distributing centre for fish is Billingsgate Market in London, which handles about 180 tons a day, but other large cities also have central fish markets. The principal method of distribution is through wholesalers, located at the ports, who buy 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. Retail sales are handled by fish-

mongers and fish friers; the latter use about a third of the landings of white fish.

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, which are sold mainly by other retail outlets.

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 1st 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. 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 to follow the general agricultural timetable (see p. 288).

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.

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 distributing herring. 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 in length and towards the cost of new nets and gear. Up to 31st March 1974 about £5·1 million in loans and £5·3 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 administers loans for the purchase of nets and gear and loans are made available to processors, co-operatives, etc., to acquire, recondition or improve facilities. Up to 31st March 1974 about £40 million in loans and £49 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 4.9 million acres (1.98 million hectares), or about 8½ per cent of the total land area; nearly half of the area is in England, two-fifths in Scotland, the remainder in Wales.

The area of productive forest managed by the Forestry Commission, at I·94 million acres (0·78 million hectares) represents 40 per cent of the total. The annual rate of productive forest expansion is currently about 50,000 acres (20,000 hectares) by the commission mainly in Scotland, and a similar area 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 and because over 90 per cent of industrial demand which the commission is primarily charged with supplying is for softwoods. The major species used are Sitka spruce, Lodgepole pine, Scots pine and Norway spruce. 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 22,000 in 1973 and a further 12,000 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 25 per cent of the commission's woodlands are yet in production. Britain imports 92 per cent of its needs by volume and a higher proportion still by value, the total import cost of wood and wood products including pulp and paper being nearly £1,200 million in 1973, of which £670 million was for timber imports.

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. 302). New policies,

resulting from an earlier forestry review, were announced in 1973. In future, alongside timber production, environmental and employment criteria are to be the main objectives of forestry in Great Britain.

The commission's total estate covers some 3 million acres (1.2 million hectares) and includes 2.2 million acres (0.89 million hectares) of forest land, of which nearly 1.9 million (0.78 million hectares) 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, having become suitable for

forestry as a result of deep ploughing and fertilisation.

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 1.6 million cubic metres in 1973-74. Some of this produce is meeting traditional requirements of the coal mines but much is taken by the paper pulp industry and by factories established to make chipboard, fibreboard

and wood wool.

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 ending 31st March 1973, drawings from funds voted by Parliament amounted to £15.4 million, and receipts were £12.2 million.

Privately owned woods comprise nearly 60 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 acres to several thousand acres, and some 40 per cent of the private woodland area is in small ownerships—that is, owners of up to about 250 acres (100 hectares).

The effective management of private woodlands is encouraged by the provision of grants. A single woodlands dedication scheme in 1974 replaced the three earlier schemes. Under the new arrangements once-for-all planting grants, based on acreage, 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 two associations of woodland owners: the Timber Growers' Organisation (for owners in England and Wales) and the Scottish Woodland Owners' Association.

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

**Finance** 

Private Forestry

Advisory Bodies

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. The HGTAC maintains a technical sub-committee to advise it on subjects such as harvesting, transport and utilisation of homegrown 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 the study of hardwood trees, especially in connection with lowland forests and landscaping and amenity problems. Work at the Northern Research Station at Roslin near Edinburgh is linked to the needs of forest management and upland forestry. Expenditure on research work in Great Britain amounted to £1.37 million in 1972–73. This sum included grants for special forestry research work to various institutions and to university departments 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 of home-grown timber is carried out by Princes Risborough Laboratory, and also by grant-aided research 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 157,000 acres (63,500 hectares) have been acquired, of which over

113,000 acres (45,700 hectares) have been planted.

Financial provision is made by sums voted annually by Parliament and from receipts from forest produce and other sources. About 1,600 people are employed in the state forests. There are also about 36,000 acres (15,000 hectares) 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 accounted for 7 per cent of the employed labour force in Great Britain in June 1973—some 1.5 million people. Of these, 465,000 employees were engaged in road passenger transport and road haulage contracting, 223,000 in railways, 436,000 in postal services and telecommunications, 77,000 in port and inland water transport, 88,000 in sea transport, 77,000 in air transport and 135,000 in other transport services and storage. Transport and communications contribute nearly 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.

#### SEA TRANSPORT

#### SHIPPING

Of the world's active sea-going tonnage of 100 gross tons<sup>1</sup> and over, some 10 per cent is registered in Britain, making the British merchant fleet, at 30·2 million gross tons, the third largest in active employment after those of Liberia and Japan. The oil tanker fleet, at 14·1 million gross tons, is the world's third largest, and the ore and bulk carrier fleet, at 7 million gross tons, the fourth largest.

The British fleet has grown steadily, particularly over the last few years; since 1968 it has increased by 38 per cent, much of the new tonnage consisting of purpose-built container, tanker and bulk carrier vessels. British shipping meets severe international competition and, with the fleets of other traditional maritime nations, encounters difficulties from practices such as flag discrimination and the use of 'flags of convenience'.

## Relations with 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. Most of the work which these responsibilities entail is carried out by the staff of the Marine Survey and Mercantile Marine Offices at the ports. There is also a Registrar General of Shipping and Seamen, in whose office at Cardiff a complete record of all British ships is kept. The Merchant Navy Establishment Administration, an organisation managed by the shipowners, records information on British seafarers actively employed at sea. Overseas, certain parts of the Merchant Shipping Acts are administered by British Consuls and by officers of Commonwealth Governments.

<sup>&</sup>lt;sup>1</sup> One gross ton (g.t.) = 100 cubic feet (2.83 cubic metres). One deadweight ton (d.w.t.) = 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.

Much of the law relating to employment at sea has been brought up to date under the Merchant Shipping Act 1970. Arrangements for the welfare and safety of seamen have been improved and disciplinary provisions revised.

#### THE MERCHANT FLEET

In June 1973, 28 million gross tons of trading vessels of 100 gross tons and over were both owned and registered in Britain. These ships are usually employed as follows: 5.6 million gross tons as foreign-going passenger and cargo liners; 7.7 million gross tons as foreign-going tramps; 14 million gross tons as foreign-going tankers; and 715,000 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, greater speeds and faster turn-round facilities are stabilising operating costs. The tendency to greater average size has been most marked in tankers and dry bulk cargo ships. Vessels are specially built to carry ore and various kinds of chemicals. Many ships have been designed to carry fully loaded road vehicles, pallets and containers and the use of these on door-to-door journeys can result in speedier, safer and cheaper carriage of a wide range of goods.

### **SEAFARERS**

EMPLOYMENT OF There were some 89,000 seamen employed by the merchant fleet in 1971, according to a census of seamen, of whom some 55,000 were domiciled in Britain.

#### Qualifications

The Department of Trade holds examinations for, and issues certificates of competency to, ship's officers as master, first mate and second mate of foreigngoing ships, or master and mate of home trade 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 radiotelegraphy issued by the Home Office on the results of an open examination.

A seaman may not be rated as AB (Able Seaman) in British registered ships unless he holds a certificate of competency as AB granted by the Department of Trade, or an equivalent certificate. To obtain this certificate a seaman must, among other qualifications, have served three years at sea on deck, have obtained a certificate of efficiency as lifeboatman and have passed a qualifying examination. Seamen qualify by seniority and efficiency for promotion to the rating of petty officer. Service as a deck rating qualifies for the purpose of admission to the examination for a second mate's certificate.

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. Minimum wages and holidays with pay are guaranteed for both officers and ratings. The Merchant Navy Established Service Scheme, introduced by the board 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

<sup>&</sup>lt;sup>1</sup> 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.

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.

#### **SHIPOWNERS**

Most of the foreign-going cargo liners, including container ships, owned and registered in Britain, are operated by large groups. Many operate wide networks of scheduled conventional or container services which, between them, cover every ocean. Foreign-going tramp ships are operated by a large number of private owners, some having only a small number of ships and some only one ship. The greater part of the total tanker fleet belongs to the oil companies, although there are a few important independent British tanker-owning companies.

#### SHIPPING ORGANISATIONS

The main organisations concerned with the activities, interests and common problems of the industry are as follows:

# Lloyd's Register of Shipping

Lloyd's Register is an organisation (distinct from the Society of Lloyd's, see p. 371) which surveys and classifies ships with particular regard to their safety and operational efficiency. It accepts responsibility for surveying and giving technical advice on vessels of all flags from the initial stages of building, at regular intervals during their service, and after casualties. A satisfactory Lloyd's classification is a guarantee to an underwriter that he may accept the risk of a vessel, and this forms a strong link between the Register and the Society of Lloyd's.

# Shipowners' and Shippers' Organisations

The representative body speaking for shipowners generally (excluding, for the most part, owners of fishing vessels) is the Chamber of Shipping of the United Kingdom. The British Shipping Federation is the employers' organisation concerned with labour relations and the regulation of employment. The two bodies are merging to form the General Council of British Shipping, a national organisation representing the interests of British shipowners; it becomes fully operative on 1st March 1975. Other organisations represent companies specialising in a particular trade or type of cargo.

The British Shippers' Council, formed in 1955, represents the shipping interests of exporters and importers in matters of both national and international concern.

#### The National Maritime Board

The National Maritime Board is composed of equal numbers of representatives of the shipowners and seafarers' unions and is responsible for negotiation of wages and conditions of service.

#### 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. Some of the conferences are connected by rate agreements, or have joined together to form wider groupings. There are about 100 conferences dealing with trade to and from Britain.

# The Baltic Exchange

The Baltic Mercantile and Shipping Exchange, which originated in one of London's seventeenth-century coffee houses, is the world's largest market

for the chartering of ships of all nationalities. Shipbrokers and merchants' representatives meet there to arrange the chartering of dry-cargo tramp ships for the carriage of goods to and from all parts of the world. In addition sale and purchase of ships, chartering of aircraft and trade in certain commodities are carried on there.

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 and to prevent oil pollution, and conducts enquiries 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 550 regular coastguards and about 7,000 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 1973 life-saving action was taken on 4,811 occasions.

The Coastguard Service calls upon shipping, the lifeboats of the Royal National Life-boat Institution, and Service aircraft to assist as necessary. It may call upon the services of long-range civilian helicopters based at Aberdeen in Scotland. The Royal National Life-boat Institution is supported entirely by voluntary contributions, and depends for its operation on voluntary workers. From its foundation in 1824 to the end of 1973 it saved 98,392 lives. Lifeboats were launched 2,641 times in 1973 and rescued 1,757 people.

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

Trinity House is the chief pilotage authority, licensing some 720 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. In Britain there are 47 pilotage authorities for the 92 pilotage districts and over 1,600 licensed pilots.

Traffic Control

Eevry day there are some 350 vessel movements, including up to 200 in peak summer periods of cross-Channel ferries, in the Dover Strait, one of the most congested seaways in the world. 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 on a voluntary basis in 1967. It was revised, extended and made mandatory 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 two countries have joint plans to develop these services with the establishment of further radar stations in the Dover Strait area.

POLLUTION OF

The discharge of oil into British territorial waters was first restricted in 1922. Britain is a party to the International Convention for the Prevention of the Pollution of the Sea by Oil 1954. 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. Britain enforces these restrictions on British registered ships through the Prevention of Oil Pollution Act 1971. The International Convention for the Prevention of Pollution from Ships 1973, concluded in London, will eventually supersede the 1954 convention. The Department of Trade is responsible for the prevention of oil pollution at

Dumping at sea 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. The Act enables Britain to ratify and implement the Oslo and London Conventions, which permit dumping at sea on the basis of scientific criteria set out in annexes to the conventions. Under the Act dumping is prohibited unless a licence has

been obtained from the appropriate department.

**PORTS** 

There are some 250 port authorities or public wharf operators in Britain, and about 1,400 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 present Government intends that the entire industry should

eventually be brought under public ownership and control.

Over a quarter of total port capacity is run by nationalised undertakings; the majority of these ports, including Southampton, Hull, Immingham, Newport, Cardiff and Swansea, are owned by the British Transport Docks Board. In 1973 shipping arrivals and departures at the board's docks totalled over 137 million net registered tons (including fishing vessels) and total cargo handled was 89.7 million tonnes. The British Railways Board controls certain ports, which are largely used for the cross-Channel services of the railways (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 vary considerably. Traditionally they consist of representatives of shippers, importers, exporters, shipping companies, local authorities and trade unions. Examples of such public trusts are the Port of London Authority, the Tees and Hartlepool Port Authority, and the Belfast Harbour Commissioners. The reconstitution of a number of port trusts 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. The Forth Ports Authority and the Ipswich Port Authority have been reconstituted on these lines. Local authorities own about one-third of Britain's ports, including Bristol, Preston and Sunderland. Port undertakings owned by statutory companies include Manchester, Liverpool and Felixstowe. 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 (NPC), 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. It has encouraged the amalgamation of harbour authorities in certain estuaries into single port authorities, as on the Forth, Clyde and Tees.

#### Development

Large-scale modernisation of the port transport 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 seagoing 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. There are some 72 lift-on and 76 roll-on berths in operation in Britain.

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. Another major scheme has been the construction of the new £,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 £20 million will provide six berths and have the largest entrance lock in Britain; it is due to open in 1975-76. Container facilities have been expanded at a cost of some f.14 million for the Far East traffic at Southampton, where a computer-linked harbour surveillance and shipping information system has been installed to provide radar and VHF radio coverage over 20 miles (32 kilometres) of port area. Deep-sea container facilities have also been constructed at Felixstowe, the Clyde, and Manchester. A f,20 million deep-water harbour at Port Talbot, south Wales, serves as an ore terminal for the British Steel Corporation. Other ore terminals have been built at Redcar and Immingham and another is planned at Hunterston on the Clyde. The discovery of oil in the North Sea has resulted in major developments at harbours on the east coast of Scotland and in the Shetland Islands to provide facilities for vessels servicing the drilling rigs.

#### Labour

About 80,000 people are employed in Britain's port transport industry; of these, 35,000 dockers, responsible for the physical and mechanical handling of cargo, were registered with the National Dock Labour Board at the end of 1073.

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 a 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. In recent years there has been a continuous decline in employment opportunities in the industry, due to

improvements in cargo-handling methods, and voluntary redundancy schemes have been in operation since 1967 to encourage surplus workers to leave the industry.

Port Traffic

About 350 million tonnes of cargo a year pass through the ports of Great Britain. Of this total, coastal traffic accounts for nearly 100 million tonnes consisting mainly of petroleum and coal. Of over 200 million tonnes of imports from overseas some 126 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 22 million tonnes of goods in 1972. London, Dover, Felixstowe, Southampton and Liverpool all handled large amounts.

**Principal Ports** 

Britain's largest port is that of London. In 1973 some 57 million tonnes of goods were handled, including 28.1 million tonnes of petroleum and 4.6 million tonnes of coal. Southampton is Britain's second seaport by value of trade, the chief port for ocean passenger traffic and the main trading port on the south coast. In 1973 it handled 31.3 million tonnes of goods. 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 passenger port.

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 53 million tonnes a year, is Britain's major oil port and now Britain's second 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 Clyde is the principal port, serving the central industrial area; there is a crude oil terminal at Finnart. On the Forth, Grangemouth is associated with petroleum, petro-chemicals and timber.

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. Finnart on the Clyde will accept vessels of 325,000 deadweight tons; it is frequently used in lightening operations to allow part-laden vessels to proceed with shallower draft to other ports in Northern Europe. At Tetney Haven off the mouth of the Humber, fully laden tankers discharge at Britain's first offshore mooring monobuoy, a large buoy anchored in deep water with a connecting pipeline to the shore. A single-buoy deep-water mooring is under construction at Amlwch, Gwynedd, to accommodate tankers up to 500,000 deadweight tons. A £9 million crude oil terminal to handle tankers of 250,000 deadweight tons is under construction at Hound Point, near Edinburgh. The terminals are connected to the refineries by pipelines (see p. 263).

HOVERCRAFT

The hovercraft, a vehicle invented in Britain which rides on a cushion of air over both land and water surfaces, has been in regular public passenger service around the coasts of Britain since 1965. Services are run by several privately owned firms including Hoverlloyd Ltd., which has a purpose-built hoverport at Pegwell Bay in connection with its car and passenger ferries between Ramsgate and Calais, and Hovertravel Ltd., which operates across the Solent to the Isle of Wight and has a subsidiary which does training and charter work. Two publicly owned bodies, the British Railways Board and the Scottish Transport Group, have hovercraft interests. British Railways' subsidiary, British Rail Hovercraft Ltd. ('Seaspeed'), was set up in 1966, and is the world's largest commercial hovercraft operator. It runs regular services across the Channel between Dover and Boulogne, and Dover and Calais, carrying passengers and accompanied cars. It also operates two services across the Solent, and takes on charter work. A privately operated hovercraft service between Greenwich and Westminster is primarily intended for commuters; it is being financially assisted by the Government and the Greater London Council.

#### 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. A small proportion of freight goes by air.

Part of the inland transport system of Great Britain is publicly owned: the railways, a large proportion of 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.

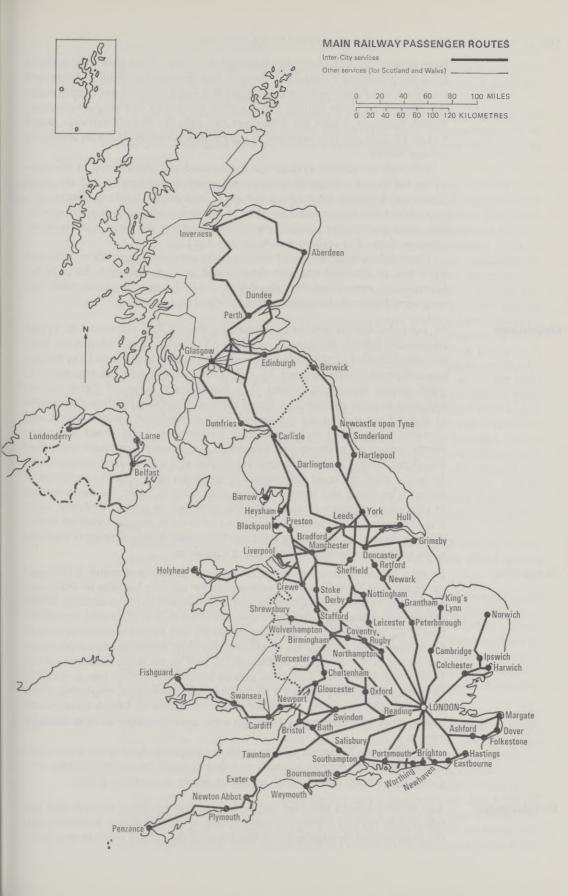
In the third quarter of 1973 there were 17 million vehicles licensed for use on the roads. Of these 13.5 million were motor cars, one million motor cycles, scooters and mopeds and 1.7 million road goods vehicles; about two-thirds of the 77,000 public road passenger vehicles (excluding taxis) were publicly owned. 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.

In 1973 about 64 per cent of freight, in terms of ton-mileage, travelled by road, 18 per cent by rail, 16 per cent by coastal shipping, and 2 per cent by pipeline and inland waterway.

**RAILWAYS** 

The railways first came under government direction during the first world war, and afterwards some 130 private companies were amalgamated into four

 $<sup>^{1}</sup>$  Ton-mileage is calculated by multiplying the tonnage carried by the actual distance it was transported.



large regional groups under the Railways Act 1921. Thereafter they suffered from the prolonged industrial depression and growing competition from road transport, and following the second world war the Transport Act 1947 brought the railways in Great Britain under public ownership as a single enterprise, British Railways. Under the Transport Act 1962 the British Railways Board was set up and came into existence in 1963 with sole responsibility for managing railway affairs.

Although the railway system was modernised and streamlined in the mid-1960s the board's financial position remained unsatisfactory and the 1968 Transport Act made far-reaching changes in its financial structure. The board's capital debt was reduced and a system of grants introduced to support specific loss-making passenger services considered necessary for social and economic

reasons; about for million was so paid in 1973.

These measures helped the board to make an operating profit in 1969 and 1970, but its financial situation deteriorated in 1971 and 1972. In 1972 the Government announced that the deficit would be met by grants while the

long-term future of the railways was reviewed (see below).

**Operations** 

In 1973 the railway network operated by British Rail amounted to 11,326 route-miles (18,227 kilometres) of which 2,151 miles (3,462 kilometres) were electrified. A total of 728 million passenger journeys was made and 194 million tons of freight traffic carried by rail. Total railway receipts amounted to £582 million (excluding grants). The board made a loss of £51.6 million following interest payments of £57.3 million. Capital expenditure amounted to about f,100 million. At the end of 1973 it employed 250,000 people and operated 3,639 diesel and 333 electric locomotives, 3,468 diesel and 7,173 electric passenger multiple-unit vehicles, 7,152 passenger carriages and a fleet of 248,700 freight vehicles. Several companies also own or lease rolling stock. 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 and other bulk commodities, and including containers.

Subsidiaries

In 1973 British Transport Hotels Ltd. owned 32 hotels of which it managed 31. It 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 64 vessels in 1973, 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 Hovercraft Ltd. runs regular hovercraft services (see p. 310). In 1973 British Rail Engineering Ltd. had 14 main workshops, employing about 32,400 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 2,000 people and controls a comprehensive research and development programme costing over £4 million a year, half of which is met by direct government grants.

Development

The board's second five-year corporate plan was produced in 1972 and was followed in 1973 by a comprehensive review of railway policy. Following this the Government decided to retain and improve the railway network at roughly

its present size. Under the Railways Act 1974 a new system of government support for the passenger network will replace the present system of grants for loss-making services from 1st January 1975.

Further improvements to commuter and inter-city passenger services and freight services will be made and the standards of track and signalling will be raised to allow faster running speeds and higher levels of safety and operating efficiency.

Inter-city
Passenger Services

Although passenger route-mileage and rolling stock have been reduced since 1963, the number of passenger journeys has declined less and rolling stock is used more intensively. This has been achieved during a period of substantial growth in car ownership. Passenger services have been concentrated increasingly on the high-speed inter-city network, linking the main centres of Great Britain, and on commuter routes 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 airconditioned stock. The high speed train (HST) is due to enter regular service on the route from London to Bristol and south Wales in 1977, operating at a sustained speed of 125 mph (201 kph). Work is in progress on track improvements and signalling, which already permit speeds of up to 100 mph (161 kph) in certain sections. Development work is proceeding on an experimental advanced passenger train (APT), capable of speeds up to 155 mph (250 kph). Train speeds of up to 100 mph (161 kph) are also possible on parts of the London-Edinburgh line and the electrified west coast route from London to Glasgow. This electrification scheme 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. The first stage between London, Birmingham, Manchester and Liverpool was completed in 1967 and led to an approximate increase of 150 per cent in numbers of passengers. The second stage of the electrification scheme, an extension of 235 route-miles (378 kilometres) to Glasgow, was completed in May 1974.

Motorail services (carrying both passengers and their cars) have an annual capacity of 125,000 cars on 40 services. Six new services were added during 1974.

Commuter Services The board's proposals for commuter services include the development of new multiple-unit trains to replace old stock. The first of these, the Prototype Electro-Pneumatic Train, is being tested in the London area. Urban railway projects include a scheme to electrify the north London commuter lines to Royston. On Merseyside a £14 million scheme, due for completion in 1976, will provide an extension of the Mersey underground railway in central Liverpool and an £11 million scheme to provide an underground link between Liverpool's main railway stations will be completed in 1977.

Freight

The most important freight commodities handled in 1973 were coal and coke (99.4 million tons) and iron and steel (35 million tons). A decline in the carriage of these products, particularly coal and coke, has been accompanied by a small increase in 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. The board has begun a programme to concentrate freight traffic at fewer and better equipped and sited marshalling yards and terminals. A computer-based

total operations processing system, allowing constant control of all consignments and freight train and wagon movements, was introduced in south-west England in 1973 and will be extended to the whole of Great Britain by 1975. 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 growing in importance. The freightliner services, introduced in 1965 by Freightliners Ltd., now serve a network of 28 main terminals throughout Great Britain, with connections to the continent of Europe.

#### National Freight Corporation

The National Freight Corporation was set up under the 1968 Transport Act. It operates the depots, vehicles, warehouses, containers and other equipment, though not the actual trains used, in the freightliners and sundries services, and has a large road haulage fleet of 23,800 vehicles. It has a capital of about £110 million, and employs 50,600 people; annual turnover amounts to some £223 million.

Freightliners Ltd., a company jointly owned by the National Freight Corporation and the British Railways Board (with 51 per cent and 49 per cent of the shares respectively), is responsible for the marketing and management of freightliner services. The British Railways Board makes a charge for providing and hauling the trains, and profits are divided between the board and the corporation in proportion to their holdings.

#### Freight Integration Council

A Freight Integration Council, set up under the 1968 Act, advises the Department of the Environment and the Secretary of State for Scotland on the provision of integrated freight services by publicly owned bodies. It consists of several independent members with an independent chairman, the chairmen of the National Freight Corporation and the British Railways Board, and members representing union interests.

# Railways in

The Northern Ireland Railways Company Ltd., a subsidiary of the Northern Northern Ireland Ireland Transport Holding Company, operates the railway service on 200 miles (322 kilometres) of track. Improvements to the rail system under a modernisation scheme involve the re-opening of several stretches of line closed in earlier years and the introduction of new rolling stock. The Belfast Central Railway is being rebuilt for passenger traffic and should be open by mid-1975.

#### **Channel Tunnel**

Following completion of final studies into the financial and technical feasibility of a bored rail tunnel under the Channel, the British Government announced in 1973 that it intended, subject to Parliamentary approval, to proceed with the project in association with the French Government and an international group of banking and other interests. Initial works are in progress. The present Government has decided that there should be a full re-assessment of the project before any decision is taken to embark on the main construction works.

The Channel Tunnel would run from Cheriton, near Folkestone, on the British side, to Fréthun in France. There would be three tunnels—two single track railway tunnels linked by crossovers and a separate service tunnel connected to the other tunnels by cross passages. An electrified rail link, suitable for very high-speed running, would be built from Cheriton to London. Services through the tunnel would include through rail passenger and freight services—freightliner-type and bulk trainload traffic—motorail services and ferry train services for road vehicles. The total cost, excluding the rail link, has been estimated at £468 million at 1973 prices. This would be shared equally between Britain and France.

PUBLIC PASSENGER TRANSPORT Public road passenger transport in Britain is provided mainly by publicly owned operators but partly by private firms. In the public sector in Great Britain 25,000 vehicles are operated by the National Bus Company and the Scottish Transport Group, 11,000 by the Passenger Transport Authorities, 6,500 by London Transport and over 6,000 by local authority undertakings. There are about 5,000 privately owned fleets (of which the majority have five vehicles or less) comprising some 25,000 vehicles.

Licensing

The Road Traffic Act 1930 (consolidated in the Road Traffic Act 1960) ended the licensing of public service vehicles (that is, buses and coaches) by local authorities and set up instead traffic areas each under the control of three traffic commissioners. The commissioners are responsible for ensuring the fitness of vehicles used in public road passenger transport, and for licensing services in order to secure proper co-ordination and to eliminate unnecessary competition; to this end they may fix routes, timetables and fares.

Grants

Capital grants may be made by the Government towards the cost of investment in public transport, at rates of up to 75 per cent of approved cost. Eligible schemes include improvements or extensions of railway lines, new fixed track rail and bus systems, interchanges, stations, car parks, urban and suburban railway rolling stock, resignalling, train control systems and automatic fare collection. Local authorities may assist unremunerative bus services in rural areas and where they do so the Government reimburses half their expenditure. From 1st April 1975 in England and Wales both types of grant will be replaced by a new unified system of central government support for local transport expenditure, under which grants will be paid to county councils to enable them to carry out comprehensive transport policies and programmes.

Grants at the rate of 50 per cent are available towards the cost of new buses complying with specifications approved by the Department of the Environment. 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 1973 it owned some 20,000 vehicles and employed 68,000 people. In 1973 passenger journeys on the company's buses amounted to 2,314 million.

The Scottish Transport Group operates bus services in Scotland and shipping services on the Clyde and to the Western Isles. It has 4,500 vehicles.

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.

Passenger Transport Authorities The Transport Act 1968 enables Passenger Transport Authorities (PTAs) to be set up to control and co-ordinate the different forms of transport in any particular area. PTAs have been set up in England and Wales in the conurbations of Greater Manchester, Merseyside, West Midlands, Tyne and Wear, South Yorkshire and West Yorkshire. In each case the PTA is the metropolitan county council, which is also responsible for land use policy and transport matters in general. 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 their own bus services and enter into agreements with other bodies, such as the British Railways Board and the National Bus Company. In 1972 four of the English PTAs became responsible for local rail services in their areas and subsequently reached agreement with the British Railways Board on their future operation.

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 10,500 taxicabs that ply for hire in the streets are privately operated by companies or owner-drivers and are licensed annually by the Metropolitan Police. There are about 15,000 licensed cab drivers. In addition, numerous car-hire firms are in operation.

The London Transport System London Transport's railway network stretches over 20 miles (32 kilometres) from north to south and 35 miles (56 kilometres) from east to west. In January 1974 the total length of the railway over which London Transport trains operated was 252 miles (406 kilometres), of which 99 miles (159 kilometres) were underground. London Transport trains serve 278 stations and its buses travel over 1,731 miles (2,786 kilometres) of roads. To carry traffic over all this area London Transport owns 4,379 railway cars and 6,534 buses. The total staff employed is over 54,000.

Improvements being carried out by London Transport have included extension and modernisation of parts of the Underground system, and the introduction of automatic fare collection and automatic trains. Work is in progress on the construction of the first stage of the new Fleet Line, which is projected to link the north-west and south-east suburbs of London, and on a scheme to link Heathrow airport with the Underground railway system which

should be completed in 1976.

One-man operation of buses is being steadily extended over a period of years although certain heavily used routes in central London will continue to be operated by two-man crews. The first one-man-operated double decker buses were introduced in 1969; some 1,000 of these buses had been delivered by mid-1974. Experimental 'minibus' services are in operation in some suburban areas.

London Transport operates an international advisory service for city transport.

Development

Improvements to public transport services and passenger facilities are being undertaken in many areas of Britain. Plans in Greater Glasgow are centred on a complete modernisation of Glasgow's underground system and, in associa-

tion with British Rail, integration of rail services on the north and south banks of the Clyde in the 'Clyderail' scheme; in addition, the city's bus network is being improved. 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 system, which should be operating in 1980, will be 34 miles (55 kilometres) long with 46 stations. The project is the largest provincial urban transport scheme to have been prepared in Britain in the twentieth century.

ROADS

An extensive road-building programme has been in progress since 1955. Public expenditure on the construction and improvement of roads in Great Britain is estimated at over £600 million in 1974-75.

Roads are classified according to their traffic value. Trunk roads provide a national network of routes for through traffic; other roads are divided into principal and non-principal roads. Motorways are roads specially designed for

high-speed traffic only.

In mid-1974, Great Britain had about 212,000 miles (341,500 kilometres) of public highway. There were 9,500 miles (15,300 kilometres) of trunk roads, of which 1,120 miles (1,802 kilometres) were motorways; 20,400 miles (32,800 kilometres) of principal roads, of which some 46 miles (74 kilometres) were motorways; and 182,300 miles (293,000 kilometres) of other roads, including unsurfaced roads.

In Northern Ireland in mid-1973 there were 14,189 miles (22,835 kilometres) of public roads comprising 317 miles (510 kilometres) of trunk roads, 1,026 miles (1,651 kilometres) of Class I roads, 1,737 miles (2,795 kilometres) of Class II roads, 2,887 miles (4,646 kilometres) of Class III roads and 8,222 miles (13,232 kilometres) of unclassified roads.

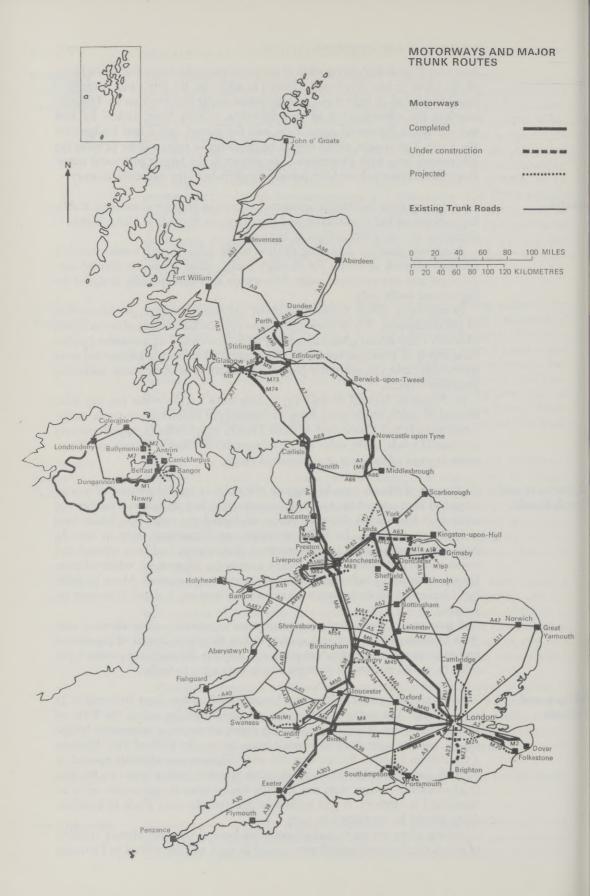
Motorways and Trunk Roads At the end of March 1974 in England 988 miles (1,590 kilometres) of motor-ways had been opened for traffic and construction had started on a further 197 miles (317 kilometres). Schemes for an additional 574 miles (924 kilometres) were being prepared. In Wales 27 miles (43 kilometres) were in use. In Scotland about 95 miles (153 kilometres) of motorway had been opened and construction had started on a further 15 miles (24 kilometres), while schemes for an additional 55 miles (89 kilometres) were being prepared. About 60 miles (97 kilometres) of motorway were in use in Northern Ireland. (See map on p. 368.)

A government trunk road programme aims to provide a comprehensive network of strategic routes of high quality to link the major centres of population and to serve the most important ports and airports. By early 1974 some 1,700

miles (2,740 kilometres) of strategic routes were open to traffic.

Bridges and Tunnels A large programme of bridge and tunnel building has been undertaken in recent years. The bridges include the suspension bridge across the Firth of Forth, the Severn Bridge incorporating major advances in suspension bridge design, and the 7,000-ft (2,134-metre) bridge across the Firth of Tay. The new £5.5 million London Bridge over the river Thames was officially opened in 1973. A £26 million 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 1976–77. A £10 million bridge over the river Foyle in London-derry should be completed in 1977.

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 February



1974. A second crossing of the Thames at Dartford, Kent, is under construction.

#### Administration

The Secretary of State for the Environment is the highway authority for trunk roads in England and on these roads he administers expenditure, which is provided wholly from central government sources, although for many purposes he employs local authorities as his agents. The Secretary of State for Scotland has corresponding responsibilities for roads in Scotland and the Secretary of State for Wales for roads in Wales. Work on major trunk road schemes in England, including motorways, is controlled by regional road construction units, manned jointly by Department of the Environment 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. The Secretary of State makes specific grants towards approved expenditure on construction and major improvement of principal roads. From 1st April 1975 expenditure by local authorities on building and maintaining the non-trunk roads will be eligible for grants under the new support system (see p. 315). In Scotland the highway authority for principal roads is the county or large burgh council; from May 1975 it will be the regional or islands council.

In Northern Ireland the Department of the Environment is directly responsible for the trunk road system and bears the entire cost of maintenance and construction work on these roads; in October 1973 it became responsible for the other roads, formerly the responsibility of the local road authorities.

#### Research

Research on roads is carried out at the Department of the Environment'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.

#### Road Haulage Licensing

The Road and Rail Traffic Act 1933 established a system of licensing for road haulage vehicles designed to restrict vehicle operations to proved needs. A new goods vehicle licensing system, aimed solely at improving safety, has been introduced as provided under the Transport Act 1968. Those operating vehicles of over  $3\frac{1}{2}$  tons gross weight (with certain special exemptions) now require an operator's licence, obtained on showing 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. Licences are granted by independent, quasi-judicial licensing authorities, and may be revoked, suspended or curtailed if necessary. Regulations concerning the fitness and loading of vehicles have become more stringent under recent legislation. Holders of operators' licences may carry their own or other people's goods and are free of statutory control over their charges. Over 900,000 goods vehicles not exceeding  $3\frac{1}{2}$  tons gross laden weight are exempt from operators' licensing. In Northern Ireland there is a separate licensing

system for road haulage operation. About 1,760 operators and 3,940 vehicles are licensed, the biggest single operator being Northern Ireland Carriers Ltd., owned jointly by the Northern Ireland Transport Holding Company and the National Freight Corporation.

European Community rules setting new requirements for drivers' hours, rest periods, records and daily distances applied in Britain from April 1973 to commercial vehicles on international journeys. Journeys entirely within Great Britain, regulated under the Transport Act 1968, are due to become subject to the Community rules from 1st January 1976 with the exception of most bus services. The European Community rules limit drivers in general to eight hours' driving a day. The tachograph, an instrument automatically measuring vehicle travelling activity, is due to become a compulsory fitting on all goods vehicles of over  $3\frac{1}{2}$  tonnes gross weight—for new vehicles from 1st January 1976 and for vehicles already in operation from 1st January 1978.

**Road Safety** 

Britain has one of the highest densities of road traffic in the world but a relatively good accident record, the fatal accident rate per vehicle being lower than that in most other European countries. In 1973, 7,400 people were killed on the roads, about 89,400 seriously injured and 256,900 slightly injured. Road accident statistics are compiled and published by the Government Statistical Service from reports made by the police.

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 speed limits of 30 mph (48 kph) in most built-up areas, 40, 50 and 60 mph (64, 80 and 97 kph) on selected roads where appropriate and 70 mph (113 kph) on other roads including motorways where no lower limit applies. In Northern Ireland there is no speed limit on motorways. Other measures directed primarily towards road safety include the provision of pedestrian crossings and the system of road markings and traffic signs which are being replaced by improved signs in accordance with general European practice. A centrally controlled, computerised signalling system is being installed on 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 fitting of seat belts to the front seats is compulsory for cars first registered in or after 1965 and for light goods vehicles first registered in or after 1967. 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 a scheme to test private cars, initially ten or more years old, at vehicle driving test centres will be introduced in October 1974. 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.

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 obtain a 'provisional' licence and display 'L' (Learner) plates on their vehicle. 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 kph). With the exception of solo motor-cycles and

motor-cycle combinations, where vehicles are constructed to carry passengers, learner drivers must be accompanied 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.) Professional driving instructors must be approved by the Department of the Environment. There is a scheme for special licensing and testing of drivers of heavy goods vehicles. A new Driver and Vehicle Licensing Centre at Swansea began operating in 1973; it 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 easily understandable form in the Highway Code. A failure to observe the code does not of itself render a person liable to criminal proceedings but may be taken into account in any 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 milligrammes of alcohol per 100 millilitres of blood. The wearing of safety helmets by all riders of motor-cycles, scooters and mopeds was made compulsory in 1973.

National campaigns to persuade people to take greater care on the roads are conducted by the Department of the Environment and the Royal Society for the Prevention of Accidents with assistance from the local authorities, which also help by arranging courses of instruction, especially courses for children. In recent years major publicity campaigns have been undertaken to increase

the wearing of seat belts and reduce pedestrian casualties.

Control of Traffic The Road Traffic Regulation Act 1967 empowers traffic authorities to make orders regulating traffic and imposing parking control. With the exception of trunk roads, which are the concern of the central Government, traffic is the responsibility of local authorities. Extensive schemes are being undertaken for the improvement of road safety and the relief of traffic congestion particularly in the centres of cities. These include: 'fly-overs' at road junctions; new outlet roads from cities; provision of parking spaces at railway stations to encourage motorists to travel to work by train; and traffic management measures, including comprehensive control of street parking, 'one-way' systems, peak hour 'clearways' prohibiting waiting on busy roads, the restriction of traffic in some streets to buses, taxis and delivery vehicles, and 'tidal flow' arrangements. Lanes reserved for buses are being introduced in many large towns-in Greater London there were 62 bus lanes in use in July 1974. A Traffic Advisory Unit within the Department of the Environment advises local authorities. 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. Disc schemes providing free but limited parking facilities are in operation in some towns, including Cheltenham, Devizes, Harrogate and Ripon. The Government is identifying and acquiring a national network of long-distance lorry parks. A computer-controlled system to regulate traffic was installed in west London in 1968. Similar systems are operating in Glasgow and Liverpool. The Government is devising, in co-operation with local authorities, a system of advisory lorry routes. Local authorities are required to complete comprehensive plans for dealing with heavy lorries by the beginning of 1977. In the interest of environmental improvement, longdistance and in particular heavy goods traffic, is being diverted from many towns and villages; lorries of 40 feet (12 metres) and longer are banned from travelling into central London except for delivery purposes.

INLAND WATERWAYS Since 1963 control of the majority of inland waterways has been vested in the British Waterways Board. Under the Transport Act 1968 a grant-in-aid is being paid primarily to enable the board to maintain an extensive network of amenity waterways; in 1973 £3.7 million was paid and a further £1.3 million for improving bridges.

The System

There are about 2,500 miles (4,023 kilometres) of navigable inland waterways in Great Britain, some 2,000 miles (3,219 kilometres) of which belong to the British Waterways Board; the remainder are mainly in the hands of water authorities or private companies. Many of the board's canals are narrow waterways which can generally be used only by boats not exceeding 7 ft (2·13 metres) in width; others are broad waterways, ship canals and canalised rivers, some of which can be used by craft of up to about 1,000 tons capacity. Of the inland waterways under the control of the British Waterways Board some 340 miles (547 kilometres) are commercial waterways, which are mainly canalised river navigations. A substantial additional mileage (1,100 miles—1,770 kilometres—known as cruising waterways) is being maintained for recreational purposes; a statutory Inland Waterways Amenity Advisory Council advises the Secretary of State for the Environment and the British Waterways Board.

Engineering, commercial and estate work is directed from the board's headquarters in London. There are also principal offices at Leeds and Gloucester. In Scotland the Caledonian Canal and the other Scottish canals are, for engineering and estate purposes, under the control of the board's office in Glasgow, with direction as a whole from London.

In 1973 traffic on the board's waterways amounted to just under 5 million tonnes, of which 2·1 million tonnes were coal, 1·3 million tonnes liquids in bulk and 1·6 million tonnes general cargo. Some 97 per cent of the traffic is carried on the commercial waterways.

Although the British Waterways Board is the largest single carrying operator, most of the traffic is handled by independent carriers or by traders in their own craft. The board at the end of 1973 owned 427 freight-carrying craft (including tugs) with a carrying capacity of 17,500 tonnes. It operates 2 docks and 19 warehousing depots.

In Northern Ireland, the only inland waterway which is still used for commercial transport purposes is the Lower Bann Navigation.

Development

The British Waterways Board is developing its cruising waterways for purposes of recreation and amenity. Among the most popular are the Llangollen branch of the Shropshire Union Canal, the Oxford Canal, and the Leeds and Liverpool Canal. Many disused waterways are being restored in co-operation with local authorities and voluntary societies. The principal commercial waterways are the river navigations and broad canals in the Yorkshire-Humberside area, the Trent Navigation, and the Gloucester and Sharpness Canal. New facilities and waterway improvements are being undertaken to increase freight traffic. The board has devised and is already operating on some of its commercial waterways a specially designed interlocking modular barge system. A ship capable of carrying small, 140-ton capacity barges entered service in 1974, initially running between Rotterdam and the Humber and Tees estuaries.

The board's turnover in 1973 amounted to £6.7 million, of which £0.3

million arose from its own freight-carrying activities,  $\pounds_1.6$  million from warehousing and terminal services, and  $\pounds_1.4$  million from the docks. The sale of water for industrial and agricultural purposes brought in over  $\pounds_1$  million. Receipts from pleasure boating were  $\pounds_{29}8,700$ . The number of pleasure craft licensed or registered in 1973 was 23,700.

#### CIVIL AVIATION

In April 1924 four small British companies merged to form Imperial Airways Limited and this company pioneered the commercial development of intercontinental air routes. By 1929 there was a through service from England to India. The first passenger service to Australia started in 1935.

The British Overseas Airways Corporation (BOAC), a public corporation, took over the undertakings of Imperial Airways Limited and British Airways Limited in 1940. British European Airways (BEA) was established under the Civil Aviation Act 1946 as a separate public corporation to cover the United

Kingdom and Europe.

BOAC and BEA have become divisions of British Airways (see p. 325) following a major reorganisation of the control of British civil aviation through the Civil Aviation Act 1971. Under this Act were created the Civil Aviation Authority (CAA) and the British Airways Board (BAB). The new bodies

became fully operative on 1st April 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), airport 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 is empowered to give written guidance on the general policies to be followed. The guidance must be approved by both Houses of Parliament, and the CAA is then bound by it.

The Secretary of State may also give directions, after consultation, to the CAA, concerning Britain's relations with other countries, membership of international organisations or adherence to international agreements, or to deal with problems of noise, vibration, pollution or other disturbances arising from the activities of civil aviation. He may also give directions, after consultation, to the BAB concerning matters affecting the public interest. He has powers to make funds available to the CAA and the BAB, with the approval

of the Treasury and within limits laid down by 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 operation of Aberdeen Airport and the Scottish Highlands and Islands aerodromes and the provision by the National Air Traffic Services of air navigation services and the aerodrome navigation services at certain British airports. 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, by 1977–78, 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 £33 million

in 1973-74.

#### Licensing

The Civil Aviation Authority operates an air services licensing system, within which British operators, both state-owned and independent, apply on an equal footing for licences for scheduled and charter services, or for revocation or variation of existing licences. It determines categories of licence, content of applications, and conditions and tariff provisions of licences. It also has power to exempt particular flights or categories of flights from licence requirements. In issuing licences the CAA must consider the applicant's financial resources, staffing and organisation, the need for the proposed services, their adequacy and possible effect on existing services, and any representations made by interested parties. Appeals may be made to the Secretary of State for Trade. A new CAA scheme for licensing air travel organisers came into operation in 1973. 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 British civil aircraft. Its Airworthiness Division is responsible for British Civil Airworthiness Requirements, a code with which all aircraft built in Britain are expected to comply. Continued airworthiness is ensured by regular inspection and by requiring aircraft to be maintained in accordance with a schedule approved by the CAA. The authority is advised by an Airworthiness Requirements Board representing various interests including manufacturers, operators, pilots and insurers.

#### 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 his aircraft. The CAA's flight operations inspectors (who are experienced airline pilots) check that satisfactory operating standards are maintained by these operators. In addition to British Airways 62 independent air transport operators hold an Air Operator's Certificate.

#### 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. The CAA has approved such courses at training schools at Carlisle, Oxford and Perth, as well as the College of Air Training at Hamble. The latter was set up in 1960 to increase the supply of well-trained pilots for civil airlines. It is sponsored by British Airways. An engineering apprentice school was set up at Cranebank, near Heathrow, in 1970.

An Air Transport and Travel Industry Training Board has been established under the Industrial Training Act 1964.

#### 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.

#### Technical Provisions

In 1950 a system of airways covering the main traffic routes with control zones around the major airports was introduced. Subsequently, the airway system has been revised and extended to meet traffic requirements, employing principally very high frequency omnirange beacons as the primary navigation aid. There are three main air traffic control centres: at London for southern

England, at Preston for the north of England and Wales, and at Prestwick for

Scotland and the Atlantic Ocean to 30°W.

A variety of radar installations and other equipment provides the means by which the system can accept the increasingly heavy load of air traffic. Britain was the first country to use radar for the control of through civil air traffic. During the next few years virtually the whole of the airspace over Britain above 5,000 feet (1,500 metres) will be brought under surveillance by the latest types of primary and secondary radar equipment, which will provide data to be used in two air traffic control centres, located at West Drayton (near London) and Prestwick. The first stage was introduced in 1971. Early in 1975 a subsidiary centre will be opened at Manchester to deal with traffic in the Manchester terminal control area. Extensive use will be made in these centres of automatic data processing and other advanced electronic techniques.

Britain has pioneered the development of all-weather landing systems, based on an improved version of the standard instrument landing system used at all major airports. The Blind Landing Experimental Unit of the Royal Aircraft Establishment at Bedford and private industry have worked towards fully

automatic landing which is widely used on scheduled flights.

Britain is a member of Eurocontrol, a European international agency concerned with the traffic control problems arising from the increasing use of high-flying, high-speed jet aircraft. Set up in 1963 it provides control at the higher flight levels for civil aircraft and for military aircraft operating according to civil procedures.

Since 1971 all new types of subsonic aircraft using British airports have been required to hold a 'certificate of quietness'. The noise standards for this purpose follow the recommendations of the special meeting held by the International Civil Aviation Organisation in Montreal in 1969, subsequently embodied in an annex to the Chicago Convention on International Civil Aviation.

Noise abatement measures in force at various airports include limitations on noise levels at take-off, route restrictions, limits on the number of jet movements during summer nights and other procedures designed to lessen noise on the ground.

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 and investment limit is fixed at £560 million; it may be increased up to £700 million by statutory order. During the year 1973–74 the board's turnover was £647 million and it made a net profit of £16.6 million. Revenue earned by the airline divisions amounted to £578 million, of which 56 per cent was earned overseas. Some 16.1 million passengers were carried, 20 per cent more than in 1972–73. At March 1974 British Airways employed about 58,800 staff. Its assets of £528 million included £370 million

of aircraft and spares and £85 million of land and buildings.

British Airways has the largest route network in the world, almost 500,000 miles (800,000 kilometres), covering 200 destinations in 88 countries.

The Overseas Division is engaged on long-haul operations. Its scheduled services link Britain with continental Europe, the Middle East, the Far East,

Eurocontrol

Noise Control

Board of British Airways

British Airways Overseas Division Australasia, Africa and North and South America, and also provide complete round-the-world services.

British Airways European Division The European Division operates on short-haul and medium-haul services in Britain and the rest of Europe, North Africa and the Middle East.

British Airways Regional Division The Regional Division is responsible for secondary domestic services and for a network of services to Europe operated by British Airways—Cambrian, British Airways—Channel, British Airways—Northeast and British Airways—Scottish. Its services in Britain include a number which meet a vital social need, mainly the services to and from the Highlands and Islands of Scotland.

Other Divisions

British Airways Associated Companies Ltd. is responsible for the group's investments connected with some 40 hotel companies and nine 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 the air-sea rescue service 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. British Airways also controls British Airtours which operates charter flights. British Airways Cargo–UK was established in 1974 to control British Airways' cargo-handling facilities at 18 airports in Britain.

Aircraft

The British Airways fleet of some 220 aircraft in May 1974 is the world's largest passenger fleet operating international services. Aircraft in the Overseas Division consist of Super VC10s (16), VC10s (9), Boeing 707-436s (9), Boeing 707-336s (11), and 15 Boeing 747s. The European Division contains BAC One-Elevens (18), Trident Threes (26), Trident Twos (15) and 20 Trident Ones. British Airways has converted the Vanguard aircraft into the Merchantman used solely for freight and nine are now in service. The Regional Division's fleet consists of BAC One-Elevens (7), Viscounts (35), Trident Ones (4), and Skyliners (2). British Airtours has 9 Boeing 707-436s. Helicopters in the helicopter division include Sikorsky 61Ns (10), Bell Jet Ranger (1) and Bell 212 (1). Major orders include five Concorde supersonic aircraft and two Boeing 747s for the Overseas Division and nine Lockheed TriStars for the European Division.

The Independent Airline Companies

Although the public sector had a formal monopoly up to 1961 there has been a significant expansion in the last 20 years not only of the number of passengers and volume of freight carried but also in the diversity of services operated by the independent operators. The independent companies compete with British Airways over several domestic routes, including the busiest internal route in Europe, from London to Glasgow. In 1973 they carried some 5.9 million passengers on scheduled services. British Caledonian Airways, the 'second force' airline, has a fleet of some 31 aircraft, used on chartered and scheduled passenger and freight services, and carries about 1.3 million scheduled service passengers a year. A new type of airline scheduled service—the *Skytrain* involving a one-way non-reservation service—has been proposed by Laker Airways and the CAA has granted a licence for a London to New York service, although it has not yet been approved by the United States authorities.

In addition to the public transport operators there are a large number of companies engaged in miscellaneous aviation activities such as crop-spraying,

aerial survey and photography, and flying instruction. About 30 companies carry out air-taxi operations.

#### Growth of Air Services

Total capacity offered on all services by British airlines rose by 9 per cent in 1973 to 9,003 million capacity-tonne-kilometres. In 1955, 2·5 million passengers entered or left Britain by air, compared with 5·7 million who arrived or departed by sea; in 1962 there were for the first time more air than sea passengers, and by 1973 the figures were 31 million by air (international terminal passengers) and 12·5 million by sea. British Airways accounts for some 92 per cent of scheduled services flown by British airlines. The charter market is dominated by independent companies; British Caledonian has 26 per cent of the market, other independent airlines 53 per cent and British Airways' charter subsidiaries 21 per cent.

#### Air Freight

Freight traffic in 1973 amounted to some 699,500 tonnes, 8 per cent higher than in 1972. This growth is reflected in the figures showing the proportion of Britain's overseas trade carried by air. In 1956, 1.7 per cent of imports and 2.9 per cent of exports (by value) were carried by air. In 1973 the corresponding percentages were 15 for imports and 17 for exports, and the total value of exports, imports and re-exports by air was £4,480 million. The chief export items are expensive machinery and parts, aircraft and vehicle parts, and electrical and electronic products; furs and skins account for a large proportion of the total value of re-exports.

#### Private Flying

The estimated number of aircraft on the British register used for business and private purposes is 2,218 while approximately 939 are owned by clubs, groups and training schools. About 19,300 private pilots hold licences. About 100 companies use corporate aircraft and 65 companies are members of the Business Aircraft Users' Association. There are some 9,000 glider pilots.

#### Airports

Passenger movements at the principal airports have risen very markedly in recent years and in 1973 Britain's civil airports handled 44·4 million passengers. The leading airports were Heathrow—14 miles (22 kilometres) west of central London—20·7 million passengers, Gatwick 5·8 million, Luton 3·2 million, Manchester 2·7 million, Glasgow 2·2 million, Belfast 1·3 million, Birmingham 1·2 million, Edinburgh 893,000 and Prestwick 657,000. Air transport movements have grown at a slower rate than passenger movements; in 1973 there were 719,000 movements of aircraft engaged on commercial transport operations.

# Ownership and Control

There are approximately 150 civil airports in Britain; in addition, 50 Service aerodromes are available for civil use.

The British Airports Authority (BAA), an independent statutory body operating on a commercial basis, was created in 1966 to own and manage London's two major airports (Heathrow and Gatwick), Prestwick in Scotland and Stansted; it acquired responsibility for Edinburgh airport in 1971. Aberdeen and eight small airfields in the Highlands and Islands of Scotland are controlled by the Civil Aviation Authority. Aberdeen is to be transferred to the BAA which will establish a new organisation to administer its Scottish airports. Most of the other public airports are controlled by local authorities. Municipally or privately owned airports or airfields which are used for the public transport of passengers and/or flying instruction are subject to licensing,

inspection and regulation by the CAA, which is also responsible for navigation facilities at the BAA's airports and a number of the main municipal airports.

Development

For international scheduled services Heathrow and Gatwick are the main airports and Heathrow is the busiest centre of international travel in the world. An £8 million programme is under way for the improvement of two passenger terminals. The London Airport Cargo Electronic-data-processing Scheme (LACES) came into full operation at Heathrow in 1971, making Britain the first country to control incoming cargo by computer. The airport at Gatwick, 28 miles (45 kilometres) south of London, was opened in 1958 as the second airport for the London area. Built alongside the main London to Brighton railway and the A23 road, Gatwick airport was the first in the world to contain road, rail and air transport in one unit. The first stage of a £37 million expansion scheme was completed in mid-1974; the project involves the construction of a new arrivals terminal and improvements to passenger facilities.

Work is in progress to develop facilities at many of Britain's other airports. A £7 million extension to Manchester airport, controlled by the Manchester District Council and the Greater Manchester County Council, was opened in March 1974. The extension doubled the airport's passenger handling capacity and enabled it to accommodate Boeing 747 (jumbo jet) aircraft. Prestwick airport in Scotland has been developed to accommodate large jet aircraft and a new cargo terminal has been built. It is already one of the best-equipped freight airports in the world. An £11 million redevelopment scheme for Edinburgh airport involves the construction of a new terminal, which is expected to be in operation by 1976; in addition, a new 8,400-foot (2,560-metre) runway is under construction. A £1.5 million scheme is being undertaken by the CAA to strengthen and lengthen the main runway at Inverness airport. At Sumburgh in the Shetland Islands, an important staging post for communications between the Scottish mainland and many North Sea oil rigs, a £1.5 million scheme is being undertaken to improve the runway.

#### 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.

Organisation

'The Post Office is headed by a chairman, appointed by the Secretary of State for Industry. It has some 420,000 employees and nearly 24,000 post offices.

Finance

The Post Office has authority to borrow up to £3,800 million with provision for an increase to £4,800 million, if necessary. At 31st March 1974 it had borrowed £3,300 million. Over 90 per cent of total expenditure on fixed assets is accounted for by telecommunications. The Post Office is investing some £4,000 million in the period 1973–77.

**Postal Services** 

Some 10,392 million items of correspondence and about 184 million parcels are carried annually by the inland postal services. An increasing amount of correspondence is sent by air, reaching 467 million items in 1973-74; 2.6 million parcels were sent by air in that year.

New highly mechanised sorting office buildings are being opened in Britain. Letter segregating and facing machines have been installed at some 39 centres. Postal address coding (postcode) is in operation over the whole country. Some £50 million is being invested in an improved parcels service.

'Datapost', a door-to-door overnight collection and delivery service for computer data and important packages, provides over 17,000 services each week. The service is also available to Brazil, Hong Kong, the Netherlands and the United States.

The British Postal Consultancy Service offers professional advice on all aspects of postal business to overseas administrators and to business organisations. Subjects covered include management methods and systems, postal circulation systems, containerisation, planning of buildings and mechanisation. Work was done in 1973–74 for seven overseas postal administrations.

Counter Services At the post office counter, besides making use of its postal and telegraph facilities, a person can 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 investments facilities of the National Savings Bank (see p. 367) and the money transmission services of the National Giro (see p. 366). In much of its counter service the Post Office acts as agent for government departments and local authorities.

Telegraph Services Britain has one of the most up-to-date telegraph systems in the world and is directly connected to most of the principal overseas telegraph offices. With the exception of those offered by the small number of foreign telegraph companies licensed to operate in Britain, all international public telegram services from Britain are operated through the provincial and London offices of the Post Office International Telegraph Service. Direct connection is available to the main towns in the rest of Europe and to 49 other countries throughout the world. Although connection is mainly semi-automatic between the international telegraph centres, a computer-based telegram retransmission centre will be fully operational in 1974–75.

Telex Service

The telex service combines the speed of the telephone with the accuracy of the printed word. Calls may be made direct between the rapidly increasing number of telex users in Britain (estimated at 50,000 by mid-1974) and also to well over 550,000 subscribers throughout the world. Britain is linked to over 170 countries by telex. The British telex service is fully automatic. Connection is made by direct dialling to any subscriber within the country, and about 98 per cent of international calls are also 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 1980. A radioteleprinter service extends the use of telex to ships at sea (see p. 331).

Datel Services The demand for facilities enabling digital data to be transmitted over telephone and telegraph lines has greatly increased; to meet it the Post Office has developed a range of datel services providing for transmission at rates of up to 110 bits per second over telegraph-type circuits and up to 2,400 bits per second (to be increased to 4,800 bits per second) over speech-type circuits. Speeds of 48,000 bits per second can be accommodated over wider bandwidth circuits by special arrangement. Most of the services are available internationally over telegraph or speech-type circuits. In March 1974 the number of British Post Office datel terminals amounted to some 29,600, more than the rest of Europe combined.

Telephone Services At the end of March 1974 there were over 6,200 local telephone exchanges and 19·1 million telephones. During 1973–74, 1·5 million new lines were installed. All London's exchanges are now automatic. Trunk dialling by subscribers (STD) began in Bristol in 1958; by March 1974 the facility had been extended to 4,857 exchanges, serving nearly all subscribers. In 1973–74 some 14,906 million telephone calls were made comprising 12,707 million local calls, 2,138 million trunk calls and 61 million international calls.

Hull District Council is the only municipality 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 400 such exchanges in Britain. Large electronic exchanges with capacities of up to 40,000 lines are due to come into service in major cities by the mid-1970s. Mobile electronic exchanges were introduced in 1973.

Pulse code modulation (PCM) systems developed in Britain are being used to increase the circuit capacity of lines on short-distance routes between exchanges. Over 2,300 were in service by the end of 1973.

International subscriber dialling operates from London and other major cities to most of western Europe, the United States and Canada. Britain has two automatic international telephone exchanges in use and two more under construction. It is expected that by 1978 85 per cent of international calls will be dialled direct, compared with about 65 per cent in 1973.

Operator-connected calls are handled at London international exchanges, which are connected to over 4,000 direct telephone circuits to European countries. Direct links via transatlantic and Commonwealth cable networks, communications satellites and high frequency radio provide service to countries outside Europe. Almost every country can be reached from the international exchanges, via intermediate points where necessary.

A radio tower, 620 feet (189 metres) high, in London provides microwave radio links for carrying long-distance telephone and television circuits. There are over 100 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 London and south Lancashire enables users of vehicles fitted with suitable equipment to make or receive calls to or from any telephone in the British network; the service is being extended during 1974 to the Birmingham area and later to four other areas in Britain. Recorded information services include: the speaking clock, weather forecasts, motoring information, recipes, 'Test match' 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.

Private
Telecommunications
Services

There are over 252,000 private circuits not connected with the public exchange networks. These are associated with circuits rented for private use for telephone conversations, teleprinter connections, photo-telegraphy, television, music, or for the transmission of signals which represent data for computers or operate other devices.

Submarine Cables There are some 23 submarine cable systems between Britain and Europe and five between Britain and North America, covering a total of about 14,000

miles (22,530 kilometres). Cable systems using transistors in place of thermionic valves have been developed by British manufacturers in consultation with the Post Office Research Station and are used in many new systems. A comprehensive Commonwealth telephone cable plan was agreed upon in 1958 and carried out by Cable and Wireless Ltd. in co-operation with the Post Office. The plan covered the construction of three long-distance telephone cable systems: CANTAT I (2,100 nautical miles), from Scotland to Canada, was opened in 1961; COMPAC (8,130 nautical miles), connecting Canada, Hawaii, Fiji, New Zealand and Australia, opened in 1963; and SEACOM (7,070 nautical miles), connecting Australia, New Guinea, Guam, Hong Kong, Malaysia and Singapore, was completed in stages from 1965 to 1967. The submarine cables are linked overland across Canada and Australia by radio microwave systems. CANTAT I was the first single-cable ocean telephone system to use the new lightweight cable and rigid two-way repeaters, both developed by the Post Office.

Since CANTAT I was laid between Britain and Canada telephone calls have risen substantially. CANTAT 2, which entered service in March 1974, has doubled telephone links across the Atlantic, with its 1,840 circuits. It covers

2,800 nautical miles between Cornwall and Nova Scotia.

#### Satellite Communications

The Goonhilly satellite communication earth station in Cornwall was brought into operation in 1962, and took part in the first experimental satellite communications using the Telstar and Relay satellites. A second aerial was introduced in 1968 and a third was brought into use in 1972. The three aerials provide commercial telephone and television circuits via high-capacity, geostationary satellites positioned over the Atlantic and Indian Oceans. In March 1974 Britain operated some 760 satellite telephone circuits to 32 countries. The satellites used in the global communications systems are provided by the International Telecommunications Satellite Organisation (see p. 408) of which Britain is the second largest shareholder.

Radio Communications with Ships at Sea

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. 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 play an important part in the services concerned with safety of life at sea. They 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 1973-74 the stations handled 669 urgency and distress calls.

In addition to the services for safety of life at sea, the stations 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. The stations also broadcast navigational warnings and weather bulletins.

The stations operate a free medical advice service whereby the master of a ship of any nationality may obtain advice from appropriate medical authorities on the treatment to be given in cases of sickness or injury aboard ship. During 1973-74, 554 medical cases were dealt with in this service.

Data Processing Service The Post Office is one of the largest users of automatic data processing equipment and techniques in Britain. Its computer organisation is divided into two parts: the Post Office Data Processing Service for its own internal services, and the National Data Processing Service for services to business firms and other external users.

In addition to stock control and telephone billing, computer systems are used for large-scale document and information retrieval systems, the Giro system, scheduling of mail vans in London, the LACES import-handling system at Heathrow airport (see p. 328), and control of revenue collection from television licences. In its 13 regional computer centres the Post Office Data Processing Service operates 40 computers. Techniques and equipment employed by the staff of over 4,000, of whom some 700 are systems analysts and programmers, include optical and magnetic ink character reader/sorters; direct keying of data on to discs and magnetic tapes; and the direct recording of data from magnetic tapes to micro-film.

'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.

Research

The Post Office is spending over £20 million a year on research and development, in collaboration with industry and the universities. A new £10 million research centre is being built at Martlesham Heath, Suffolk, to replace eventually the laboratories at Dollis Hill.

# 16 Employment

The Department of Employment, together with the Manpower Services Commission, is principally responsible for industrial relations, pay policy, employment, training and related manpower questions in Great Britain (see pp. 48 and 336). 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 1973 was 25.5 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 22.2 million employees (13.5 million men and 8.7 million women) in employment. The percentage of women (particularly those working part time) in the labour force is rising. The great majority of the working population work for a wage or salary, but about 1.8 million are employers or self-employed.

Northern Ireland, which has 2.8 per cent of the total population of the United Kingdom, has 2.3 per cent of its working population (see p. 335). Farmers and smallholders working their own holdings account for about

6 per cent of the working population.

The working population increased slowly until 1966, and declined between 1966 and 1971, since when it has been rising again (see Table 27). One reason for the fall after 1966 was the increased number in full-time education. During the late 1970s the number of males in the labour force is expected to remain approximately constant, while the number of females is expected to continue to increase.

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. Non-employed married women form the only substantial reserve.

Deployment of Manpower

Growth in

**Population** 

Working

The industrial distribution of employees is shown in Table 28. Of all employees about 36 per cent are employed in the manufacturing and mining industries and under 2 per cent in agriculture, forestry and fishing. Well over half of those in manufacturing are in the metal, engineering, vehicles and chemicals groups of industries.

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. It is illegal to employ women in certain jobs, such as underground work in coal mines. Women are chiefly employed in the food, drink and tobacco industries; the manufacture of electrical goods, textiles and clothing; the distributive trades; the financial, professional, scientific and miscellaneous services; and public administration.

The numbers given in Table 28 as working in an industry or service include those engaged on administrative, technical and clerical work, so that the totals

given for the production industries are greater than the numbers on productive processes. It is estimated that in April 1974 in manufacturing industries in Great Britain (comparable figures for Northern Ireland are not available) 27 per cent were administrative, technical and clerical employees (the ratio ranged according to industry from 13 per cent in clothing and footwear to 39 per cent in chemicals and allied industries).

### Manpower Research and Planning

As an aid to government manpower policies the Manpower Services Commission (see p. 336) maintains a continuing study of manpower resources and requirements for both the whole economy and for some particular industries and occupations.

The commission, through its Training Services Agency (see p. 336), 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—but has risen since then. 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 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. 205). The general unemployment rate in Great Britain in July 1974 was 2.6 per cent: the areas with the highest rates were Wales and Scotland and the North and North-West regions.

### Northern Ireland

The total working population of Northern Ireland—including employers and self-employed but excluding certain unpaid helpers—was about 578,700 in June 1973 (380,800 males and 197,900 females). The number of insured

TABLE 27: Manpower in Britain 1964-73

Thousandsa

Year	Numbers in civil employment <sup>b</sup>	Unemployed	Armed Forces <sup>c</sup>	Total working population <sup>c</sup>
At June: 1964 1965 1966 1967 1968 1969 1970 1971 <sup>a</sup> 1972 1973	25,076	349	424	25,849
	25,327	299	423	26,049
	25,476	281	417	26,174
	25,065	503	417	25,985
	24,883	542	400	25,825
	24,904	518	380	25,802
	24,709	555	372	25,637
	23,988	724	368	25,080
	23,981	806	371	25,158
	24,550	623	361	25,534

Source: Department of Employment.

<sup>b</sup> Part-time workers are counted as units.

<sup>&</sup>lt;sup>a</sup> Discrepancies between totals and their constituent parts are due to rounding.

<sup>&</sup>lt;sup>c</sup> The working population figures and the Forces figures include ex-Service personnel on leave after completing their service.

<sup>&</sup>lt;sup>a</sup> Estimates before 1971 are based primarily on counts of national insurance cards; estimates for 1971 and after are based on censuses of employment.

employees was 477,300. The largest productive industries are agriculture, engineering, textiles and clothing. Most of the agricultural work in Northern Ireland is done without hired help.

The unemployment rate in Northern Ireland has remained higher than in other parts of the United Kingdom. In July 1974 it was 5.7 per cent of insured employees. The Northern Ireland Department of Commerce has wide powers (similar to those 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. 208).

### **EMPLOYMENT SERVICES**

The main government employment services are provided in Great Britain through a country-wide network of 'jobcentres' (see p. 337) and employment offices. The running of them is to be transferred to the Manpower Services Commission from the Department of Employment. 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. Wide ranging changes are being made in the organisation of these services in Great Britain.

TABLE 28: Analysis of Civil Employment in Britain mid-1973 Thousands<sup>a</sup>

Industry or Service	Great Britain	Northern Ireland	Total
Employees:			
Agriculture, forestry and fishing	421	53	474
Mining and quarrying	361	2	363
Manufacturing industries:			
Chemicals and allied industries	424	2	426
Metals, engineering and vehicles	3,957	49	4,006
Textiles	555	39	594 441
Clothing and footwear	418 728	23 26	754
Food, drink and tobacco Other manufactures	1,582	27	1,609
Other manufactures	1,302	21	1,009
Total: manufacturing industries	7,664	164	7,828
Construction	1,338	49	1,387
Gas, electricity and water	335	9	344
Transport and communications	1,501	24	1,525
Distributive trades	2,690	63	2,753
Professional, financial, scientific and			
miscellaneous services <sup>b</sup>	6,327	141	6,468
National government service	583	40	1,583
Local government service	960	)	,
Total: employees	22,182	477	22,659
Employers and self-employed persons (all			
industries and services)	1,820	71	1,891
		1	-,
Total in Civil Employment	24,002	548	24,550

Sources: Department of Employment and Northern Ireland Department of Manpower Services.

<sup>b</sup> Excludes private domestic service.

<sup>&</sup>lt;sup>a</sup> Discrepancies between totals and their constituent parts are due to rounding.

Manpower Services Commission The Manpower Services Commission (MSC), set up under the Employment and Training Act 1973 to manage the Government's employment and training services, came into operation on 1st January 1974. Its responsibilities are exercised through two agencies, the Employment Service Agency (ESA) which is to be transferred to the MSC from the Department of Employment in October 1974, and the Training Services Agency (TSA) which became fully operational under the MSC on 1st April 1974. The agencies are statutory organisations each headed by a chief executive appointed by the MSC with the approval of the Secretary of State. The main object of the change is to transfer direct control from the Government to representatives of employers and employees and of local government and educational interests, who, together with the chairman, form the ten members of the MSC.

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, the Professional and Executive Recruitment (PER) Service, the Occupational Guidance Service and other employment services, operating the Training Opportunities Scheme (TOPS) and co-ordinating the activities of the in-

dustrial training boards (see p. 340).

and employees.

The MSC carries out its functions within a general policy framework agreed with the Secretary of State, and is responsible for expenditure in excess of £100 million a year. 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 local consultative committees on which employers, employees and other local interests are represented, so that it may secure the full benefit of local knowledge and the co-operation of employers

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. 144), certain functions in relation to redundancy payments, the issue of work permits to immigrants and international aspects of employment and training matters, the conciliation and advisory service, 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**Offices

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 1,000 local offices, which find jobs for 1.9 million people a year (some 20 per cent of the job changes 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.

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EMPLOYMENT

Fobcentres

Employment offices are being replaced by Jobcentres which provide self-service facilities in addition to other services. The first Jobcentre was opened in Reading in May 1973 and a network of 800 is to be in operation by the end of the 1970s.

Special Employment Services A commercial employment service (office and shop work) is available at all employment offices and also at a number of commercial employment offices. In the hotel and catering industry a specialist service is based on the Hotel and Catering Trades Exchange in London, and 20 hotel and catering trades sections elsewhere.

The Regular Forces Resettlement Service, in which the Department of Employment collaborates with the Ministry of Defence and the voluntary organisations concerned with ex-regulars, helps members of the Forces to achieve a satisfactory transition to civilian life.

In areas where there are large groups of hospitals, there are specially trained officers in the employment service to deal with the employment problems of nurses, midwives and those in related occupations or who wish to enter those professions. Elsewhere nursing employment work is done as part of the general employment service.

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. Each of the 38 offices is staffed by experienced 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.

Occupational Guidance Service The Occupational Guidance Service is available in 44 centres of population. It is available free to anybody over the age of 18 who has left school and who wishes to take expert advice before choosing or changing his occupation.

Careers Service Under the Employment and Training Act 1973 young people in Great Britain have a choice of employment services. Those under the age of 18 may use either the services of the Employment Service Agency (see p. 336)—which will provide for their particular needs—or the Careers Service provided by local education authorities; those over that age may continue to use the Careers Service. In addition, all local education authorities have a duty to provide a vocational guidance service for people attending educational institutions (except universities) and an employment service for those leaving them.

In Northern Ireland the functions of the Youth Employment Service are similar to those in Great Britain but its organisation is different in that the service is operated by a statutory board composed of representatives of local education authorities and other educational and industrial interests.

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. From October 1974, it will be run through the Employment Service Agency (see p. 336). All aspects of the service are under review.

Vocational guidance and help in finding jobs is given at employment offices by specialised disablement resettlement officers (DROs) who, where necessary, 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 (at present 3 per cent for all industries, except shipping in respect of the manning of ships) of registered disabled persons.

Industrial rehabilitation is provided at 26 units (including one linked with a medical rehabilitation unit). Attendance at a unit is voluntary and maintenance allowances are paid. Financial assistance is also given to various voluntary and other organisations operating approved industrial rehabilitation.

There are vocational training facilities for the disabled at skillcentres (see p. 340), 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 for about 8,000 registered severely disabled people who are unlikely to obtain work except under special conditions. The Department of Employment helps local authorities and voluntary organisations with the cost of providing facilities for sheltered employment for 3,245 severely disabled sighted workers and for 2,300 blind workers.

Mobility of Labour As part of the policy of assisting geographical mobility of labour within Britain to balance resources and demands, the department 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. They are available to unemployed workers moving away from home to take up employment; to key workers transferred by a firm into a development or intermediate area to inaugurate a new plant; 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 (see p. 205). The incentives include grants towards the cost of new buildings and equipment; help with training; and a regional employment subsidy.

Immigrant Workers In general, people coming to Britain for employment (including Commonwealth citizens who do not have the right of abode, see p. 13, but excluding nationals of European Community countries) need a work permit issued by the Department of Employment. This must be obtained 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 change their jobs with the approval of the department and normally their stay is extended if they remain in approved employment. After four years' approved employment the time limit on their stay may be removed and a worker may change employment without restriction. The issue of work permits is controlled by the Department of Employment in the light of the availability of suitable manpower from the resident population and subject to certain conditions regarding wages.

Nationals of the European Community countries do not require permits

(see below) but for other overseas workers 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, where suitable resident labour is not available to fill the post offered 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 men, unskilled and semi-skilled as well as skilled workers may, however, be admitted for work in the hotel and catering industry. Single men, women, and married men coming for joint employment with their wives are admitted for resident domestic work but permits are not issued to those known to have dependants. 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 and approved by the Department of Employment. Foreign nationals may also enter Britain as student employees on a short-term basis to enable them to improve their English.

In Northern Ireland employment permits 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 of about five years 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 injuries benefits. Workers who wish to remain in the United Kingdom for longer than six months must obtain a residence permit. If they are in permanent employment the residence permit will be valid for five years. If the employment is temporary (that is, expected to be of less than 12 months' duration) the permit will be 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.

#### INDUSTRIAL TRAINING

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 in the right jobs and to acquire new skills when old ones are no longer in demand. Since 1st January 1974, the Manpower Services Commission (MSC) operating through its Training Services Agency (see p. 336) is responsible for managing and developing the country's training programme.

### Industrial Training Act

The framework of training in industry and commerce is mainly based on the Industrial Training Act 1964, as revised by the Employment and Training Act 1973. There are 23 industrial training boards and the Foundry Industry Training Committee appointed to be responsible for the quantity and quality of industrial training in the industry concerned; 14 million employees or about 61 per cent of those in industry and commerce are covered.

Under the Employment and Training Act 1973 most of the Secretary of State for Employment's previous responsibilities for exercising control over the activities of industrial training boards have passed to the Manpower Services Commission. Exchequer funds are available to cover the boards' operating expenses, including advisory services and for grants for certain key training activities; the boards also have powers to raise levies to finance other training activities. The previous levy/grant system is replaced by a levy/grant/exemption system and the levy rate normally limited to 1 per cent of employers' payrolls. The boards' plans and budgets are agreed with the Training Services Agency for a running 5-year period.

A body sponsored by the MSC is the Industrial Training Service (ITS) which is independent and non-profit-making and helps companies, employers' associations and industrial training boards in any industry in the identification of training needs, the formulation of training policy, job analysis for any occupational categories, training programme design and the assessment of training effectiveness.

### Government Training Opportunities Scheme

The Government 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 over 50 skillcentres (SCs) which are within easy reach of the main industrial areas of the country. Courses are available in over 60 different trades. Most courses last for six months but a few are longer. 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 allowances which vary according to the number of their dependants and their former earnings. Allowances are substantially higher than unemployment benefit.

The Government is expanding the scheme substantially. Some 40,000 people were trained under TOPS in 1973, and it is hoped to train 70,000 to 75,000 in 1976.

### Other Training Services

The Government also offers industry a wide range of training facilities outside the scope of the TOPS. The Training Within Industry Scheme (TWI) is intended to develop the skills of supervisors in instructing and communicating, in improving methods and in preventing accidents. Special courses are available for supervisors employed in offices, retail distribution and hospitals, and for staff engaged in export procedures, and there is also an in-plant training development service to aid selection and further the training of operatives and clerks as instructors. 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 assist-

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ance provided jointly by the Department of Employment and the Ministry of Overseas Development).

Training Aids in the Assisted Areas

Certain training services, previously available free to firms expanding in assisted areas, are now available to all firms; these 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

Though 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, until recently there were relatively few legal restrictions on the right of an employer to hire an employee on any terms which he would accept and to dismiss him at will. The employee in general looked to his trade union to protect him. The determination by statute of minimum wages, holidays and holiday pay was in principle confined 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. 345). However, the Trade Union and Labour Relations Act 1974 (see below) and other recent legislation 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 under recent legislation, 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 comprehensive information on 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 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 as a whole. The Trade Union and Labour Relations Act 1974 gives protection against unfair dismissal by providing machinery under which an employee may bring an action against an employer for unfair dismissal, and seek re-engagement or compensation; gives legal support to the right to trade union organisation by making it illegal to dismiss, or to discriminate against, a person because he is or proposes to become a member of an independent trade union; gives protection on reasonable grounds for people not wishing to be members of an independent trade union, where a union membership agreement is in force; and lays 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 Race Relations Act 1968 (see p. 144) 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.

Other legislation prescribes minimum standards of safety, health and welfare in most places of employment (see pp. 350-4). 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 entitlements for many manual workers are determined by national collective agreements or statutory wages regulation orders. For men these range from about £0.30 to £1.00 per hour. Separate rates for men and women are less frequently specified as the date for full implementation of the Equal Pay Act 1970 approaches. 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 regularly 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 1973 were £0.90 an hour and £40.92 a week. Full-time women manual workers at the

same date earned an average of  $f_{0.56}$  an hour and  $f_{21.16}$  a week.

Minimum time rates for women manual workers tend to be lower than the corresponding male rate, though the gap is gradually closing. 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 provides that from 29th December 1975 a woman doing the same or broadly similar work to a man will qualify for equal pay and conditions of employment.

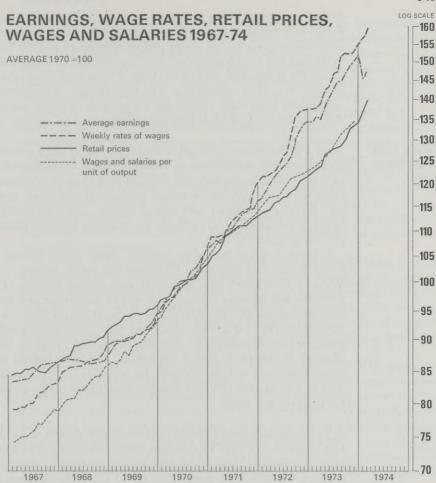
Between October 1963 and October 1973 average weekly wage rates increased by 123 per cent and the average weekly earnings of manual workers, before tax and national insurance deductions, by 153 per cent. Part of the increase has been offset by a rise in retail prices of about 80 per cent and by larger national insurance contributions and income tax. The trends of earnings, wage rates, retail prices, wages and salaries per unit of output from 1964 to 1973 are shown in the diagram opposite.

### Salaries and Fees

Remuneration in commercial, technical and professional careers is normally by annual salary, often on a scale carrying annual increases, and such careers generally afford opportunities for promotion to posts with higher remuneration. Starting salaries may be in the range of f,1,500-f,1,800 (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 1973 were about £,48 for men and £,25 for women. On average, salaries doubled between 1963 and 1973.

Most of the senior posts in business, the professions and the Civil Service are in the range of £6,000 to £12,000 a year gross before tax. The posts with salaries in the range of £15,000 to £25,000 a year include those of Cabinet Ministers, top-ranking judicial appointments, the highest positions in government departments and the largest municipal authorities, editors of daily newspapers, some persons outstanding in their professions and in the higher managerial posts in industry, commerce and banking. The earnings of a few persons in business, star entertainers and certain other very successful people exceed  $f_{.50,000}$  a year gross.

A Royal Commission on the Distribution of Income and Wealth was set up in July 1974 to inquire into, and to report on, such matters concerning the distribution of personal incomes, both earned and unearned, and wealth as



may be referred to it by the Government. The commission, whose setting up forms an integral part of government policy on industrial relations and collective bargaining, will work in close co-operation with other bodies involved.

Women have the same right of entry as men to nearly all public offices, administrative posts and professions. As civil servants, Ministers of the Crown, Members of Parliament, salaried magistrates and solicitors, and in journalism, broadcasting and architecture they are paid the same salary as men for doing the same kind of work. Women in independent professions are not expected to charge lower fees than men. As already stated equal pay as between men and women will be enforced in all occupations from the end of 1975 (see p. 342).

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 normal hours, on account of overtime; in October 1973 they were 45.6 compared with 37.7 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. 350) 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 or first in June, the last Monday in August or first in September and the first weekday after Christmas (Boxing Day); and in Scotland on New Year's Day, 2nd January (in the civil service, banks and most major industries but on another additional day elsewhere), the last Monday in May or first in June and the last Monday in August or first in September. 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 pension schemes. Many employees are also covered by occupational sick pay schemes (additional or complementary to the State schemes, see p. 125). A smaller number are covered by schemes for redundancy payments above the statutory minimum (see p. 341). Such benefits are more usual among clerical and professional employees receiving a standard salary than among manual workers with a chance to earn overtime and other additions to their pay. Senior members of firms may use a company car and some firms provide profit-sharing schemes and share-saving schemes under the 'Save As You Earn' scheme (see p. 368).

Office of Manpower Economics The Office of Manpower Economics was established in 1971 as an independent non-statutory body, with three functions: to act 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; to service enquiries on particular pay structures and related problems; and to carry out research on more general matters affecting pay and manpower, either at the request or with the approval of ministers.

INDUSTRIAL RELATIONS

The structure of labour relations in Britain has been established mainly on a voluntary basis. The system rests mainly on the organisation of employers and workers into employers' associations and trade unions. These organisations discuss and negotiate terms and conditions of employment and other matters

affecting people at their work. In the past the emphasis has been on detailed industry-wide agreements supplemented as necessary by local agreements in firms or factories, but a gradual change of attitudes and structure has led to more emphasis being placed on formal agreements at firm and factory level. In some industries, firms and factories, negotiations are conducted simply by meetings of employers' and employees' representatives, which are held when necessary; in others, voluntary joint 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. Some of them only negotiate. Others discuss a wide range of topics. But the scope of the bodies is tending to widen and the distinction between discussion (or consultation) and negotiation to become blurred. 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 arbitration.

Standing arrangements exist for consultation at national level between the Government, the Confederation of British Industry (CBI) (see p. 346), the Trades Union Congress (TUC) (see p. 347) and the nationalised industries through the National Economic Development Council on matters in which employers and workers have a common interest. The operation of collective bargaining has from time to time been restricted in the national interest by

government policies to combat inflation (see p. 192).

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. 409) and the Medical Research Council (see p. 403). 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 feepaying 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 may submit proposals for fixing minimum remuneration and holidays with pay to the Secretary of State who must then make orders giving statutory force to such proposals, subject only to his right to return them as a whole for further consideration by the councils. 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 3.25 million workers are covered by such arrangements.

Agricultural wages boards (there are separate boards for England and Wales and for Scotland) perform similar functions in relation to employment in agriculture.

Legal Framework

The Trade Union and Labour Relations Act 1974 defines the status of trade unions and employers' associations and sets out certain legal requirements which they must observe. It confers responsibilities on them in respect of

actions taken in the course of a trade dispute; confirms the right to picket peacefully and also provides that collective agreements shall not be legally enforceable unless they specifically provide for this. Workers are given the right not to be unfairly dismissed and their right to belong to an independent trade union is safeguarded.

### Employers' Associations

Many employers in Britain are members of employers' organisations wholly or partly concerned with labour questions. 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.

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 a particular industry. In some of the chief 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 these different sections of the industry as well as for the industry as a whole. Although there are some 1,400 employers' organisations dealing with labour matters, most of these are local branches of national organisations. There are over 100 of these, most of which belong to the CBI and they negotiate the national collective agreements for their industry with the trade unions concerned.

The final authority of a local or small national organisation 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 organisation's day-to-day work. 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.

The Confederation of British Industry

The principal organisation representing employers is the CBI, which deals with all matters (not only labour relations) 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 Communities. 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 sit on various government advisory committees, on other statutory bodies, such as the Manpower Services Commission, and on voluntary bodies concerned with labour matters.

#### **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. The qualification for membership of some unions is occupational (for instance, they may recruit clerks or fitters wherever employed), while in most others the qualification is industrial (that is, they seek to recruit all employees in an industry, whatever their occupation). In many unions recruitment is based on a combination of these principles.

At the end of 1972 the total membership of British trade unions was about 11 million. There were 466 unions, but over 77 per cent of all trade unionists were in the 25 largest unions each with a membership of 100,000 or over, while under 1 per cent were in the 232 smaller unions with under 1,000 members each.

The number of trade unionists has increased during the last decade but the number of unions has fallen owing to amalgamations. In Northern Ireland some 80 per cent of trade unionists are members of unions with headquarters in Great Britain.

The Registrar of Friendly Societies is required to maintain a list of trade unions. To be eligible for entry on the list their principal purposes must include the regulation of relations between workers and employers, or between workers' and employers' associations or their constituent or affiliated organisations.

The central organisation of most large unions consists of a national executive council, usually elected by and responsible to annual conferences 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 factory/plant pay agreements with managements, 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 support the Labour Party financially.

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 126 organisations, some of which are themselves federations of smaller organisations. Together

Trades Union Congress they represent about 10 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 Congress, which constitutes the TUC proper, meets for a week every year to discuss matters of concern to trade unionists and to employees generally. It elects annually a General Council which represents it during the remaining 51 weeks of the year. This is responsible for carrying out Congress decisions, for watching economic and social developments, for providing educational and advisory services to unions, and for presenting to the Government the trade union viewpoint on economic, social and industrial issues. It is also empowered to mediate in inter-union disputes in certain circumstances and its activities for this purpose were enlarged following a special Congress in June 1969 and subsequent agreement with the Government. The General Council undertook to use its authority to deal with unauthorised and unconstitutional stoppages of work, as well as the inter-union and official disputes with which it had dealt previously.

Both the TUC and many unions conduct extensive educational services for members, mainly concerned with industrial subjects, trade unionism and industrial relations principles and practice.

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' delegate to the International Labour Conference.

The 1973 Congress adopted proposals for the establishment of eight TUC regional councils in England, based on the Government's eight planning regions (see p. 190), 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, came into operation in May 1974 and replaced the previous twelve TUC regional advisory committees. They also 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 with Scottish membership 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, though the majority of trade unionists in Northern Ireland belong to unions based in Great Britain.

State Provision for Conciliation, Arbitration and Investigation In September 1974 the Secretary of State for Employment set up an independent Conciliation and Arbitration Service, which is controlled by a council consisting of a chairman and nine other members experienced in industrial relations.

The service has the duty of offering conciliation in both the public and private sectors where this is considered likely to be of assistance, and has discretion in meeting requests for conciliation subject only to the need to pay regard to agreed procedural arrangements in the industry or area of employment concerned. Where there are such procedures, the service does not normally intervene unless efforts to obtain a settlement within these procedures have failed.

The service also, at the joint request of the parties in dispute and with regard to the need to safeguard negotiating procedures, appoints single arbi-

trators or boards of arbitration chosen from a register of people experienced in industrial relations to determine differences on the basis of agreed terms of

The Secretary of State is also empowered to appoint a court of inquiry or committee of investigation into a dispute, whether existing or apprehended. These procedures are primarily means of informing public opinion of the facts of a dispute (the report of a court of inquiry has to be laid before Parliament). Although the recommendations contained in the reports of such bodies are not binding on the parties, they often provide the basis for further negotiations leading to a settlement.

Labour Relations of

While industrial relations in government service and in the nationalised industries are, in general, organised on the same principle as in private industry, Public Authorities 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 (see p. 45), are permitted and encouraged to join the appropriate Civil Service trade unions and there is a highly developed system of negotiation and joint consultation by means of the National and Departmental Whitley Councils (see p. 62). 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 Industrial Arbitration Board (see above).

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 in their industries and for joint consultation with their employees; in carrying out these duties they are free to choose suitable arrangements. The main difference from private industry is that 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 Department of Employment (see p. 48), but coalmining and rail transport have their own special arrangements. Consultations at all levels, including the workplace, have been arranged in all the nationalised industries.

### Industrial Disputes

As in many other countries time lost through industrial disputes has risen in Britain in recent years, though it is still very much less than time lost through sickness, accidents and absenteeism. In 1972, when major disputes occurred in coalmining, docks, engineering and building, nearly 24 million working days were lost, involving some 1·7 million employees; but this figure dropped sharply in 1973, when only 7·2 million working days were lost, involving some 1·5 million employees.

### Northern Ireland

Northern Ireland has its own system of industrial relations under which certain powers and responsibilities devolve upon the Department of Manpower Services.

#### 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. 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 was introduced by the Government in July 1974 to reorganise the system under which safety and health at work are safeguarded, to extend it (with effect from 1st April 1975) to cover initially everyone at work and to further the protection of the general public from industrial hazards.

A Health and Safety Commission, with members representing employers, trade unions and local authorities, is to be set up on 1st October 1974, together with an Executive, to be established on 1st January 1975. These will take over responsibility for the existing government inspectorates covering factories, mines and quarries, explosives, nuclear installations and alkali works, and to

develop and carry out policy on health and safety matters.

From 1st January 1975 the basic obligations laid down in the Health and Safety at Work etc. Act 1974 will be supported by Ministerial powers to make regulations dealing with particular hazards to health and safety issued by the commission and by codes of practice for improving standards of protection of employees and the public in specific situations. In particular the Act gives inspectors the power to issue improvement and prohibition notices, which enable them to require practical improvements to be made within a specified time or to require preventive measures immediately without first having to obtain a court order. There are provisions for appeals to industrial tribunals against such notices.

### Safety Regulations

About 270,000 industrial premises (factories, warehouses, shipyards, docks and construction sites) are regulated under the Factories Act 1961, which is enforced by Her Majesty's Inspectorate of Factories (to be transferred to the new Health and Safety Executive). About 750,000 premises are subject to the Offices, Shops and Railway Premises Act 1963, whose enforcement is shared by Her Majesty's Inspectorates of Factories and of Mines and Quarries (also to be transferred to 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 fire and special risks; the safe condition of the

premises; and cleanliness, lighting, temperature and ventilation. Anyone intending to employ other people in industrial or commercial premises to which the Acts apply has to notify the enforcing authority of his intention before he begins to employ people and every fatal accident and every accident causing more than three days' incapacity must be reported. The Factories Act includes provisions for the compulsory notification and investigation of certain dangerous occurrences, for precautions against dangerous substances and about 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 (to be part of the new Health and Safety Executive), the Agricultural Inspectorate of the agricultural departments, and the Railway Employment Inspectorate of the Department of the Environment. (The Health and Safety at Work etc. Act 1974 provides for separate administration of the Agricultural and Railway Employment Inspectorates, and for the Building Regulations, which are the responsibility of the Department of the Environment.) 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 are delegated to the Civil Aviation Authority, see p. 323), and the Department of the Environment is responsible for road and rail transport safety matters. Safety requirements in hotels, places of entertainment or educational establishments are covered by the 1971 Fire Precautions 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 1974 amends this Act to allow for the transfer to fire authorities of responsibilities for general fire precautions and means of escape. The Radiological Protection Act 1970 has been amended to provide for co-ordination of the activities of the commission and the National Radiological Protection Board (see p. 398).

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, transport plant and equipment, by traffic regulation and control of standards of maintenance and by training crews in competency and safety awareness.

To safeguard the many interests which might be adversely affected by the use of chemicals in agriculture and food storage, a voluntary scheme is operated by the Government with the help of an advisory committee and with the full co-operation of the chemical industry.

The National Coal Board has its own safety organisation—a Standing Committee on Safety, a chief safety engineer, and safety engineers at divisions, areas and the largest collieries.

The Promotion of Safety
Measures

The Health and Safety Commission will encourage 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 enquiring into notified accidents and safety aspects of machine design and specification, circulates expert advice by personal exhortation, lectures and literature, 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. Representatives of the Trades Union Congress, the Confederation of British Industry, the nationalised industries and other interests meet on the Industrial Safety Advisory Council under the chairmanship of the Secretary of State. The Royal Society for the Prevention of Accidents (RoSPA) and the British Safety Council are two major national bodies concerned with accident prevention. A number of local accident prevention groups are affiliated to either RoSPA or the British Safety Council. These groups serve as forums where questions of industrial safety can be examined and knowledge of accident prevention exchanged.

Training and Research in Safety Training is important in accident prevention and the Training Services Agency (see p. 336) provides a safety course in its TWI scheme and the industrial training boards include specific provisions for safety training in their training

recommendations (see p. 340).

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, 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 Department of Energy has a statutory responsibility for research concerning the safety and health of coal miners. This responsibility is largely exercised through its Safety in Mines Research Establishment (to be transferred to the Health and Safety Executive in January 1975).

The University of Aston has established a Chair in Safety and Hygiene to help 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 Local authorities have power, under the Public Health Acts, to regulate the provision of suitable sanitary accommodation at places of work and to treat

workplaces which are dirty or badly ventilated or overcrowded as nuisances the abatement of which can be enforced. Factories, certain other industrial premises, offices, shops and railway premises must comply with the health and welfare requirements of the Factories Act or the Offices, Shops and Railway Premises Act. These include: the cleanliness of workrooms, adequate ventilation and suitable temperature and lighting, the avoidance of overcrowding and the provision of sanitary accommodation, and the protection of workers against inhaling harmful dust or fumes; and the provision of washing facilities, lockers or other accommodation for outdoor clothing, drinking water, first aid and seats.

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 (see p. 151) in any industrial undertaking; of women and young people underground in mines and in certain other dangerous occupations (for example, certain processes connected with lead manufacture); and of women in factories and workshops within four weeks after childbirth. It also limits and defines the permissible hours of employment for women and young people (see p. 344). 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.

There are special arrangements for the medical care of people at work. The former Appointed Factory Doctor Service of the Department of Employment, which dealt mainly with the periodic medical examination of young people in industrial establishments and of workers in certain hazardous occupations, was replaced in February 1973 by the department's Employment Medical Advisory Service (EMAS), under the Employment Medical Advisory Service Act 1972. (Responsibility for running the service is to be delegated to the new Health and Safety Executive.) EMAS provides a nation-wide service of advice on the medical aspects of employment problems to employers, employees, trade unions, doctors and others. In particular it carries out the periodic medical examination of workers in hazardous occupations as required under factories legislation, and in conjunction with school medical officers and careers officers advises young people who are starting work and whose school medical records reveal a need for special care in choice of employment.

The service, headed by a Chief Employment Medical Adviser, has over 100 employment medical advisers who will be based in the country's main industrial centres. An EMAS committee has been set up to advise the department on the development of the service. Its members are nominated by the Confederation of British Industry, the Trades Union Congress, and other interested organisations.

### Health Services in Industry

Many employers voluntarily maintain medical services for their employees over and above the statutory requirements. It is estimated that there are some 397 factories with doctors providing full-time medical cover and some 3,922 factories with part-time medical cover. In addition several thousand nurses are employed in industry. 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. The Secretary of State is advised on measures to further the development of health services in workplaces covered by the Factories Act by the Industrial Health Advisory Committee, which includes members nominated by the Confederation of British Industry, the Trades Union Congress,

the nationalised industries, the British Medical Association, the Royal College of Nursing and other organisations closely concerned with the promotion of industrial health.

Advice and Research The Factory Inspectorate gives advice on occupational hygiene problems and has an industrial hygiene unit, with laboratory facilities. There are some six centres in Great Britain (including the TUC's Institute of Occupational Health) which undertake studies of particular problems or health risks and also carry out routine physical, chemical and biological tests for industry.

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.

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, with some exceptions, is similar to that in Great Britain and 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 industrial accident prevention.

## 17 Finance

### THE PUBLIC SECTOR

PUBLIC EXPENDITURE Public expenditure comprises 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 in 1973–74 amounted to about £33,800 million, of which 60 per cent was by the central Government, 32 per cent by local authorities, and 8 per cent, 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 29.

Between 1963 and 1973 total public expenditure grew in real terms by

61 per cent.

The social services programmes now take 41 per cent of the total, whereas in 1960 they represented just over 35 per cent. On the other hand defence expenditure has declined from 17 per cent to just over 10 per cent.

Out of total public expenditure of £33,800 million in 1973-74, some

TABLE 29: Public Expenditure 1973–74	£ million		
Defence and external relations Defence Overseas services	3,420 581		
Commerce and industry Agriculture, fisheries and forestry Trade, industry and employment	587 1,978		
<i>Nationalised industries</i> Nationalised industries' capital expenditure	1,879		
Environmental services Roads and transport Housing Other environmental services Law, order and protective services	1,562 2,360 1,828 971		
Social services Education and libraries, science and arts Health and personal social services Social security	4,571 3,598 5,559		
Other services Other public services Common services Northern Ireland	469 443 824		
Total programmes Debt interest	30,630 3,186		
Total	33,816		

Source: National Income and Expenditure 1963-73.

£19,900 million or 59 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 of public expenditure. 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.

Public Expenditure Surveys Up to 1960 discussion of public expenditure centred on the expenditure of the central Government departments, including grants to local authorities, set out in the annual Supply Estimates which were presented to and approved by Parliament for one year ahead. These Estimates did not (and do not) cover certain major areas of public expenditure, such as the nationalised industries' capital expenditure, the bulk of the payments from the national insurance fund, and local authorities' expenditure financed from the local rates (see p. 71). Following the recommendations of the Plowden Committee on the Control of Public Expenditure in 1961, surveys were instituted of the whole range of public expenditure, for the period five years ahead. The surveys take place each year, rolling forward the period to be covered. They are 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 over the whole area over which the Government has control or influence. The five-year period covered by the surveys gives the Government the opportunity to plan ahead significant changes without causing wasteful disruption in existing services, and to have regard to the overall economic outlook when taking decisions.

The initial recosting normally takes place in the first half of the year, to be followed by ministerial consideration of the survey report. Since 1969 the public expenditure plans as settled by the Government have been published (see Bibliography p. 477) towards the end of the year, forming the basis of an annual public expenditure debate in the House of Commons. From 1974–75 the form of the Supply Estimates has been revised to bring them into line with the functional classification shown in Table 20.

In 1971 the Expenditure Committee of the House was created, replacing the Estimates Committee, to consider public expenditure, and its reports provide further information on which the debates can draw. The Expenditure Committee has formed 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 relations; education and the arts; employment and the Home Office; social services; trade and industry; and environment. These committees can question departmental ministers as well as their officials, and can take evidence also from witnesses outside Government.

**Estimates** 

Each department submits its estimates to the Treasury in the December before the financial year beginning on the following 1st April.

After they have been approved by the Treasury, the Estimates are presented to Parliament shortly before the presentation of the Budget (see p. 358) and are approved by Parliament, by means of an annual Appropriation Act, in

FINANCE

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. Although Estimates can be debated on these days, normally broad issues of policy are 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 and has its balance held in the Exchequer account at the Bank of England. The National Loans Fund, set up in 1968, 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. 364).

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

Control over issues of money to departments and the audit of accounts is exercised by the Comptroller and Auditor General, a permanent officer of the Crown. Since 1866 he has had two functions: as Comptroller he controls receipts and issues of public money to and from the Consolidated Fund and the National Loans Fund, and as Auditor General he audits departmental accounts and submits his report on the Appropriation Accounts and other accounts, as required by statute, to Parliament. His statutory function is to ensure that all expenditure is properly incurred, for example, that no payments are made which go beyond any relevant statutory authority, and that Treasury sanction has been obtained wherever necessary. In addition, however, he has been encouraged by successive Public Accounts Committees (see below) to examine departmental expenditure for cost-effectiveness with a view to drawing their attention to any cases of apparent waste or extravagance.

The Public Accounts Committee The accounts of each department and the reports on the accounts made by the Comptroller and Auditor General are considered by a House of Commons select committee called the Public Accounts Committee. This was first set up in 1861 for the purpose of ensuring that expenditure was properly incurred in accordance with the purpose for which it was voted and with any relevant Acts of Parliament. The terms of reference of the committee are simply to examine the accounts and these terms have been widely interpreted by successive committees which 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 therefore become a powerful instrument for the exposure of waste and inefficiency. It embodies the findings in reports which may be debated in the House of Commons. Its recommendations are considered by the Treasury in consultation

with departments and put into effect, so far as they are accepted, according to Treasury instructions. A reply to each report is submitted to Parliament by Treasury Minute and both documents are debated at the beginning of the following 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. 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 the Chancellor's assessment of the position and prospects of the economy as a whole.

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.

The Budget is principally an instrument of economic management, and the Budget speech is normally the main occasion for a review of general economic policy. The scale of Government 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. Taxation provides the Government with a means of exerting a considerable influence on the pressure of demand. Taxation 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 whatever procedure is appropriate to implement them—separate legislation, statutory instruments or administra-

tive 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.

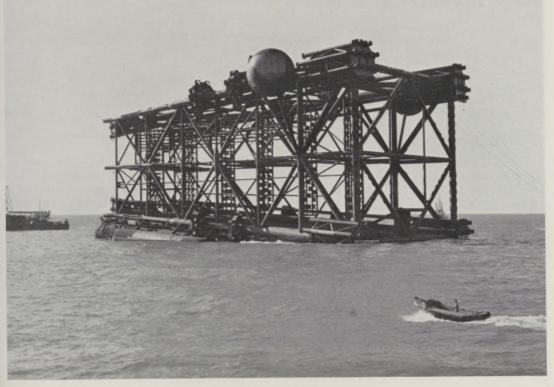
The bulk of the taxation proposals in the Budget are concerned with changes in the rates or coverage of existing taxes, the introduction of new taxes or the abolition of existing ones, and changes in the administrative machinery relating to taxation. In two cases however—income tax and corporation tax—annual 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. It is this which makes a Budget at or about the beginning of each financial year a necessity.

### North Sea platforms

The smallest of a series of six platforms for the Viking natural gasfield.

A 30,000-ton off-shore oil production platform for the Forties Field floating on its side before being put into an upright position for installing on the sea bed 370 ft below.





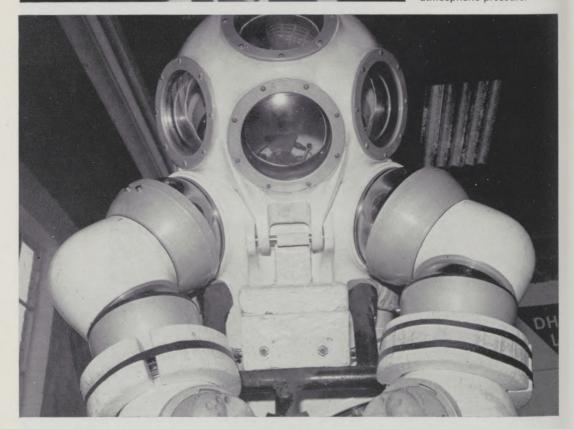


## Equipment for off-shore operations

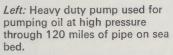
From top: Power anchor for securing rigs.
Underwater electric arc welding equipment.



Magnesium alloy deep-sea diving suit enables divers to operate at normal atmospheric pressure.



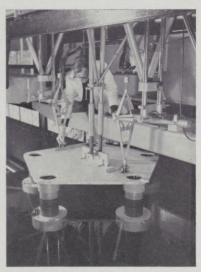




Below: Unsinkable reinforced plastics mooring buoy.







Above: Researching oil rig stability.

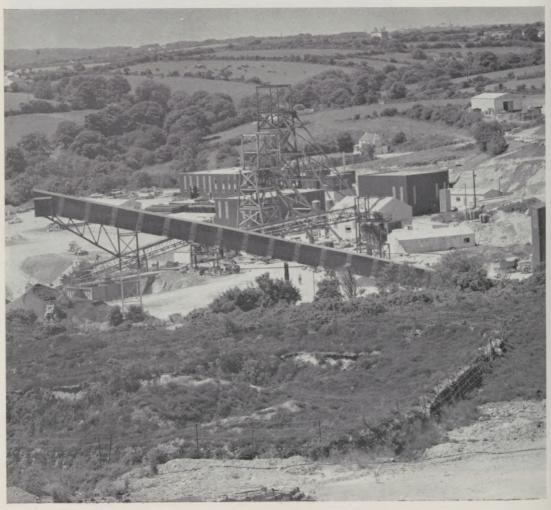
Left: Havdrill, one of the world's most modern drill ships.

### **New mines**

Potash mine in the North Yorkshire Moors, came into operation in 1974.



Tin mine in Cornwall, the first to be brought into production in Europe for over 50 years.



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New taxes and changes in certain existing taxes, like other changes in statute laws, do not come into effect until 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 other times in the year 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. 477) which is laid before the House of Commons by the Chancellor of the Exchequer when opening the Budget. The report is in three parts: the economic context of the Budget; the accounts of the public sector; and the accounts of the central Government for the past financial year and the one immediately ahead. The accounts are designed to assist in assessing the impact of changes in revenue and, where relevant, 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. 367) 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 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, although some nationalised industries and local authorities have obtained statutory power enabling them to borrow, 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 March 1974, the central Government's borrowing requirement for 1974-75 was expected to be £1,525 million, compared with £2,423 million in 1973-74 and that for the public sector as a whole £2,733 million compared with £4,276 million in 1973-74. In July 1974, the Government announced an additional public sector borrowing requirement estimated at £340 million.

Table 30 shows total revenue from taxation and other sources in 1973-74 and 1974-75 together with the effects of the Budget changes.

### **Budget Changes**

In the Budget presented in March 1974 the Chancellor of the Exchequer introduced a wide range of measures designed to redistribute income and move the

burden of taxation away from those with low incomes. The main aim of the Budget was to bring about a social unity that would help in arresting inflation and reducing the balance of payments deficit.

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 estate duty and capital gains tax (for proposed new taxes, see p. 362); 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, stamp duties and licence duties (for example, on motor vehicles). Taxes on individual (but not corporate) incomes are progressive taxes in that large incomes and estates 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.

Far-reaching changes in the structure of personal and company taxation and in taxes on expenditure were introduced in 1973. A single graduated personal tax replaced the old system of income tax and surtax. Company taxation was reformed on the basis of an imputation system. A 10 per cent VAT became operative, replacing selective employment tax and purchase tax which were abolished. In July 1974 the rate of VAT was reduced to 8 per cent (see p. 363).

**Income Tax** 

Income tax is imposed for the year of assessment beginning on 6th April. The rates of tax introduced in the March 1974 Budget are as follows: under the unified system of direct personal taxation the basic rate of 33 per cent applies to the first £4,500 of taxable income (that is, total income less deductions and personal allowances), a rate of 38 per cent is charged on the £4,500-£5,000 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. These rates are charged on both earned and investment incomes; larger investment incomes are also liable to a surcharge of 15 per cent on the amount by which they exceed £2,000. The tax imposed on an individual is graduated by means of personal allowances and reliefs. 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 personal allowance instead of the married allowance.

A single person earning £2,000 a year pays £453.75 in income tax, while a married man with the same earned income pays £374.55; if he has two children under the age of 11 and his earnings plus the family allowance total £2,000 his tax falls to £233.31; when the children are between the ages of 11 and 16, the tax is £210.21; if the children are over 16 and receiving full-time education, £190.41. The range of tax (including the higher rates under the unified system) payable by a single person varies from, for example, £123.75 on an earned income of £1,000 a year to £10,768.75 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

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TABLE 30: Taxation and Miscellaneous Receipts 1973–74 and 1974–75.

				£ muuon
	1973–74		1974–75 Estimate	
	Budget Estimate	Pro- visional outturn	Before Budget changes	After Budget changes
Taxation Inland Revenue: Income tax Surtax Corporation tax Capital gains tax Death duties Stamp duties Other	7,233 360 2,045 225 398 203	7,058 305 2,245 320 405 190 2	9,415 170 2,845 320 380 165	9,682 200 3,265 320 380 240
Total Inland Revenue	10,464	10,525	13,295	14,087
Customs and Excise: Value added tax Purchase tax Oil Tobacco Spirits, beer and wine Betting and gaming Car tax Other revenue duties Protective duties, etc. Import levies	1,150 350 1,650 1,030 854 190 120 7 360 40	1,425 380 1,580 1,065 945 186 100 9 435 25	2,495 1,610 1,075 975 205 125 10 525 45	2,700 
Total Customs and Excise <sup>a</sup>	5,751	6,150	7,065	7,650
Motor vehicle duties	500	535	540	540
Selective employment tax (gross)	39	40	_	_
Total Taxation Miscellaneous Receipts Broadcast receiving licences Interest and dividends Other	16,754 147 90 460	17,250 153 111 536	20,900 161 125 625	22,277 161 125 625
Total	17,451	18,050	21,811	23,188

Source: Financial Statement and Budget Report 1974-75.

<sup>a</sup> Includes Customs Duties and Agricultural Levies accountable to the European Communities as 'own resources'.

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

Since April 1973, companies pay corporation tax at a single rate on all their profits, whether distributed or not. However, only a proportion of any capital gains is included in total profits, with the result that chargeable gains as a whole are subject to a lower effective rate of tax. Income tax is no longer deducted from dividends but a company which distributes profits to its share-

holders is required to make to the Inland Revenue an advance payment of corporation tax. In general, this advance 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. For 1974-75, companies are required to pay a supplement (equal to half their advance corporation tax) which is allowed against their corporation tax liability for the year.

The rate of corporation tax is fixed retrospectively in the Budget for the past financial year; for 1973-74 it is 52 per cent with a reduced rate of 42 per cent for small companies (as defined in the Finance Acts 1972 and 1974). 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.

Taxes on Capital

In August 1974 the Government announced its intention to introduce later in 1974 a comprehensive tax on lifetime gifts to mesh in with the existing estate duty, so as effectively to replace it with a comprehensive tax on all transmissions of personal wealth. The tax is called Capital Transfer Tax.

At the same time the Chancellor of the Exchequer announced the Government's intention to introduce an annual tax on wealth, but only after a thorough public discussion about its form, rates and relationship with other forms of taxation had taken place. The first step towards this was the publication of a consultative document.

**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 for persons other than companies is 30 per cent, but in the case of individuals may be less, depending on their circumstances. Certain assets are exempt from tax, including the principal private residence, chattels worth less than f,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. The 1971 Finance Act also exempted an individual from capital gains tax where the total proceeds of disposals do not exceed £,500 in any year. All gains are now subject to long-term capital gains tax whatever the length of period of ownership, except for gains on gilt-edged securities which continue to be exempt from capital gains tax if held for more than 12 months.

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, alcoholic drinks, protective duties, betting and revenue duties. In British usage the distinction between customs and excise depends on whether the goods are imported (customs duties) or produced in Britain (excise duties). 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. The Treaty of Accession to the European Community provides that the revenue duties should be gradually converted to internal taxes chargeable alike on imported and home-produced goods. All the revenue duty goods (other than hydrocarbon oil for non-road use) are subject to the standard rate of VAT.

The Chancellor of the Exchequer has power to vary between Budgets the rate of VAT by up to 20 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 March 1974 Budget increased the duty

on tobacco, spirits, wine and beer.

Value Added Tax

Value added tax (VAT) is collected at each stage in the production and distribution process (unlike purchase tax which was collected at a single stage). 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, unlike purchase tax, VAT entering directly into export costs can be reclaimed.

VAT, which is chargeable at the standard rate of 8 per cent, 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 included in the price of these goods or services. 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 and lotteries; finance; education; health; and burial and cremation.

The first Budget in 1974 extended VAT to include confectionery, some

manufactured beverages and hydrocarbon oil for private use.

Betting and Gaming Duties

Car Tax

New cars, 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.

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.

Motor Vehicle Licence Taxes Taxes on motor vehicles are collected for the Department of the Environment by local post offices; the proceeds are paid into the Consolidated Fund. The licence duty on a private motor car is £25 a year; motor cycles and three-wheel vehicles, etc., pay £2.50, £5 or £10 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 1974 the total National Debt was estimated at £40,122 million, of which £1,543 million was repayable in currencies other than sterling, mainly to the United States and Canadian Governments. Of the £38,519 million of internal debt, £6,399 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  $2\frac{1}{2}$  to 12 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. Revenue also accrues from taxes such as rates and some licence fees. The revenue required to meet the cost of devolved services is derived from the Northern Ireland share of the yield of United Kingdom taxes which is paid out of the Consolidated Fund of the United Kingdom into that of Northern Ireland, from the product of taxes levied locally, and from certain non-tax revenue which accrues locally. This revenue may be supplemented by an annual sum voted to the Secretary of State. (Loans from the United Kingdom National Loans Fund will continue to be available—up to a limit of £350 million which may be increased to £450 million by order—to finance capital expenditure programmes in Northern Ireland.)

Various funds have been established in Northern Ireland, in addition to statutory Reserve and Sinking Funds, for specific purposes. In general, these 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 1974 a sum of approximately £400 million was outstanding against such borrowers.

### THE CENTRAL BANK

The British banking system is long established and well integrated. It comprises a central bank; deposit banks which perform the usual main banking services; the United Kingdom offices of banks whose main business is in other countries; merchant banks and other specialised institutions.

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; 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 designs its interventions 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.

In implementing monetary policy the Bank is ready to act daily in the money market, by buying or selling Treasury and other bills, and similarly in the market for government stocks. When necessary, the Bank may exert influence on interest rates through market operations; 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

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members of the London Discount Market and is normally  $\frac{1}{2}$  per cent above the average rate of discount for Treasury bills. The Bank can also influence market and money supply conditions through its power to call for special deposits.

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 Bank of England notes. The provision of coin for circulation is the respon-

sibility of the Royal Mint, a government department.

Following discussions by the Bank of England with the banks, the hire purchase finance houses and the discount houses, new arrangements for the control of credit came into effect from September 1971. While it is still necessary for the Government, as an indispensable part of economic management, to regulate the development of credit and the money supply, the new system has replaced rigid quantitative controls over lending in sterling with policies for influencing bank and finance house lending which are designed to combine effective control with greater flexibility and freedom for these institutions. The techniques now in operation involve more reliance upon changes in interest rates, in particular through calls by the Bank for special deposits from other banks superimposed on a minimum reserve assets ratio of 121 per cent of eligible liabilities.1 Calls for special deposits also restrict the growth of money supply by reducing the banks' lending base. The ceiling controls on lending by the banks and finance houses have been removed and the London and Scottish clearing banks have abandoned their collective agreements on interest rates. Moreover they now set their base rates for lending independently of the minimum lending rate, which closely reflects short term market rates. Greater potential for competition and innovation by these institutions has thereby been introduced into the domestic economy.

In December 1973, the Bank introduced a supplementary scheme to improve its control over the money supply and bank lending. The scheme came into effect during 1974 and was designed to penalise any growth in the banks' interest-bearing deposits above a specified rate through the placing of non-interest bearing supplementary special deposits at the Bank of England.

#### THE PRIVATE SECTOR

THE BANKING SYSTEM

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 December 1973 current and deposit accounts with deposit banks operating in Britain totalled some £23,081 million, and accounted for nearly 32 per cent of the total deposits (in sterling and foreign currencies) of the banking sector, which also includes the National Giro, the accepting houses, overseas

<sup>&</sup>lt;sup>1</sup> Basically sterling deposits of two years or less from outside the banking system together with any foreign currency changed into sterling.

banks, other banks and the discount market. The deposit banks provide full banking services throughout Britain, and operate through over 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.

Together with the Bank of England the London clearing banks, the Trustee Savings Banks and the Co-operative bank make up the membership of the London Bankers' Clearing House. In 1973 cheques, drafts, bills and bankers' effects passing through the interbank debit clearing system averaged in value nearly £121,440 million monthly, while the average monthly value of the credit transfer clearing was over £1,355 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. All banks have been asked by the Bank of England to place a ceiling of  $9\frac{1}{2}$  per cent on the rate of interest paid on deposits under £10,000. 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). The ratio of London clearing bank advances to total deposits in February 1974 was 64 per cent.

The bank giro, originally introduced as the 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. Another banking innovation has been the introduction by some banks of automatic cash dispensing machines. 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 in overseas countries.

#### 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. On its fourth anniversary in March 1973, Giro had 473,000 accounts with deposits of nearly £81 million. The number of weekly transactions had risen from 500,000 in September 1969 to 3.3 million by March 1974 when the weekly turnover was £300 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. Many local authorities 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.

#### Overseas Banks

There are also 43 British overseas and Commonwealth banks, many of which have their headquarters in London. They provide a comprehensive banking

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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. There are also in London 44 United States banks, 36 European banks including 19 from the European Community, 16 Japanese banks, about 47 other foreign banks and 32 consortium banks.

#### 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 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 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 commercial 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. 368) 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. They have a staff of civil servants. Voluntary local savings committees, often supported by local authorities, co-ordinate the work of voluntary local savings groups. Northern Ireland issues separately Ulster Savings Certificates and Ulster Development Bonds on the same terms as the corresponding National Savings Certificates described below.

National Savings Securities The administration of the National Savings Bank and other forms of national savings is carried out by the Department for National Savings. Five forms

<sup>&</sup>lt;sup>1</sup> 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.

of National Savings securities are currently on sale: National Savings Certificates, British Savings Bonds, Premium Savings Bonds, National Savings Stamps 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. British Savings Bonds, 9.5 per cent, sold in units of  $f_{.5}$ , 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 £3 per cent tax free. Maximum holding is £10,000. Premium Savings Bonds are in units of £1 (minimum purchase is (2) 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 prizes of  $f_{1}$ ,000 and a monthly draw for prizes ranging from £25 to £75,000. At the end of April 1974, £1,022 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.

In August 1974 the Government announced that it would introduce two new savings schemes to protect small savers from inflation. The first, designed for men aged 65 (women aged 60) and over, is a savings bond to be introduced in 1975. The second scheme will be available to all those eligible for the current Save-As-You-Earn scheme (see below), which it will replace. Both schemes will be adjusted periodically in accordance with the price index.

Contractual Savings

A contractual savings scheme, known as 'Save as You Earn' (SAYE), enables savings to be made in regular monthly amounts with a minimum of  $f_{s,1}$  and a maximum of f,20 in deposits with the Department for National Savings or Trustee Savings Banks by means of deductions from pay or by other regular payments. Under the terms of the Second Issue (introduced in July 1974) at the end of five years, savings will qualify for a bonus equivalent to 14 months' savings tax free. Completed savings which are not withdrawn will qualify for a double bonus at the end of seven years, that is, 28 months' savings. For example, contributions totalling f, 60 payable over five years at a rate of f, 1 per month will qualify for a bonus of £14 at the end of that period, or £28 if left on deposit for a further two 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 be paid at the rate of 6 per cent per annum on amounts withdrawn after the first but before the end of the fifth year or where the contributions cease but the savings are left invested for the remainder of the five years, or 8 per cent where the saver dies before the contributions are completed. Proposals for a new contractual scheme are mentioned above.

National Savings Bank The National Savings Bank provides a countrywide system for depositing and withdrawing small savings and has over 22 million active accounts. Ordinary Accounts bear interest at 4 per cent and the first £40 of interest is tax free (a new tax exemption limit introduced for the 1974–75 year of assessment). Up to £20 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 (at present 9 per cent) may be made in Investment Accounts. All deposits carry a government guarantee. At the end of April 1974 the sum of the two accounts totalled £2,080 million.

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Trustee Savings Banks

The Trustee Savings Banks, most of which were founded in the nineteenth century, operate under their own trustees but are subject to Government supervision through the National Debt Office and the Trustee Savings Banks Inspection Committee. There are 72 individual banks with over 1,550 offices and 11 million depositors. Deposits can be made either in the Ordinary Department, the Special Investment Department or the Current Account Department. Savings in the Ordinary Department earn interest at 4 per cent and the first f,40 of interest is tax free. Withdrawals can usually be made on demand though notice is required for large sums. Deposits are invested with the National Debt Commissioners and both capital and interest are guaranteed by the Government. The Special Investment Department offers a higher rate of return, which is taxable.

At the end of April 1974 total sums in Ordinary Departments of the Trustee Savings Banks were £1,389 million and in the Special Investment Departments f,1,995 million. Most Trustee Savings Banks operate cheque services on deposits in the Current Account Departments, and other services include the purchase of government securities and the SAYE (see p. 368) contractual savings scheme. The Trustee Savings Banks operate their own unit trust and

units may be purchased by depositors and non-depositors alike.

In August 1974, the Government announced that the role of Trustee Savings Banks would be expanded and would include personal loans to depositors. At the end of April 1974 National Savings totalled £10,472 million.

**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, discount and other finance houses, stockbrokers, insurers, insurance underwriters and brokers.

**Finance** Houses

There are about 1,900 firms engaged in the financing of hire-purchase and other instalment credit transactions, and of these 35 constitute the Finance Houses Association and together cover go per cent of all finance house business. At the end of 1973 the value of instalment credit debt outstanding to finance houses and retailers amounted to £2,485 million, compared with about £975 million at the end of 1960. About 65 per cent of the assets of finance houses consists of hire-purchase agreements and other instalment credit. Of this amount between 60 and 70 per cent 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 observed the authorities' policies on lending similar to those applied to banks, and all finance houses have been required to observe term controls affecting the minimum deposit and maximum repayment period for specific goods financed by certain forms of lending. The system of credit control introduced in 1971 (see p. 365) has been applied to the larger finance houses, whose total eligible liabilities exceed £5

million.

Finance Corporations

Finance for Industry Ltd. 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, computer bureaux, and other services to small and medium-sized companies, especially those concerned in technical development. Authorised capital amounts to about £100 million and the group may borrow up to four times its capital and reserves to bring actual and potential resources

to almost £,500 million.

The Commonwealth Development Finance Company (CDFC) is no longer confined to the Commonwealth in its activities. It supports business enterprise overseas by providing finance in the form of share capital and loans on mutually acceptable terms. Its authorised share capital is £30 million, of which about  $14\frac{1}{2}$  million 'A' ordinary shares of £1 (£0·10 paid) are held by industrial, shipping, mining and banking interests in Britain, and  $11\frac{3}{4}$  million 'B' ordinary shares of £1 (£0·50 paid) are held by the Bank of England and certain central banks in the Commonwealth. At 31st March 1974 the CDFC held investments worth £33 million spread over a wide range of industries placed in more than 39 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 1974, loans and investments amounted to £244 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 1973, CDC had a total capital commitment of £243 million.

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 exchanges in Glasgow, Liverpool, Manchester, Birmingham, Bristol, Cardiff, Dublin and Belfast.

The number and variety of securities officially listed on the London exchange is greater than in any other market and its turnover of company securities is roughly equivalent to that of all the European bourses combined. Some 10,000 securities are quoted on the London exchange; at the end of March 1974 these had a total market value of £176,898 million. About 7,770 securities of companies are 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 and 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 stock exchange operates under strict rules of

conduct which it formulates itself.

There has been substantial growth in demand for ordinary (equity) shares, partly in expectation that such shares will maintain or increase their real value. This demand, however, is very sensitive to the state of the economy, and economic uncertainty in 1973–74 caused large falls in share values. There is a growing level of institutional investment on the London market by insurance companies, pension funds, and by investment and unit trusts. The percentage of total market holdings of ordinary shares quoted in Britain held by these four groups of institutions together rose from 25 per cent to 31 per cent over the six-year period March 1964–70.

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# 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 1973 investment trust companies held assets worth £5,600 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 semi-annual 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 is satisfactory to them.

The first British unit trust was formed in 1931 and by 1939 there were 98 trusts, with assets estimated at £80 million. This medium of saving has grown considerably since 1957. At the end of March 1974 there were 2.2 million unit holdings. The value of the funds invested in authorised trusts rose from £60 million in 1958 to £1,909 million at the end of March 1974; it has nearly trebled since the end of 1967. There is now a wide variety of trusts, both as regards the range of investments covered and the ways in which they

cater for the differing needs of investors.

#### 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 625 insurance companies incorporated in the United Kingdom. Most British insurers write several classes of business although some specialise in one class, particularly in life assurance, where about 150 companies write only that type of business. A few specialise in re-insurance.

In addition about 170 overseas companies carry on business (and even more companies are represented) in the United Kingdom, which illustrates the international nature of the London market. Some of the large British companies, however, have their administrative headquarters in the provinces.

At the end of 1972 the total assets of the British insurance companies amounted to about £22,360 million, the bulk of which is life assurance companies' investments.

The Government's supervisory powers over insurance companies under the Insurance Companies Acts 1958–73 are exercised by the Department of Trade.

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. By the middle of the eighteenth century, Lloyd's coffee house had become the principal centre of underwriting business and intelligence of shipping movements. 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, which does not itself transact insurance business.

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 which is second to none. Since 1969 non-Commonwealth underwriters have been admitted to membership of Lloyd's, if they satisfy the requirements.

Today there are about 7,600 underwriting members of Lloyd's grouped into some 260 syndicates and represented at Lloyd's by underwriting agents who accept risks on behalf of the members of their syndicates.

In conjunction with 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

About two-thirds of general (that is, non-life) insurance business 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.

**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 FINANCE 373

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 which have a fixed value are not dealt in on the stock exchange but may be withdrawn in cash if notice is given. The Building Societies Act 1962, which consolidated a number of earlier Acts, 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 1973, 456 societies were in operation, with total assets of about £17,000 million; half of this amount is accounted for by the five largest societies. The amount advanced on mortgage in 1973 was nearly £3,500 million, six per cent less than in 1972.

# 18 Trade and Payments

#### **OVERSEAS TRADE**

Although small in area and accounting for only about 1.5 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 about 40 per cent of all trade.

For well over a century international trade has been of vital importance to the country's economy. Britain relies upon imports for about 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, metals and ores, textile raw materials, petroleum and many other products. Its exports of goods represent about one-fifth of the gross national product. It is a major supplier of machinery, vehicles, aircraft, metal manufactures, electrical apparatus, chemicals and textiles.

PATTERN OF TRADE

Value and Volume

Changes in the value, volume, composition and geographical distribution of imports and exports are outlined in the following paragraphs.

In 1973 Britain's exports of goods were valued at about £11,435 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, Britain's imports in 1973 were about £13,810 million. Between 1972 and 1973 the value of exports rose by 25 per cent while that of imports increased by 41 per cent. Over the same period the volume index of exports rose by 12 per cent, and of imports by 13 per cent; but the unit value of exports rose by only 13 per cent while import unit values rose by 27 per cent, largely because of higher com-

modity prices and the depreciation of sterling (see p. 194).

Exports had increased steadily from 1961 to 1966, but in 1967 they declined slightly in value as well as in volume. Following the devaluation of sterling in 1967 they rose rapidly until 1972 when they increased by only 4 per cent in value compared with 11 per cent in 1971. 1973 saw a marked recovery with the value of exports growing by 25 per cent, around half of which represented an increase in volume; a rate about twice that of the annual average volume increase of the previous five years. This sharp increase was generated in part by the upswing in world trade in manufactures in 1973 and in part by the initial effects of the depreciation of sterling since mid-1972 on the competitiveness of British goods overseas. The rapid rise in exports continued in early

There was a particularly rapid expansion of imports in 1964 (15 per cent in value and 11 per cent in volume) and again in 1968 (22 per cent in value and 10 per cent in volume). The increase in the value of imports in 1973 mainly reflected the effects of increased commodity prices, which, together with the depreciation of sterling, accounted for about two-thirds of the rise in value of imports. The further large increase in value in early 1974 can be mainly

attributed to the sharp rise in oil prices. The increased demand for imports associated with the growth of domestic output in 1973 also contributed to the

rise in the import bill.

From 1964 to 1967 there had been a steady improvement in Britain's terms of trade, that is, export prices rose faster than import prices. Following the devaluation of the pound in November 1967 the terms of trade index fell by 4 per cent in 1968, but subsequently continued to increase until 1972, when it stood at 101.7 (1970=100). With the sharp rise in commodity prices and the lower exchange value of sterling, the index fell to 90.3 in 1973 and by the end of the first half of 1974 to 75.2.

The value and volume of exports and imports from 1968 to 1973 are shown

in Table 31.

#### Commodity Composition

Imports

The value of Britain's imported food supplies has been growing less rapidly than the value of total imports and the ratio of imported foodstuffs to total imports has fallen from 39 per cent in 1954 to less than 20 per cent in 1973. There has been a similar downward trend in the proportion accounted for by basic materials—from 30 per cent in 1954 to over 12 per cent in 1973 though this showed a slight increase over the 1972 proportion.

Imports of petroleum and petroleum products are by far the biggest single item by value, amounting to 10.6 per cent of the total value of imports during 1973 when their value was £1,682 million. With the large increases in the price of oil the proportion by value is expected to increase considerably.

The most marked change in recent years has been the rise, in Britain as in

TABLE 31: Imports and Exports: Annual Figures

	1968	1969	1970	1971	1972	1973
Value (£, million): Imports a.c.i.f. <sup>b g</sup> Imports f.o.b. <sup>cf</sup> Exports of British produce and manufactures, and re-exports	7,752	8,128	9,015	9,812	11,137	15,854
	6,923	7,206	7,902	8,512	9,811	13,810
f.o.b. e d g  Exports f.o.b. e f	6,434	7,339	8,061	9,181	9,746	12,455
	6,274	7,063	7,893	8,796	9,134	11,435
Volume Index Nos.f (1970=100) Imports Exports	94·2	94·5	100	104·2	116·6	131·8
	88·5	96·8	100	106·7	106·7	119·2
Unit Value Index Nos.f (1970=100) Imports Exports	92·7 90·0	95·6 93·0	100 100	104·3 105·6	109·2 111·0	139·1 125·5
Terms of Trade <sup>e f</sup> (1970=100)	97.1	97.3	100	101.2	101.7	90.3

Source: Department of Trade.

(details first published in June 1969).

Export unit value index as a percentage of the import unit value index.

<sup>&</sup>lt;sup>a</sup> 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 'Costs of 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.

"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.

Including, for the years 1967–70, an allowance for under-recording of exports

f On a balance of payments basis. g On an overseas trade statistics basis.

other industrial countries, in the proportion of imports of finished manufactures, particularly capital goods and industrial components. Such imports rose from about 6 per cent of total imports in 1957 to 29 per cent in 1973, amounting to £4,633 million in value. Imports of semi-manufactures have also been increasing steadily 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 participate in the subsequent stages of manufacture themselves. Imports of semi-manufactured goods (including chemicals) totalled £4,280 million in 1973 and accounted for 27 per cent of total imports.

Exports

About 84 per cent of Britain's exports consist of manufactured goods both finished and semi-manufactured. By far the most important group is engineering products—in 1973 41 per cent of total exports compared with 44 per cent in 1972. Within this group, exports of many types of machinery, electrical equipment, road vehicles, agricultural machinery and scientific instruments have been increasing rapidly though the share in total exports of transport equipment in particular has fallen. The share of chemicals has grown fairly steadily, exports of chemicals having grown by 32 per cent in 1973. The share of metals was little changed in 1973 following a steady fall over a number of years to 10.4 per cent in 1972.

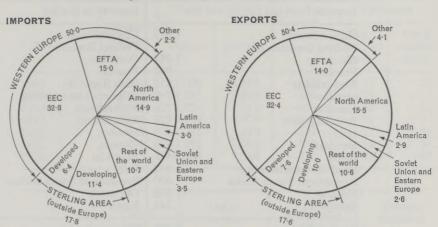
For the first time in many years textiles' share rose marginally in 1973 to 4.7 per cent having fallen from 18 per cent of the total in 1948 to 4.6 per cent in

TABLE 32: Commodity Composition of Trade 1967 and 1973 (per cent)

Exports	1967	1973
Engineering products	43.9	41.1
Machinery	27.3	25.9
Road motor vehicles	10.0	8.8
Other transport equipment	4.1	3.6
Scientific instruments	2.5	2.8
Semi-manufactures:	34.2	36.4
Chemicals	9.6	10.2
Textiles	4.9	4.7
Metals	11.6	10.5
Other	8.1	10.9
Other manufactures	5.7	6.5
Non-manufactures:	16.1	16.1
Food, beverages and tobacco	6.8	7.0
Imports		
Finished manufactures	19.3	29.2
Food, beverages and tobacco	27.4	19.5
Industrial materials:	40.6	39.4
Basic materials	15.7	12.4
Manufactures chiefly for further processing	24.8	27.0
Mineral fuels and lubricants	11.3	10.9
Miscellaneous	1.4	1.0

Source: Department of Trade.

## AREA PATTERN OF TRADE IN 1973 (Percentages of total values)



1972. The proportion accounted for by food, beverages and tobacco rose to 7 per cent in 1973.

Composition of exports and imports in 1967 and 1973 is shown in Table 32.

Geographical Distribution of Trade Trade between Britain and Western Europe has been increasing in recent years—particularly rapidly in 1973—and conversely there has been a decline in the proportion of Britain's exports going to primary producing countries. In 1958, 31 per cent of exports went to Western Europe, but in 1962 these exports began to exceed those to the sterling area and in 1973 they formed just over half of the total, having risen by 34 per cent during the year; they rose sharply again in early 1974 to nearly 52 per cent of the total. Exports to the enlarged European Economic Community (EEC) rose by 37 per cent to account for over 32 per cent of Britain's total exports; and in early 1974 they rose further to over 33 per cent of the total. Exports to the European Free Trade Area (EFTA) countries increased by 30 per cent in 1973.

Imports from Western Europe rose by 48 per cent in 1973, forming one half of the total imports but fell during early 1974 to 48 per cent of the total. Imports from the European Community also rose by 48 per cent in 1973 to

form one-third of all imports.

In relative terms Britain's trade with other members of the Commonwealth and with the sterling area as a whole has tended to decline in recent years. Exports to the sterling area (see p. 385) amounted to 18 per cent of total exports in 1973 compared with 29 per cent in 1962. Imports have shown a similar fall in their share of the total. Canada, Australia, South Africa and the Irish Republic are still among Britain's leading trading partners but since 1957 the United States has been Britain's largest single market and source of imports. In 1973 North America accounted for about 15 per cent of Britain's exports and imports. The value of exports to Latin America increased by 5 per cent in 1973 but the value of imports rose by 47 per cent. After a fall in 1971 Britain's trade with the Soviet Union and Eastern Europe resumed in 1972 the growth apparent since 1960, and in 1973 exports rose by 17 per cent and imports by 42 per cent. Trade with Japan continued to grow; exports rose sharply by 59 per cent in 1973 while imports maintained a high rate of growth, with a 41 per cent increase. (See also Table 33.)

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

TABLE 33: Principal British Markets and Sources of Supply, 1973 f. million

Imports from (c.i.f.)		Exports to (f.o.b.)	
United States <sup>a</sup> Federal Republic of Germany France Netherlands Sweden Canada Lish Republic Italy Denmark Japan	1,622 1,351 980 912 740 736 527 504 478 443	United States Federal Republic of Germany France Irish Republic Belgium-Luxembourg Netherlands Switzerland Sweden Canada Australia Italy	785 678 626 621 604 521 514 414 404 386
Belgium-Luxembourg Republic of South Africa Finland Australia	442 400 332 341	Italy   Republic of South Africa   Denmark   Japan	374 329 273
Western Europe EEC EFTA Sterling Area outside Europe Developed countries North America Latin America Soviet Union and Eastern Europe Rest of the world	7,920 5,197 2,371 2,822 1,016 1,806 2,358 482 550 1,699	Western Europe EEC EFTA Sterling Area outside Europe Developed countries Developing countries North America Latin America Soviet Union and Eastern Europe Rest of the world	6,283 4,030 1,746 2,195 947 1,248 1,936 355 323 1,318

Source: Department of Trade. a Including dependencies.

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 34 shows the breakdown of the figures from 1967 to 1973. The total invisible balance in 1973 was £1,165 million. Gross earnings of £7,969 million from total invisible exports were about two-thirds of the total of £11,435 million from visible exports. Net private invisible receipts were £2,150 million.

As shown in Table 34, 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. Travel credits have exceeded debits since 1968. About half the total debits in respect of government expenditure relates 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 (see p. 79).

TABLE 34: Britain's Invisible Overseas Transactions 1967-73

f, million

		Total in	visibles	C	Trans	sport
	Invisible balance	Debits	Credits	Govern- ment (net)	Sea transport (net)	Civil aviation (net)
1967 1968 1969 1970 1971 1972 1973	+244 +379 +592 +716 +808 +791 +1,165	3,000 3,431 3,720 4,257 4,751 5,293 6,804	3,244 3,810 4,312 4,973 5,559 6,084 7,969	-463 -466 -467 -485 -527 -564 -790	-17 +35 -33 -76 -57 -49 -75	+27 +29 +41 +37 +45 +64 +61

	Travel (net)	Other services (net)	Interest, profits and dividends (net)	Private transfers (net)
1967	-38	+400	+379	44
1968	+11	+490	+335	55
1969	+35	+566	+499	49
1970	+50	+699	+525	34
1971	+50	+785	+525	13
1972	+23	+861	+513	57
1973	+6	+982	+1,095	114

Source: United Kingdom Balance of Payments 1963-73.

In addition Britain is paying £24 million in three annual instalments into the European Coal and Steel Community, a capital subscription of £37.5 million in five instalments ending in 1975 to the European Investment Bank and a contribution of £20 million to the Bank's reserves over the same period.

#### **Tourist Trade**

Tourism yields a substantial income from overseas; in the ten years 1964–73 overseas visitors spent nearly £3,630 million in Britain. For 1973 these travel and tourist receipts, excluding fares, are estimated at about £680 million. United Kingdom residents on holiday, or travelling for business or other purposes overseas, spent about £674 million (excluding fares) in the same year. The continuing increase in both the average expenditure per visitor and in the number of travellers visiting Britain has produced the surpluses on travel credits mentioned above since 1968. The estimated total number of visits to the United Kingdom in 1973, including visitors from the Irish Republic, was a record figure of 7.6 million—more than twice the level of 1956 and an increase of 6 per cent over the 1972 level.

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 Tourist Board for Northern Ireland. The English, Scottish and Wales boards offer financial assistance to selected tourist projects in development areas.

### 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 International Monetary Fund, the General Agreement on Tariffs and Trade (GATT), the Organisation for Economic Co-operation and Development, 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.

# 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 in their tariffs on industrial goods. The reductions made between 1968 and 1972 in the British tariffs on dutiable industrial goods imported from the EEC, the United States and Japan amounted to about 37 per cent, 40 per cent and 34 per cent respectively. This was closely in line with the reductions made by these countries which affected well over 70 per cent of British exports of dutiable industrial goods to them. Some reductions were also made in the tariff on agricultural goods. A new series of negotiations began in September 1973.

# Community Preference

All tariffs on trade in industrial products between Britain and the other 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 customs 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 Area (EFTA), to which Britain belonged between 1960 and 1972, will have been dismantled.

#### Commonwealth Countries

Reciprocal preferential tariff treatment for trade between Britain and other independent Commonwealth countries dates from the Ottawa Conference of 1932. Following Britain's accession to the European Community, 21 independent developing Commonwealth countries in Africa, the Caribbean, the Indian Ocean and the Pacific¹ took part in negotiations covering both trade and aid arrangements for a new convention of Association with the Community. This is due to come into effect in 1975. All Britain's dependent territories (except Gibraltar and Hong Kong, to which special conditions apply) have been offered association under the Treaty of Rome. At Malta's request it is not being included in the Community's generalised preference scheme (see p. 381). Special arrangements have been made to protect the sugar exports of the Commonwealth and the dairy products trade of New Zealand. The Community has stated its continuing objective of expanding and reinforcing existing trade relations with the Commonwealth countries of Asia, taking into

<sup>&</sup>lt;sup>1</sup> Barbados, Botswana, Fiji, The Gambia, Ghana, Grenada, Guyana, Jamaica, Kenya, Lesotho, Malawi, Mauritius (with whom an association agreement was negotiated in 1972), Nigeria, Sierra Leone, Swaziland, Tanzania, Trinidad and Tobago, Tonga, Uganda, Western Samoa and Zambia. Kenya, Uganda and Tanzania were already associated with the Community of Six under the Arusha Convention.

account the scope of the generalised preference scheme from which they are expected to derive considerable benefit. Another important development in this respect was the signing in December 1973 of a commercial co-operation agreement between the Community and India.

#### Generalised Preference Scheme

The establishment of a system of generalised preference 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 Community's scheme, which first came into effect in July 1971, but was considerably improved after the Community's enlargement. Over 100 countries benefit from the scheme which provides for tariff reductions on manufactured or semi-manufactured products and a large number of processed agricultural products.

#### 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 fits European Community Membership, Britain has progressively removed quantitative restrictions from almost all its imports from noncommunist countries. There has also been a continuing substantial relaxation of quantitative controls on imports from communist countries. Controls remain on a few goods including (those recognised internationally) arms, ammunition and radioactive materials. Controlled goods require a specific import licence and quotas have been set up for many of them. Apart from economic controls, 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 territories¹ 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 restriction on goods to Rhodesia.

# Exchange Control

Britain applies exchange control mainly in order to conserve its reserves of gold and foreign exchange. The powers under the Exchange Control Act 1947

In September 1974 the scheduled territories comprised the United Kingdom, the Channel Islands, the Isle of Man, the Irish Republic and Gibraltar.

are conferred mainly on the Treasury which has delegated the administration of most parts of the Act to the Bank of England. 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.

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 projects in other ways, for example, by borrowing foreign currency. Exports of goods to destinations outside the scheduled territories have, in general, to be paid for within six months in foreign currency or in sterling from an external account 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. The buying, selling and holding of gold coins does not require specific Exchange Control permission, although their export remains controlled.

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 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 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 would normally be regarded as resident, though they might 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 any foreign currency notes which they brought in with them.

GOVERNMENT ASSISTANCE TO OVERSEAS TRADE 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 of the Department of Trade directs Britain's export programme, including export intelligence work, the work on

trade fairs and other promotional activity overseas, the schemes for financial support for firms to participate in missions overseas and for inward commercial visits to Britain. It consists of businessmen and Department of Trade and Foreign and Commonwealth Office representatives 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 Department of Trade offices throughout Britain and, through these offices, the commercial posts of the British Diplomatic Service overseas. There are over 200 posts located in all the principal cities and trade centres overseas and they supply the British Overseas Trade Board with information of every kind affecting trade with their territories.

Overseas officers regularly report on local economic and commercial conditions, pay special attention to local demand for particular commodities, and generally assist the exporter to overcome any difficulties he encounters in trade with the country in question, particularly those arising out of governmental regulations. These officers investigate potential markets for British products, advise about methods of trading with particular areas, and seek out and pass on opportunities for export business and inquiries for British goods. Assistance is also given to British exporters in appointing agents and locating potential importers. From records kept up to date in London by reports from its overseas commercial officers, the Export Services and Promotions Division of the British Overseas Trade Board can provide information concerning any country on the prospects for exports and requirements of particular markets, government regulations affecting trade (including import restrictions and tariffs and duties on particular commodities), methods of trading, local tastes and preferences in design, and the commercial standing of firms with which an exporter contemplates business relations.

The Government's official information services overseas are used exten-

sively to promote Britain's export trade.

# **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 risks covered include insolvency or protracted default of the buyer, governmental action which stops the British exporter receiving payment, new import restrictions in the buyer's country, 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, with the minimum value of the individual contracts often as low as £10,000. The banks provide finance against these guarantees, the bulk of this being in turn refinanced by the ECGD.

Investment Insurance A new form of ECGD cover was introduced in 1972 to provide insurance against certain political risks on overseas investment. The scheme is designed to encourage new private investment in developing countries and offers protection for British investors against expropriation or nationalisation, war damage and currency inconvertibility.

**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, financial assistance and, in certain cases, free facilities. In 1973 the British Overseas Trade Board assisted over 6,520 British firms at 322 trade fairs and exhibitions in 48 countries and 155 outward trade missions; and gave practical help to 8 'British Shopping Weeks', and some 71 overseas store promotions. In September 1973 a British Export Marketing Centre was opened in Tokyo to hold 10 major exhibitions a year and to provide marketing facilities for individual British firms or organisations. The Government allocated for these purposes about £12 million in 1973–74.

FINANCING OF INTERNATIONAL TRADE

In the nineteenth century, the rapid growth of British industry, commerce and shipping was accompanied by Britain's development as an international trading centre. A sound commercial banking system and a wide range of financial institutions has been established to meet commercial needs for both short- and long-term finance. 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.

Commodity Markets Britain remains the principal international centre for transactions in a large number of commodities, although most of the sales negotiated in these markets relate to consignments which never pass through the ports of Britain. The need for close links with sources of finance and with shipping and insurance services often determined the location of these markets in the City of London. Among the more important are the Baltic Exchange (shipping and aircraft charter markets), the London Commodity Exchange (cocoa, coffee, copra, rubber and sugar), and the London Metal Exchange. In addition to these formal markets, there is scarcely any product which cannot be traded through an intermediary in Britain.

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. In 1968 monetary authorities established a two-tier gold system, whereby their transactions were conducted at the official gold price, leaving a free market for private transactions. This system was abolished in November 1973 and monetary authorities may now sell (but not buy) gold in the open market. 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. Monetary authorities may now also

pledge gold as collateral to loans at a price decided between themselves without reference to the official gold price.

The Sterling System As a result of Britain's early lead in international trade and finance, many countries tended to use sterling as their currency for international transactions. As trade and payments arrangements have become more diversified in recent years, the international use of sterling has declined relatively. However, a number of countries hold sterling balances in Britain (see p. 195). The term 'sterling area' includes all the Commonwealth countries (see p. 22) and their dependencies except Canada and Rhodesia, together with Bahrain, Iceland, the Irish Republic, Jordan, Kuwait, The Maldives, Oman, Pakistan, Qatar, South Africa, South West Africa, The United Arab Emirates and the People's Democratic Republic of Yemen. The 'overseas sterling area' consists of the sterling area countries except for the United Kingdom, the Channel Islands and the Isle of Man, the Irish Republic and Gibraltar.

#### BALANCE OF PAYMENTS

Traditionally Britain's balance of payments has been characterised by a deficit on visible trade usually more than offset by a surplus on invisible earnings. Estimates of the balance of payments and its main constituent items are given in summary since 1966 in Table 35 and in greater detail since 1971 in Tables 36 and 37. 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 total currency flow. This is the 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 external banking and money market liabilities in sterling) and other flows which are unidentified transactions reflected in the balancing item. The total currency flow shows the impact of all external flows on the reserves and debt position, that is, how much is available to add to the reserves and to repay any official borrowing in the case of a net inflow, or how much must be financed by drawing on the reserves or by borrowing if there is a net outflow. Table 36 gives details of the current account since 1971. 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 £285 million which, together with a substantial surplus on invisibles, produced a record current account surplus of £1,093 million. This trend was reversed in 1972 with the development of a visible trade deficit reflecting both the rise in world commodity prices and the depreciation of sterling from June 1972. The surplus on invisibles more than matched the trade deficit leaving a small surplus on current account. In 1973 the further rise in commodity prices, including oil prices, and the continued depreciation of sterling resulted in a large visible deficit of £2,375 million, offset, to some extent, by a surplus on invisibles of £1,165 million—£374 million more than that in 1972.

In the period 1963–68, there was a total currency outward flow 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 the net currency flow, and a rapidly increasing currency inflow which in 1971 reached £3,228 million. During this period almost all short- and medium-term official borrowing was repaid, and there was a substantial increase in the reserves. In 1972 there was again a currency outflow of £1,265 million. In 1973, however, there was a net currency inflow of £210 million despite the large current account deficit and payments of compensation totalling £59 million made in implementation of the guarantee clauses of the sterling agreements of 1968, as renewed in 1971 (see p. 195).

There was a net inflow in 1973 on identified investment and other capital transactions of some £1,071 million, reflecting in particular public sector overseas currency borrowing of about £1,100 million, mainly under the exchange cover scheme re-introduced in March 1973 (see p. 200). Overseas investment in the private sector increased significantly in 1973 to £1,440 million, largely

TABLE 35: United Kingdom Balance of Payments 1966-73

£ million

	Current balance	Total currency flow	Gold sub- scription to IMF. SDR al- location <sup>a</sup>	Total	Official borrowing <sup>b</sup>	Official reserves <sup>c</sup>
1966 1967 1968 1969 1970 1971 1972 1973	+84 -313 -280 +449 +707 +1,093 +114 -1,210	-547 -671 -1,410 +743 +1,287 +3,228 -1,265 +210	-44 +133 +125 +124	-591 -671 -1,410 +743 +1,420 +3,353 -1,141 +210	+625 +556 +1,296 -699 -1,295 -1,817 +449	$\begin{array}{r} -34 \\ +115 \\ +114 \\ -44 \\ -125 \\ -1,536 \\ +692 \\ -210 \end{array}$

Source: United Kingdom Balance of Payments 1963-73.

<sup>a</sup> Gold subscription to IMF in 1966 was -£44 million and in 1970 -£38 million.

b Drawings (+)/ repayments (-).
c Drawings on (+)/ additions to (-).

TABLE 36: Current Account 1971-73

f. million

			2 """"
	1971	1972	1973
Visible trade: Exports (f.o.b.) Imports (f.o.b.)	8,796 8,511	9,134 9,811	11,435 13,810
Visible balance	+285	-677	-2,375
Invisibles: Government services and transfers (net) Private services and transfers (net) Interest, profits and dividends (net): Private sector Public sector	-527 +810 +715 -190	-564 +842 +647 -134	-790 +860 +1,290 -195
Invisible balance	+808	+791	+1,165
Current balance	+1,093	+114	-1,210

Source: United Kingdom Balance of Payments 1963-73.

because of a recovery in inward direct investment and in oil investment from the exceptionally low 1972 level. Private investment overseas, at £,1,382 million, was slightly lower than in 1972. Direct investment overseas, which included a substantial element of reinvested profits and also a number of large acquisitions of overseas companies by British ones, rose sharply; but the large portfolio investment (see p. 390) outflows in 1972 were reversed in 1973.

TABLE 37: Analysis of Total Currency Flow and Official Financing 1971-73 f. million

			7, 111111011
	1971	1972	1973
Current balance	+1,093	+114	-1,210
Capital Transfersa	_	_	-59
Investment and other capital flows: Official long-term capital Overseas investment in UK public	-273	-255	-252
sector Overseas investment in UK private sector UK private investment overseas	+179 +1,025 -866	+113 +753 -1,408	+312 +1,440 -1,382
Overseas currency borrowing or lending (net) by UK banks: Borrowing to finance UK investment overseas Borrowing to finance lending to UK public sector Other borrowing or lending (net)	+280 b +219	+725 b -254	+515 +831 -129
Exchange reserves in sterlinge: British government stocks Banking and money market liabilities Other external banking and money	+55 +658	+65 +222	+74 +77
market liabilities in sterling Import credit Export credit Other short-term flows	+709 +47 -195 +15	$     \begin{array}{r}       -91 \\       +207 \\       -359 \\       -425     \end{array} $	$ \begin{array}{c c} -36 \\ +128 \\ -232 \\ -275 \end{array} $
Total investment and other capital flows Balancing item	+1,853 +282	-707 -672	+1,071 +408
Total currency flow Allocation of Special Drawing Rights	+3,228 +125	-1,265 +124	+210
Total	+3,353	-1,141	+210
Official financing Net transactions with overseas monetary authorities: IMF <sup>a</sup> Other monetary authorities	-554 -1,263	-415 +864	_
Drawings on (+)/ addition to (-) official reserves a e	-1,536	+692	-210
Total official financing	-3,353	+1,141	-210

e Valued in sterling at transactions rates of exchange.

Source: United Kingdom Balance of Payments 1963-73.

<sup>a</sup> Payments under the Sterling Agreements of 1968, as renewed in 1971.

<sup>b</sup> Borrowing of this type was not separately distinguished but was probably small.

<sup>c</sup> Excluding holdings by the IMF.

<sup>&</sup>lt;sup>d</sup> From July 1972 transactions with the IMF affecting the United Kingdom reserve position in the IMF are included as changes in official reserves.

Britain participates in the Special Drawing Rights (SDR) 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.

In 1972 Britain's official financing requirement was reduced to £1,141 million by an IMF allocation of £124 million of SDRs which was taken into the reserves.

In June 1974 members of the IMF agreed to the establishment of the 'Witteveen facility'—a source of borrowing offered by oil producers, allowing member countries affected particularly adversely by increased oil prices to obtain funds on concessionary terms. Some \$3.5 thousand million was made available in 1974 and a similar amount for 1975.

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 its own currency for the currency of another country up to a maximum agreed for a limited period. It agrees to reverse the transaction at a specified date at the same rate of exchange. The currencies so obtained can be retained in the reserves or used in exchange operations.

EXTERNAL ASSETS AND LIABILITIES The significance of any inventory of Britain's aggregate external assets and liabilities<sup>2</sup> 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 1973 shows that Britain had a substantial net creditor position estimated at some £6,130 million.

**External Assets** 

Britain's assets arising from private investment overseas are estimated to have been £19,980 million at the end of 1973. This compares with a figure of £8,070 million at the end of 1962. Direct investment, including oil, accounted for £13,030 million of the total figure for end 1973, the balance consisting of £6,950 million of portfolio investment.

United Kingdom banking and commercial claims at the end of 1973 totalled £4,872 million. Within this total banking claims were £2,749 million; suppliers' export credit to unrelated firms was £1,736 million. With the increase in recent years in British aid to developing countries, inter-governmental loans of £1,074 million form the largest item among official external assets, which at the end of 1973 were £2,517 million including refinanced export credit. The latter figure, together with official reserves of £2,237 million, £4,872 million in banking and commercial claims and private investment overseas of £19,980 million, resulted in aggregate identified external assets at the end of 1973 of some £29,605 million.

<sup>&</sup>lt;sup>1</sup> Named after the managing director of the IMF, Mr. Johannes Witteveen, who proposed the facility

proposed the facility.

<sup>2</sup> Figures for the end of 1973, and for earlier years, are published in the *United Kingdom Balance of Payments 1963–73*, produced by the Central Statistical Office (see Bibliography, p. 478).

## External Liabilities

Identified external liabilities at the end of 1973 are estimated to have been some £23,475 million. All official short- and medium-term liabilities to the IMF and other monetary authorities were repaid in 1972. Inter-governmental loans to Britain and other official liabilities, mainly a consequence of the second world war and its aftermath, totalled £1,545 million at the end of 1973 of which £1,205 million was owed to the United States and £295 million to Canada. Other public sector liabilities of £3,742 million comprised overseas holdings of British government and public corporations' sterling securities, holdings of Treasury bills and notes, local authorities' securities and mortgages, and foreign currency borrowings by British public corporations and local authorities. British banking and commercial liabilities, including liabilities in sterling and in foreign currencies, totalled £8,018 million.¹ Liabilities in the form of overseas investment in Britain's private sector totalled £10,170 million.

Liabilities in sterling comprise both public sector and banking and money-market liabilities within the totals above. Sterling held in Britain by foreigners 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 £6,146 million at the end of March 1974. Of this, £3,909 million was held by residents of overseas sterling countries (excluding the Irish Republic), £756 million by residents of the European Community, and £1,481 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, slowly in 1973 and sharply again in the first half of 1974. 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 £10,170 million at the end of 1073.

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 1973 the inflow of direct, portfolio and other private investment, including oil,

amounted to  $f_{1,440}$  million.

The value of overseas investment in the private sector at the end of 1973 comprised: the book value of direct investment in Britain by companies incorporated abroad—£4,620 million (excluding oil, banking, and insurance); portfolio holdings of British securities—£2,925 million; the book value of the net assets in Britain of overseas oil companies—£1,700 million; and the balance of £925 million which included borrowing by British companies overseas and identified overseas investment in real estate and in the insurance industry in Britain.

About three-quarters of the direct investment of £4,620 million originally came from North America and about one-fifth from Western Europe. Of the £572 million inflow of direct investment into Britain in 1973 £26 million originated from the overseas sterling countries and £546 million from the rest of the world. Foreign investment inflow brings a number of benefits to British

<sup>&</sup>lt;sup>1</sup> 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 £3,088 million are included in the figure above: they represent the difference between assets of £35,929 million and liabilities of £39,017 million.

industry, including technological development which in turn will strengthen the economy and its balance of payments position.

Outward Private Investment Private investment abroad may take several forms: portfolio investment, that is, investment in overseas securities including the loans raised by overseas countries on the London capital market; or direct investment by the establishment of subsidiary companies abroad; or the acquisition of an interest in an overseas enterprise.

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. 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 £1,345 million in 1973 compared with £731 million in 1972. The latest available area analysis indicates that of the 1972 figure £227 million was placed in overseas sterling countries and £504 million in the rest of the world. Within the latter figure the flow to EEC countries was £222 million, to EFTA £52 million and to Latin America £52 million. In the same year the flow to Western Europe was £278 million compared with a flow to North America of £161 million. With the inclusion of oil, portfolio and other investment, aggregate private investment outflows totalled £1,382 million in 1973 compared with £1,408 million in 1972, portfolio investment of £605 million in 1972 being followed by net disinvestment of £229 million in 1973.

BRITISH GOVERNMENT AID TO DEVELOPING COUNTRIES Britain's aid programme to the developing countries consists of loans and grants for economic and social development, technical assistance, budget support and contributions to multilateral agencies providing financial aid and technical assistance to these countries. To complement the official programme private investment is encouraged by the provision of government insurance to private investors by the ECGD (see p. 49). 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 £3,920 million. The average gross annual disbursement over the four years 1970-73. was about £279 million (see Table 38). In 1973 the total was some £304 million, of which bilateral aid accounted for £238 million including £73. million technical assistance; assistance provided through multilateral agencies was £,66 million. Repayments of capital and payments of interest during the year on loans made previously came to £41 million and £35 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 to move towards it as best it can in the years ahead. Britain has also accepted the UN target of 1 per cent of GNP for total net financial flows (that is, including private investment and other flows) to developing countries.

In 1973 gross disbursements of British official flows were £303.9 million; net of amortisation receipts, these amounted to £262.5 million (0.37 per cent of

GNP). The gross aid programme for 1974-75 at current prices is £363.4 million. The aid programme for 1975-76 to 1978-79 will be determined as part of the review of all public expenditure.

#### Bilateral Financial Aid

Bilateral financial aid in 1973 totalled £238 million; over 53 per cent was in grants and the rest in loans. Budgetary aid, £6 million in 1973, 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 is in loans. 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 1973 the total value of bilateral loan commitments entered into by the British Government, excluding investments by the Commonwealth Development Corporation (see p. 392), was £107 million and of this over 68 per cent was on interest-free terms and over 77 per cent at an interest rate of 2 per cent or less. The recipients included India, Pakistan, Bangladesh, Ethiopia, Bolivia, South Vietnam and Indonesia.

Where loans bear interest it is at fixed concessionary rates ranging from 2 per cent to 6 per cent, and both kinds of loan carry from two to seven years' grace periods during which repayments of capital are not made. Of all loans committed in 1973 the average maturity was 25 years. Britain has more than fulfilled the 1969 recommendations of the Development Assistance Committee of the Organisation for Economic Co-operation and Development (OECD) on easing the terms of financial aid; and fully subscribes to new 1972 recommendations which simplify and improve the terms of financial aid to be aimed at, and which introduce specially softer terms for a group of least-developed countries.

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

TABLE 38: Total Official Flows to Developing Countries 1970-73 f. million

	1970	1971	1972	1973
Bilateral Commonwealth countries (including	198-9	247.5	265-2	238-2
dependent territories)  Grants	176·2 36·6	218·2 43·1	218·0 68·4	190·7 41·6
Technical assistance (grants) Loans	35·5 104·1	43·7 131·4	47·8 101·8	57·2 91·9
Other countries Grants Technical assistance (grants) Loans	22·8 3·8 10·1 8·9	29·2 6·4 9·6 13·1	47·2 6·3 13·0 27·9	47·5 12·5 15·4 19·6
Contributions to multilateral agencies	19.8	30.7	51.1	65.7
Total Total net of amortisation (as used for	218.8	277-9	316.3	303-9
calculation of the 1 per cent target)	188-9	235.8	249.8	262.5
Interest receipts	29.3	32.1	33.2	35.1

Source: British Aid Statistics.

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

in appropriate cases. Between 1958 and the end of 1973, 403 loans were negotiated involving a commitment of £1,266 million, of which £1,095 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 £1,244 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 1973 £191 million (80 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, which are regarded as a first charge on aid funds, are now provided under the authority of the Overseas Aid Act 1966. In 1973 the territories received £22 million in bilateral financial aid and technical assistance.

An important role in development assistance is played by the Commonwealth Development Corporation (CDC), set up by the British Government in 1948, which provides finance and management for development projects in Commonwealth countries and dependencies, often in partnership with governments or private enterprise. In 1969 the CDC's borrowing powers were increased and the area of its operations was extended to non-Commonwealth countries. By the end of 1973 some £181 million had been invested out of a total commitment of £243 million. Of the latter, £57 million was in the Far East, £57 million in the Caribbean and virtually all of the remainder in Africa. New commitments approved in 1973 totalled over £48 million.

#### Technical Assistance

Expenditure on bilateral technical assistance (the provision of skilled personnel, advice and training) has increased in recent years and was £73 million, 30 per cent of total aid, in 1973. The largest component of expenditure (£32 million in 1973) was on sending or maintaining experts, including volunteers; the next largest was for students and trainees in Britain (£12 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 £16 million in 1973.

During 1973, of the 11,983 British persons other than volunteers who were working in developing countries and financed by the British Government, some 5,519 were engaged in the field of education, 2,216 in public works and communications, 1,231 in public administration, 1,227 in agriculture and allied fields, and 665 in health services.

In addition, under the British Volunteer Programme in 1973 there were 2,705 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 of the British costs (£0.9 million in 1973) are met by the British Government.

Britain receives large numbers of students and trainees from developing countries. Over 15,002 were financed in Britain in 1973 under regional programmes of technical assistance, by awards under the Commonwealth Educa-

tion 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 was nearly £141 million; the proposed contribution for the three years 1974-76 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 £74 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. Over 1,500 British nationals were serving in developing countries under the United Nations and its specialised agencies in 1973. Other contributions include those to the United Nations Relief and Works Agency for Palestine Refugees (UNRWA), the World Food Programme and the United Nations Children's Fund (UNICEF).

As a result of its accession to the European Community, Britain is now contributing to Community aid programmes; it is a party to the Community's association agreement with Turkey, is participating fully in Community food aid programmes, and has contributed to Community emergency actions, for example, in the Sahel. When the new convention of association with African, Caribbean and Pacific states enters into force, Britain will begin to contribute to the European Development Fund and it is playing its full part in elaborating overall Community development assistance policies within which Community aid should be extended to other areas of the world, including the Mediterranean, Asia and Latin America. The combined effect of these activities may eventually be to increase substantially British multilateral aid as a percentage of the whole British aid programme.

# 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 Pattern of Expenditure

Total expenditure in Britain on scientific research and development in 1969–70 amounted to £1,082 million compared with £658 million in 1961–62. The proportion this represented of the gross domestic product remained steady throughout the 1960s at between 2.7 and 2.8 per cent. There were, however, divergent trends in some of the components. The share of defence almost halved during the period whereas that for civil purposes was rising. 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 remained fairly constant since.

The Government continues to finance just over half the research and development and to carry out about a quarter in its own establishments. Expenditure by the research councils on research and development is estimated at about £125 million in 1973-74.

THE GOVERN-MENT AND SCIENTIFIC RESEARCH

Under the Science and Technology Act 1965 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. 395). 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 announced its decision (published in Cmnd 5046: see Bibliography, p. 478) to extend the customer-contractor approach to all its applied research and development, as recommended in a report by Lord Rothschild, head of the Central Policy Review Staff (see p. 45). This approach means that government departments, as customers, define their requirements; contractors (the research councils or others) advise on the feasibility of meeting the requirements and undertake the work; and the arrangements between them must ensure that the objectives remain attainable within reasonable costs. This decision has involved organisational and financial changes affecting departments and the research councils (see below). Departments concerned have appointed Chief Scientists to co-ordinate their research needs. The decision has involved also the transfer of certain funds from the Science Budget of the Department of Education and Science to allow some departments to commission research on a customer/contractor basis. During the three-year period 1973-74 to 1975-76, funds rising from £,14.6 million to £,28.4 million (at 1973 prices) are being transferred and these include provision for the Nature Conservancy Council (see p. 396) and certain research undertaken by the Soil

Survey of England and Wales. Customer departments now commission research, with transferred funds, from three research councils (Agricultural, Medical and Natural Environment): these councils continue to receive proportionately reduced funds from the residual Science Budget.

The Government announced at the same time a new programme of training and career development to equip scientists and other specialists for posts

primarily concerned with general policy and management.

The Department of Education and Science

The Department of Education and Science (see also p. 47) is responsible, among other things, for government policy regarding the universities and for promoting civil science throughout Great Britain. The department's relations with the universities are conducted through the University Grants Committee (see p. 156); and its responsibilities for basic and applied civil science are discharged mainly through the five research councils: the Science Research Council (see p. 401), the Medical Research Council (see p. 403), the Agricultural Research Council (see p. 404), the Natural Environment Research Council (see p. 408), and the Social Science Research Council (see p. 409). This remains the broad pattern despite the changes described above. The department is also responsible for some aspects of international scientific relations (see p. 411), 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, set up in 1972 to replace the former Council for Scientific Policy, 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 international and national 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. One of the independent members is appointed part-time chairman.

The Department of the Environment

The Department of the Environment is concerned with research and development for a whole range of functions which affect the environment (see p. 48).

The department's research programme, which is the responsibility of the Directorate General of Research, is carried out or controlled by its research establishments, the Building Research Establishment (BRE), the Transport and Road Research Laboratory (TRRL), and the Hydraulics Research Station (HRS). The department has its research requirements committees, each based on a particular policy subject, through which the customer requirements for research are formulated. A substantial part of the total programme is undertaken by outside agencies.

The Building Research Establishment, which comprises the former Building Research Station, Fire Research Station and Forest Products Research Laboratory, is concerned with research into all building materials, the techniques of building design and construction, and the organisation, productivity and economics of building work. The BRE also conducts research into all

aspects of fire and the danger it represents to life and property.

The Transport and Road Research 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. The TRRL's main activities are highway engineering, traffic engineering and safety, and transport systems.

The main function of the Hydraulics Research Station is to predict the performance of hydraulic civil engineering works and their consequences to the environment. It is concerned with the flow of water in open channels, including the hydraulics of rivers, estuaries, harbours and coasts.

The Water Research Centre, which became operative on 1st April 1974 at the same time as the new Water Authorities in England and Wales (see p. 275), is based upon and absorbs the existing staff and programmes of the Department of the Environment's Water Pollution Research Laboratory, Stevenage; the Water Research Association, Medmenham, Bucks; part of the technology division of the former Water Resources Board, Reading (see p. 275); and part of the programme of the Department of the Environment's Directorate General of Water Engineering. The Water Research Centre is one of the four industrial research associations supported by the Department of the Environment.

The department gives grants in aid of a number of organisations working in research, which include: the Centre for Environmental Studies (see p. 171); the Operational Research Unit of the Royal Institute of Public Administration; and the Royal Society, to meet costs it incurs as British representative on the International Institute of Applied Systems Analysis.

A Nature Conservancy Council, appointed by the Secretary of State for the Environment under the Nature Conservancy Council Act 1973, is responsible for the conservancy aspects of the former Nature Conservancy committee of the Natural Environment Research Council (NERC). The research functions remain with the NERC, under which they are carried out by the Institute of Terrestrial Ecology (see p. 409).

The Department of Industry

The Department of Industry (see also p. 402) is responsible for the sponsor-ship 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 aids, with grants, autonomous industrial research associations.

In accordance with the Government's customer-contractor principle, the department has a number of requirements boards to determine the objectives and balance of its 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; and fundamental standards. They are responsible to the Secretary of State for Industry and include representatives from industry and bodies in the public sector.

The Department of Prices and Consumer Protection The Department of Prices and Consumer Protection (see p. 53) has responsibility for standards and weights and measures, for the British Standards Institution (see p. 218) and for the Metrication Board set up in 1969 to facilitate the transition to the metric system of weights and measures in Britain by 1975 (see p. 457).

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 civil aviation, medical research and space research. For defence aspects see p. 118.

The Department of Energy

The Department of Energy (see p. 48) is responsible for the United Kingdom Atomic Energy Authority; for research into the health and safety of mineworkers, including the Safety in Mines Research Establishment to be transferred to the Executive of the Health and Safety Commission in January 1975 (see p. 350); 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; and strategic oversight of the research programmes of the coal, gas and electricity supply industries.

Other Governmentsponsored Research Branches of research for which government departments are responsible include:

Botany

The Royal Botanic Gardens, Kew (founded in 1759), together with its 400acre 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 between four and five 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 160,000 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 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. It has research stations at Dollis Hill, London, and Martlesham, near Ipswich, and laboratories at Backwell, near Bristol, and at Castleton, near Cardiff.

Environmental Pollution

The Department of the Environment, under its Secretary of State, is responsible for the total strategic approach to environmental management, protection and improvement. Other government departments have certain specific responsibilities for pollution control (for example, the Department of Trade is responsible for oil pollution at sea and the Ministry of Agriculture, Fisheries and Food for pollution from pesticides). The Department of the Environment has a small central environmental pollution unit to co-ordinate the work of all government departments on the control of pollution and the British contribution to international discussions on the subject.

In 1970 an independent standing Royal Commission on Environmental Pollution was set up to advise the Government on national and international matters concerning the pollution of the environment; on the adequacy of research; and on the future possibilities of danger to the environment. The commission has so far published three reports (see Bibliography, p. 479). A Clean Air Council was set up in 1956 and an Advisory Council on Noise in 1970.

Radiological Protection A National Radiological Protection Board was established under the Radiological Protection Act 1970 to provide an authoritative point of reference for Britain on radiological protection. The board, which carries out research, makes public and occupational health assessments and provides services, has assumed the functions of the former Radioactive Substances Advisory Committee, the Radiological Protection Service—hitherto provided jointly by the Medical Research Council (MRC) and the Health Departments—and part of the activities carried on by the central Health and Safety Branch of the United Kingdom Atomic Energy Authority (AEA). The board is financed by Parliament through the Secretary of State for Social Services and by grants from the AEA and MRC and by income from services.

Meteorology

The Ministry of Defence finances the Meteorological Office, which is responsible for research in meteorology and 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 (see below) 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.

Select Committee on Science and Technology 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

The Parliamentary and Scientific Committee, founded in 1939, 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 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, including the Queen Mother and two Royal Dukes; Foreign Members, of whom there are about 70; and the main body of Fellows numbering about 760. 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. 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 and Henry Dale Research Professorships and 12 other research professorships supported by 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 six lectureships: the Croonian (biology); the Bakerian (physical sciences); the Ferrier (nervous system); the Wilkins (history of science); the Leeuwenhoek (microbiology); and the Bernal (social functions of science). 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 appointments 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 such as the International Biological Programme, and promotes exchange visits of scientists with many academies throughout the world. Its International Fellowship Scheme to foster relations with scientists of Western European and many other countries 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 *fournal*, 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.

#### Council for Science and Society

A Council for Science and Society was formed in 1973 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. It is financed initially by the Leverhulme Trust.

#### 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 established in 1965, promotes the co-ordination of the engineering profession. The Council of Science and Technology Institutes—a federal body with five member institutes representing biologists, chemists, mathematicians, metallurgists and physicists—was formed in 1969.

#### International Prizes

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 UNIVER-SITIES AND INSTITUTIONS OF UNIVERSITY STATUS Of total estimated university expenditure on scientific research in the academic year 1971-72 (over £110·3 million), the largest government contribution (over £49·6 million) was through the University Grants Committee (see p. 156).

Scientific research in the universities 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 receive maintenance awards from the research councils, through postgraduate scholarships, studentships or fellowships. 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 currently about £10.5 million a year. Second, grants are given to the universities by the research councils for specific projects, particularly in new or developing fields of research. In recent years the research councils, in addition to making grants of this kind, have made funds available for expensive items of university equipment required for specific programmes of research. The research councils' support for research in the universities and central facilities required for it, excluding expenditure by the Medical Research Council and the Agricultural Research Council on their own research units within the universities (which remain under the control of, and are wholly financed by, the councils), amounted in 1971-72 to £23.8 million.

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 University Grants Committee 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 estimates in a survey published in 1971 (see Bibliography, p. 478) there were in 1968 just over 400,000 persons with qualifications in engineering, technology and science in Great Britain, of whom one-half were qualified in science and one-half in engineering. Of those economically active (350,000), 53 per cent (185,000) held engineering qualifications, 1·2 per cent (4,140) were out of employment, and 35 per cent employed in manufacturing. Education employed over 20 per cent and over the years 1959 to 1968 there was a rapid increase in the service sectors (commerce and consultancy). Within manufacturing the largest increase was in electrical and electronics industries (6 per cent a year). Over the period 1959 to 1968 there was a net gain of scientists from migration and a net loss of engineers and technologists.

SCIENCE RESEARCH COUNCIL The Science Research Council (SRC) was established under Royal Charter in 1965 and consists of a chairman and 10–15 other members. It is supported by grants-in-aid provided by Parliament through the Secretary of State for Education and Science, and covers all branches of fundamental science other than those for which the other research councils are responsible. Provision is made for it to carry out research and development in science and technology through its own establishments; to encourage and support similar research by any other person or body; to provide and operate equipment for common use by universities, polytechnics, technical colleges and similar institutions; to make grants for postgraduate studies; and to disseminate knowledge of science and technology. Its establishments are the Royal Greenwich Observatory,

Herstmonceux, the Royal Observatory, Edinburgh, the Appleton Laboratory, the Rutherford Laboratory, the Daresbury Nuclear Physics Laboratory, and the Atlas Computer Laboratory. The SRC also administers the British scientific space research programme (see p. 407) and provides contributions to the European Organisation for Nuclear Research (CERN), the civil science programme of the North Atlantic Treaty Organisation (NATO) and part of the United Kingdom's contribution to the European Space Agency (see p. 407).

#### INDUSTRIAL RESEARCH

The greater part of industrial research in Britain is undertaken in the research organisations of the larger firms and in government research establishments. Other main agencies are universities and technical colleges, industrial research associations, independent institutes for sponsored research and consultant laboratories.

## Department of Industry

The Department of Industry has direct control of five industrial research establishments—the National Engineering Laboratory (which includes the Birniehill Institute), the National Physical Laboratory, Warren Spring Laboratory, the Laboratory of the Government Chemist, and the Computer Aided Design Centre.

Besides research and development for industry the industrial research establishments are engaged on the application of new techniques and discoveries to design, production, quality control and distribution. The department also sponsors research by grants-in-aid to research associations and by extra-mural contracts with industry, research associations, and universities.

# The Department of the Environment

The Department of the Environment is responsible for the Transport and Road Research Laboratory, the Hydraulics Research Station, and the Building Research Establishment.

### Research Associations

The scheme by which the Government has given financial help to firms with similar interests to form organisations known as research associations, to carry out industrial research co-operatively, was started in 1917. There are now 29 such associations linked with the Department of Industry. In addition there are four (Water; Construction; Heating and Ventilating; and Timber) linked with the Department of the Environment, and four (Flour Milling and Baking; Fruit and Vegetable Preservation; British Food Manufacturing Industries; and British Industrial Biological Research) linked with the Ministry of Agriculture, Fisheries and Food. Suitably specialised associations are now available for about 50 per cent of British industry. They accounted in 1972 for about 1.5 per cent of national research and development expenditure. The largest 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 amounts of the government grants are related to the contributions made by the industries concerned; the grants are now being reduced, each industry bearing an increasing proportion of the cost of its associations. A Conference of Industrial Research Associations was set up in 1969.

### 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 fuel and power, steel and transport. They also give support to organisations concerned with research on matters of interest to them.

Private Industry According to Research and Development Expenditure (see Bibliography, p. 479), expenditure on research and development carried out within or financed by private industry in 1969–70 was £710·8 million of which £227·7 million came from government funds. Expenditure in individual industries, including funds from government sources, was as follows (in £ million): aerospace 171·3; electronics (including computers) 146·7; other electrical engineering 40·3; petroleum products 11·7; other chemical products 96; mechanical engineering 61·1; motor vehicles 49·1; scientific instruments 17·4; food, drink and tobacco 22·8; textiles 15·7. 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. In these institutes research for private firms is carried out confidentially, the

results remaining the property of the sponsor.

MEDICAL RESEARCH The Government gives substantial support to medical research both by financing the Medical Research Council and through block grants to universities distributed through the Department of Education and Science and the University Grants Committee. It supports clinical research through the Department of Health and Social Security and the National Health Service. 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.

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) and is supported by grant-in-aid provided by Parliament through the Secretary of State for Education and Science.

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 and social medicine problems 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 scholarships) 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 epidemiological and population surveys carried out in this area.

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 the new district hospital. In addition the council has over 70 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. 411), maintains laboratories in The Gambia and a unit in Jamaica.

AGRICULTURAL AND FISHERIES RESEARCH Agricultural research is carried out by the Agricultural Research Council, the government agricultural departments and by private industry. Fisheries research is carried out by the government fisheries departments, the White Fish Authority, the Natural Environment Research Council, 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 in 1973–74 totalled £15·8 million of which £6·9 million had been transferred from the Science Budget (see p. 394) of the Department of Education and Science.

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 by grant-in-aid provided by Parliament through the Secretary of State for Education and Science.

The ARC is responsible for 14 independent state-aided agricultural research institutes and also has eight institutes under its direct control and 11 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 postgraduate training awards.

Government Agricultural 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. There is a related Ministry Veterinary Laboratory at Lasswade, Midlothian. The Plant Pathology Laboratory at Harpenden, Hertfordshire, is concerned with plant quarantine matters, the standards for improved crop planting material, pest and disease assessment work, the clearance of pesticides for safety and their official approval for biological efficiency. 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 overseas work, and is concerned with the clearance of pesticides for safety.

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 facilities for experimental work in Norwich and London. 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 problems of cultivar taxonomy, seed testing, healthy seed potato production, plant pathology, and the ecology of birds, mammals and insects harmful to agriculture and stored products. In Northern Ireland the 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.

The ARC, the Ministry of Agriculture, Fisheries and Food and the Department of Agriculture and Fisheries for Scotland have set up a Joint Consultative Organisation to advise on the programmes and priorities for governmentfinanced research and development in food and agriculture. The organisation consists of five boards—three commodity boards, covering animals, arable crops and forage, and horticulture; and two special subject boards for food science and technology, and engineering and buildings. The Ministry of Agriculture, Fisheries and Food has appointed a chief scientist who is responsible for scientific advice to the ministry on the broad range of policy matters with which it deals and also for framing, commissioning and reviewing the ministry's research and development programmes and in determining the order of priorities between them.

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, one concerned with landing 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.

The Forestry Commission undertakes experimental work relating to silvicultural and allied problems (see p. 300). By means of grants, it also aids forest

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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.

#### NUCLEAR ENERGY

The Secretary of State for Energy is responsible under the Atomic Energy Act 1946 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 (AEA), set up under the Atomic Energy Authority Act 1954, is the main body carrying out research and development in nuclear energy. As an essential part of the British Government's nuclear power programme, the AEA has carried out research and developed new types of nuclear power stations for the generation of electric power on a commercial scale and for this purpose it builds and operates experimental and prototype nuclear reactors. Construction of commercial nuclear power stations is carried out by industry to the order of the electricity generating boards which operate them. A single British nuclear reactor construction company, the National Nuclear Corporation, has been formed to replace the two consortia set up in 1968 to design and construct nuclear power stations (see p. 268). Under the Science and Technology Act 1965 the functions of the AEA have been extended so that the Government may, after consultation, require it to undertake research and development outside nuclear energy and this now yields an income of some f.4 million a year.

The assets and liabilities of the AEA's trading fund were transferred under the Atomic Energy Authority Act 1971 to two statutory companies—British Nuclear Fuels Limited and The Radiochemical Centre Limited. The establishments of British Nuclear Fuels Limited include those at Springfields, Capenhurst, Chapelcross and the Windscale and Calder Works. Those of The Radiochemical Centre Limited include the Radiochemical Centre, Amersham, and its facilities at Harwell. The Reactor Group Laboratories at Springfields and Windscale and the Advanced Gas-cooled Reactor (AGR) at Windscale remain with the AEA.

The Secretary of State for Defence became responsible for the development and production of nuclear weapons for the Services in 1966; in practice, however, the AEA produced the explosive nuclear material and assemblies for nuclear weapons under contract and carried out weapons research. Under the Atomic Energy Authority (Weapons Group) Act 1973 the activities of the AEA's Weapons Group (the Atomic Weapons Establishment) were transferred to the Ministry of Defence from 1st April 1973.

The Department of Industry and the AEA are jointly responsible for cooperation with other countries in nuclear energy, partly through the medium of bilateral agreements with a large number of individual countries and partly through British membership of bodies such as the International Atomic Energy Agency and the European Nuclear Energy Agency.

### Euratom

Britain became a full member of the European Atomic Energy Community (Euratom) on 1st January 1973 (see p. 76) 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.

**High Energy Physics** 

The provision of facilities for research in high energy physics is the function of the Science Research Council (SRC) (see p. 401). 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, Cheshire, with a 5 GeV electron synchrotron. Experiments at higher energies are carried out by the European Organisation for Nuclear Research (CERN) to which Britain contributes through the SRC.

**Neutron Beam** Research

The SRC shares with its French and West German partners the control of the Institut Max von Laue-Paul Langevin (ILL) which operates a high flux reactor at Grenoble for neutron beam research.

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. Total expenditure on space activities in 1973-74 was about £37 million.

The United Kingdom with other European Governments is establishing a European Space Agency (ESA) which is expected to come into existence before the end of 1974. This new organisation will supersede the European Space Vehicle Launcher Development Organisation (ELDO) and European Space Research Organisation (ESRO) of which the United Kingdom was a founder member. Among its main responsibilities will be the establishment of a single co-ordinated European space programme.

The decision to set up the ESA was taken in 1973 at a meeting of the European Space Conference (a ministerial conference which first met in 1966). The conference also agreed in principle on the implementation of three new major

European space projects—Ariane, Spacelab and Marots.

The civil scientific space research programme is administered by the SRC, which is responsible to the Secretary of State for Education and Science. Opportunities are provided for research workers to carry out experiments in Britain's national satellite and sounding rocket programme, in the ESRO 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 and the analyses of lunar surface samples.

Responsibility for industrial sponsorship of the space industry for Britain's space technology programme and for leading the British delegation to the European Space Conference 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 82 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.

Scientific space experiments are undertaken by scientists in universities and in government research establishments. The Appleton Laboratory of the SRC at Slough provides support and services for the national scientific space research programmes and also operates the United States National Aeronautics and Space Administration (NASA) Satellite Tracking and Data Acquisition Network (STADAN) station at Winkfield. Telemetry facilities for the Department of Industry's technology satellites are situated at Lasham, Hampshire, with data processing and analysis being undertaken by Space Department, Royal Aircraft Establishment, Farnborough, which also undertakes long-term research and development intended to assist industry. Optical tracking of satellites is undertaken by many individual observers in Britain and by the Royal Edinburgh Observatory's outstation (see below); 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 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).

OPTICAL AND RADIO ASTRONOMY Optical astronomy is carried out in university departments and in the Royal Greenwich Observatory and the Royal Observatory, Edinburgh, under the Science Research Council (SRC). SRC has set out to increase the facilities available to university and observatory astronomers. The 98-in (245 cm) Isaac Newton Telescope at the Royal Greenwich Observatory was commissioned in 1967 and is operated as a national facility. A 150-in (375 cm) telescope is nearing completion at Siding Spring Mountain in Australia as a joint Anglo-Australian project, while a British 48-in (120 cm) Schmidt Telescope has been installed 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 telescopes with 1·61 km (1 mile) and 0·8 km (0·5 mile) arrays have been complemented by a third telescope array 5 km (3·1 miles) long.

THE NATURAL ENVIRONMENT

The Natural Environment Research Council (NERC), which consists of a chairman and 13–18 other members, was established by Royal Charter in 1965 under the Science and Technology Act to encourage, plan and execute research

in those sciences, physical and biological, that relate to man's natural environment and its resources. This research seeks to provide a better understanding not only of the nature, resources and processes of the human environment, but also of their influence on man's activities and welfare and of man's influence on them. Sciences supported by the NERC comprise: geology, geophysics, and geochemistry; physical oceanography and marine biology; hydrology and freshwater biology; terrestrial ecology and conservation; forestry; and meteorology.

The NERC, which is supported by grant-in-aid provided by Parliament through the Secretary of State for Education and Science, carries out research and training through its own institutes, through grant-aided institutes, and by grants, fellowships, and postgraduate awards to universities and other institutes of higher education.

The council's institutes are: British Antarctic Survey; Culture Centre of Algae and Protozoa; Institute of Geological Sciences; Institute of Hydrology; Institute of Marine Environmental Research; Institute of Oceanographic Sciences; Institute of Terrestrial Ecology; Unit of Experimental Cartography; Unit of Invertebrate Virology.

The NERC also maintains a research vessel base. Grant-aided institutes are: Freshwater Biological Association; Marine Biological Association; Scottish Marine Biological Association; Marine Invertebrate Biology Unit; and other smaller units attached to universities.

Marine Technology A Ship and Marine Technology Requirements Board to identify customer requirements for research and development in exploiting the resources of the sea and seabed and in formulating government programmes was set up in 1972 to replace the Advisory Committee on Marine Technology.

THE SOCIAL SCIENCES

The Social Science Research Council (SSRC) was established under Royal Charter in 1965 to encourage, support and to 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 three research units: the Industrial Relations RU, the Ethnic Relations RU, and the Survey Unit. 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; 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 (see p. 110) 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.

tion with universities and other independent research organisations.

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, and Chessington, Surrey. There are also a number of 'safari parks' containing reservations of wild animals through which the public can pass in closed motor cars.

### Scientific Museums

The British Museum (Natural History) is 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 APPLICA-TION 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. 426. Two constituents of the British Library (see p. 426) 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 in 1976.

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. 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. 412) 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. Set up under the Development of Inventions Act 1948 its borrowing power for government advances is £50 million. Outstanding advances total f,20 million but the corporation is currently funding its annual investment in research and development from its income from licences and levies.

The NRDC's functions are to promote the adoption by industry 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 industrial firms, on a joint venture basis, for the development of their own inventions and projects.

Projects so far sponsored include the Cephalosporin C antibiotic, hovercraft, computers, advanced types of electric motor, oceanology, insecticides, micro-

electronics and plastics.

INTERNATIONAL SCIENTIFIC RELATIONS

Britain is represented on the Scientific and Technical Research Committee (CREST) of the European Community, set up in 1974, the object of which is to co-ordinate national policies on these matters and to implement joint projects of interest to the Community. Other inter-governmental organisations involved in scientific co-operation with which Britain is concerned include: specialised agencies of the United Nations, for example, 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 European Nuclear Energy Agency (ENEA) of the Organisation for Economic Co-operation and Development (OECD); the European Organisation for Nuclear Research (CERN); the European Space Agency; the European Molecular Biology Conference; and the International Agency for Research on Cancer (IARC). 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. Britain is also represented on the two scientific committees of the OECD. In areas of non-governmental collaboration, Britain's main representative is the Royal Society.

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 in London, which aims at improving the economic viability of the less-developed countries by research into new uses for tropical plant and animal products; the Centre for Overseas Pest Research which was formed in London in 1971 out of four existing units including the former Anti-Locust Research Centre (internationally recognised as a world centre for locust research since 1931); and the Land Resources Division which is concerned with all aspects of land resource appraisal. The ministry provides over £6.9 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 all Commonwealth countries, 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. Seventeen abstract journals, one primary journal and an index are published periodically and have a combined annual circulation of about 29,000 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 Scientific Committee The Commonwealth Scientific Committee (CSC) consisting of the heads of the national research organisations of Commonwealth countries, formed in 1958 from the previous Standing Committee set up in 1946, meets biennially. Operating under the CSC is a consultative sub-committee, membership of which consists of officials responsible for scientific matters in the Commonwealth Missions in London, and representatives from British government departments, and the Royal Society. There are various specialist committees.

The British Council The principal aims of the British Council (see p. 161) 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, 50 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. The council publishes Higher Education in the United Kingdom. Other publications include British Medical Bulletin, British Medicine, a monthly guide to current literature, British Medical Periodicals, a select and annotated list, British Medical Books for Postgraduates, a select and annotated list; Science Education Newsletter, which lists facilities for education and training in Britain, and Scholarships Abroad which lists awards available to British postgraduate students wishing to study overseas.

## 20 The Arts

In the last three decades there has been a steady growth in popular interest in the arts. This development—reflected, for example, in the profusion of amateur dramatic and musical societies, the growth in sales of books and gramophone records, and the large attendance figures at major art exhibitions—is largely the result of increased leisure time and improved education in the arts. Another factor has been the influence of television and radio which have made the best in the arts available to people in their own homes.

Artistic activities in Britain receive financial and other support from many sources. Though some of the arts—for example, painting and literature—continue to flourish with little outside help, others, notably drama and classical music, have become more and more reliant on it. Valuable assistance comes from such private sources as voluntary trusts and commercial concerns, but since 1945 the Government and local authorities have played an increasingly important part in encouraging the arts.

### Government Support

The Government is concerned with the preservation of the country's cultural heritage, the promotion of education in the arts, the dissemination of the arts to a wider public and the encouragement of high standards in the performing and creative arts. In Great Britain ministerial responsibility for the arts is borne by a Parliamentary Under Secretary at the Department of Education and Science; the Secretaries of State for Wales and Scotland are also concerned with cultural matters in Wales and Scotland.

Estimated government expenditure on the arts in Great Britain is £52.7 million in 1974-75. Direct allocations include £18.8 million for the Arts Council of Great Britain and about £9.8 million for museums and galleries. The Government also finances the British Library (see p. 426); in addition it is responsible through the Department of the Environment, Scottish and Welsh Offices for the upkeep of ancient monuments and historic buildings and offers financial help to independent bodies concerned with preservation, such as the National Trust.

In Britain 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 art education in schools, colleges of further education, evening institutes and community centres, and with the public library service.

### 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 promotes music and drama through grants to professional orchestras and opera, dance and theatre companies, and arranges art exhibitions in London and the regions. Tours by opera, dance and theatre companies are organised by the council. A limited amount of assistance is given to individual artists, including painters, sculptors, photographers, writers and composers,

for particular projects; and the construction of new buildings or improvements to existing theatres, concert halls and other arts buildings is encouraged by grants provided under the council's 'Housing the Arts' scheme. The council also sponsors films on art.

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 now channelled to regional arts associations (see p. 416) 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. 161), which supports some 177 libraries of books and records in over 70 countries. 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 spends some £3 million each year in copyright payments to authors and composers and has orchestras employing about a third of the country's full-time professional musicians. 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. 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.

Independent television companies make grants for the promotion of the arts in their regions and the IBA transmits general magazine programmes on the arts.

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 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, is contributing over £4 million 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, sometimes taking 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 Associations and **Arts Festivals**  The arts benefit most when the patrons—central and local government, voluntary bodies, industry, the universities and individuals—combine.

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 17 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.

Similar examples of co-operative patronage are 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.

DRAMA

Britain is one of the world's major centres of theatrical activity. In London during the summer season, theatres are packed with foreign visitors, while in the provinces there is enthusiastic support for the work of local repertory companies. A recent development in the theatre-particularly in Londonhas been the emergence of 'fringe' theatre groups presenting short plays in an informal atmosphere.

A large part of this development of British drama stems from the growing government support provided through the Arts Councils of Great Britain and Northern Ireland which grant subsidies 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 authors may be awarded bursaries. Schemes are also in operation to train stage designers, directors, technicians and those wishing to take up theatre administration.

Professional Theatre

There are over 270 theatres in professional use in Britain. 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 40 principal theatres in or near the West End and another 15 in the suburbs. Most of the theatres are let to producing managements on a commercial basis for each production, but four are occupied by important subsidised companies, including the National Theatre and Royal Shakespeare companies. The former, which will move into its new building on the South Bank during 1975, 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 preand post-West End tours of the major London productions and performances

by companies specially formed for touring. These theatres have been declining in numbers, 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 some 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 20 new repertory theatres have been built since 1958.

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 thousands of 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. An increasing number of universities offer courses in drama.

Theatre for Young People

Theatre for young people has increased in importance in the past 15 years. In 1970, under the aegis of the National Theatre, 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 20 specialist companies, including the Unicorn Theatre for Young People, Theatre Centre and the Polka Company, some of which are supported by the Arts Council. In the provinces about 33 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.

The Arts Council estimates that annual audience attendances for young people's theatre performances are about 3 million.

MUSIC, OPERA AND BALLET Music in all its forms plays an important role in British cultural life. There is a wide interest in 'pop' music particularly among young people and concerts of

folk music attract large audiences, while jazz, light music and brass bands maintain substantial followings. A widespread interest in 'serious' music is reflected in the size of attendances at orchestral concerts and at performances of opera, ballet and chamber music.

Through the Arts Council of Great Britain, the Government encourages interest in the various forms of 'serious' music. The Council makes grants to a number of orchestras, soloists, opera and ballet companies, music societies and festivals. It also provides bursaries and commissions for British composers, musicians, designers and choreographers.

In Britain 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.

Music

Seasons of orchestral concerts are promoted every year in many of the large towns and cities of Britain. In London the principal concert halls are the Royal Festival Hall on the south bank of the Thames, adjacent to which are the Queen Elizabeth Hall and the Purcell Room which accommodate smaller-scale performances; the Royal Albert Hall, Kensington, 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 and the Scottish National orchestras. 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 Baroque Ensemble. 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. In Northern Ireland the Ulster Orchestra receives financial aid from the Arts Council of Northern Ireland.

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; most choral societies are affiliated to the National Federation of Music Societies.

Music Festivals

Music festivals in Britain, originating with 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, which receives an annual grant from the Arts Council, assists amateur groups with the cost of engaging professional soloists; over 1,000 music societies are members of the federation.

Opera and Dance

Regular seasons of opera and ballet are given at the Royal Opera House, Covent Garden, London, which receives financial assistance from the Arts Council. The Royal Opera House has a permanent orchestra which plays for the Royal Opera and the Royal Ballet. The latter has a high international reputation and makes overseas tours. It also has a regular London season and performs in the provinces.

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 Opera Group, which specialises in the performance of works by British composers, the New Opera Company which has been associated with the English National Opera and performs at Sadler's Wells Theatre, 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 with financial support from the Arts Council of Northern Ireland.

Dance Companies

Britain's dance companies include London's Festival Ballet and the Ballet Rambert (Britain's oldest ballet company) and Scottish Ballet. The London Contemporary Dance Theatre provides regular seasons of modern dance at The Place in London besides touring extensively. The work of the Patricia Mulholland Irish Ballet Company in Northern Ireland, which is assisted by the Arts Council of Northern Ireland, combines traditional music, dancing and mime.

Education in Music, Opera and Ballet

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 played an important part in raising British dance to its present high standard.

Young people are encouraged to take an interest in music, opera and ballet. 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 opera, ballet and other performances for young people. The Royal Ballet sponsors a small group, Ballet for All, to give lecture-demonstrations to the public and to schools.

In schools, more children are learning to play musical instruments; and over 208,000 candidates a year (children and other students) take the examinations of the Associated Board of the Royal Schools of Music.

**FILMS** 

There are some 1,600 cinemas in Great Britain and estimated attendance in 1973 amounted to 142.25 million. British films, actors and creative and technical talent are appreciated 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 association 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.

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 and to the National Film School. 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 The state takes no part in the censorship of films in Britain, but before it can be shown a film must be licensed by a local authority or, in some areas, a magistrate. 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' (suitable to be seen by any person not less than five years of age); 'A' (for persons of not less than five years of age but containing material that some parents might prefer their children not 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 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 Scotlish 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 partly by an Exchequer grant, and by the Scottish Film Council which also receives a government grant. The Institute encourages the making and showing of good films. It also administers the National Film Theatre in London and the National Film Archive, runs an annual summer school, 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 23,000 films, including newsreels and other miscellaneous items, besides scripts, art designs, posters and about 800,000 photographic stills, selected to illustrate the history and the art of the film and as significant social and historical records.

The National Film Theatre, on the south bank of the Thames in London, has two cinemas showing films of outstanding historical, artistic or technical interest; it holds a unique position 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 50 regional film theatres on the lines of the National Film Theatre and may make grants towards their recurrent and capital costs. In Scotland the Scottish Film Council 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 offering three-year courses for writers, directors, producers and cameramen began operating in 1971. The school, which is financed by government grant, has about 70 students. Training in film production is also given at the London Film School which has 247 students and provides two-year courses.

Children and the Cinema

The Cinematograph Act 1952 provided for the making of regulations by the Home Secretary to protect the health and welfare of children attending film shows. Cinemas which give children's shows require a special licence from the licensing authority, which may impose conditions. There are about 800 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, winning 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 an increasingly lively attitude towards display on the part of museums and galleries, and by the activities of many institutions, societies, 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 is advised on grants and policy towards museums by the Standing Commission on Museums and Galleries.

The Government also encourages high standards of industrial design and craftsmanship through grants to the Design Council and craft organisations.

In addition to direct state assistance, the Arts Council runs the Hayward Gallery in London, where major loan exhibitions are shown, maintains its own collection of contemporary British art, and organises or offers grants or guarantees towards a variety of touring and other exhibitions. There are also Arts Council galleries in Edinburgh and Cardiff. It 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

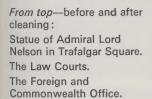
London is a major centre for the international art market: exports and imports of works of art for the year ended June 1973 were estimated at £49.9 million and £65.5 million respectively. Certain items are covered by export control: these are works of art and other antiques over 100 years old and worth 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 in Britain. These include the major national collections together with a wide variety of municipally and independently owned institutions.

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 London Museum (to be amalgamated with

### Cleaner London

Many buildings have been cleaned to help in improving the environment.















### British constructional work overseas

From top: Ammonia and urea plant at the Gulf state of Qatar.

Bosphorus bridge at Istanbul, Turkey.

Brazil's largest bridge linking Rio de Janeiro and Niteroi.









From top: Hong Kong's ocean terminal.

A 400-bed hospital in Kuwait. Housing near Toronto, Canada. Polyester ancillary plant at Novopolotsk, Soviet Union.







### Women in sport











the Guildhall Museum into the Museum of London), the Wallace Collection, the British Museum (Natural History), the Geological Museum and the

Science Museum (see p. 410).

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 Portrait Gallery, and the Scottish National Gallery of Modern Art). The National Museum of Wales, in Cardiff, has a branch at St. Fagan's Castle where the Welsh Folk Museum is housed; and in Northern Ireland there is the national Ulster Museum in Belfast.

Most of the national museums and galleries are administered by trustee bodies, but the Victoria and Albert and Science Museums are the direct 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 there is a small gallery for exhibition of pictures from the extensive royal collections. Most cities and large towns and many other towns have a museum devoted to art, archaeology and natural history, usually owned by the municipal authority but sometimes by a local learned society or privately by individuals or trustees. Both Oxford and Cambridge are rich in museums, many of them, as in other towns, 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 Birmingham, Bristol, Glasgow, Leeds, Leicester, Liverpool, Manchester, Norwich, Reading, Southampton and York. In Northern Ireland there are notable museums and galleries in or near Belfast (the Ulster Folk Museum and the Northern Ireland Arts Council Gallery), in Armagh City and in Londonderry. Many private art collections housed in historic family mansions, including those in the ownership of the National Trust, are open to the public.

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 area.

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. The association serves as a central body for the collection of information and the discussion of matters relating to museum administration, and as a training and examining body for profes-

sional qualifications.

Exhibitions

Temporary exhibitions organised and sent on tour by the Arts Councils, the Circulation Department of the Victoria and Albert Museum, the Science Museum and the Art Exhibitions Bureau are a regular feature of many museums. 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 exhibits modern sculpture in its parks periodically. Commercial exhibitions of works by old masters and living artists are held throughout the year in the galleries of the art dealers of London (largely in the Bond Street area).

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 exhibitions of children's art, including the National Exhibition of Children's Art sponsored annually by the *Sunday Mirror*.

Finance

All national collections are financed chiefly from government funds. Besides meeting the administrative and maintenance costs, the Government makes provision for annual purchase grants which totalled £1.6 million in 1974-75. It also provides special *ad hoc* purchase grants, and pre-eminent works of art accepted by the Government in lieu of estate duty 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 postgraduate level there is the Royal College of Art which awards its own degrees. Art is also taught at an advanced level at the four Scottish Central (Art) Institutions administered by the Scottish Education Department. 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 degree courses and some four-year sandwich courses are available to students who have successfully completed a foundation course or have been exempted from it. Postgraduate courses are available at some institutions. 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 (see p. 159) is the regional college for Northern Ireland.

Art has a place in the curriculum of every type of school, and the Society for Education through Art, among other activities, encourages the purchase by schools of original works of art by organising an annual Pictures for Schools exhibition. Pictures may also be borrowed from an increasing number of public libraries.

#### Architecture

Official responsibility towards the nation's architecture is concerned with encouraging the best in new building and preserving the best that has been inherited from the past (for preservation, see p. 171).

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 in these subjects. It also provides advice to local authorities in England and Wales on the best standards of housing design through a series of *Design Bulletins* and other publications and offers annual awards for the best housing designs in both public and private sectors. Other government departments, such as the Department of Education and Science and the Department of Health and Social Security, provide design advice and exercise design control over buildings—such as schools and hospitals—falling within their area of responsibility.

Government departments are assisted in an advisory capacity by the Royal Fine Art 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. 167) seeks to promote high standards in architecture and civic planning and to encourage interest in the appearance and protection of town and countryside.

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 33 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 over 21,000 in Britain and 5,500 overseas and over 3,600 students in Britain and overseas countries. The RIBA has 72 branches in Britain, and allied to it are 33 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 on a variety of subjects; 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. Among other associations are the Incorporated Association of Architects and Surveyors, the Institute of Registered Architects and the Faculty of Architects and Surveyors. Societies include 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 Council of Great Britain which supports literature in a number of ways, including grants for writers, translators, publishers, little presses and magazines. Similar provision is made through the Arts Council of Northern Ireland for bursaries, poetry readings, and aid for publications.

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 7 million volumes; the Department of Manuscripts; and the Department of Oriental Manuscripts and Books. The Lending Division at Boston Spa, Yorkshire, has over 2 million volumes and 43,000 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. A Bibliographic Services Division is being formed to include the work of the British National Bibliography which, is published weekly with three, six, nine and twelve monthly accumulations listing in a classified order (with indexes) all new books and new editions, excluding reprints, of books 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 South Kensington 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. 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.

Libraries in Education

Educational expansion has increased the strain on library resources at all levels of 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 about 5 million volumes, the John Rylands University Library in Manchester contains more than 2 million volumes, and the university libraries of Edinburgh, Glasgow and Birmingham each have over three-quarters of a million 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 Brotherton Library of English Literature at Leeds. The new universities, including the new technological uni-

versities, are also building collections and substantial libraries are being assembled in polytechnics and colleges of education.

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 117 million books. (The figures do not include the libraries in the 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.

Under the Public Libraries and Museums Act 1964 the Secretary of State for Education and Science is charged with the supervision of the public library service in England and in Wales, and is advised by two library advisory councils. Public library authorities in Great Britain have a duty to provide an efficient and (with some limitations) free lending and reference library service for books and periodicals. Outlying 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.

Similar duties are carried out in Northern Ireland by the education and

library boards.

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 pro-

vided by or based upon the local library.

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 interlending 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 Queen's University and New University of Ulster libraries and to the five education and library boards.

The principal professional organisation is the Library Association, which, among other functions, holds examinations in librarianship. The Association

Library Co-operation

Library Associations in September 1974 had a personal membership of 21,495 of whom more than 2,023 were from overseas countries. It maintains a Register of Chartered Libarians, 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. 410).

Books

In 1973 British publishers issued 35,254 separate titles including 9,556 reprints and new editions. The total of new titles issued was 25,698. An increasing proportion of books—including a wide range of specialised non-fiction—is now sold in paper-back form; Penguin Books are the best known publishers of paper-backs. 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 libraries in over 70 countries, its programmes of book exhibitions and its bibliographical publications. The Book Development Council promotes British books overseas. (For sales and exports of books in 1973, see p. 239.) The National Book League has a membership covering all who are interested in books; 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, generally known as the British Academy, is the leading society of humanistic studies and receives a grant from the Treasury.

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 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.

A large number of newspapers are sold in Britain every day, 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 200,000 to nearly 4.2 million.

The national newspapers (daily and Sunday) fall into two categories: popular and quality. The tabloid format is more commonly used by the former and the broadsheet format by the latter. Prices range from £0.04 to £0.08 for dailies and from £0.05 to £0.12 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 one morning and two Sunday newspapers: the Daily Telegraph, the Sunday Times and The Observer.

According to *The Newspaper Press Directory*<sup>1</sup> 132 daily and Sunday newspapers and some 1,158 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 groups of nationals of other countries resident in Britain and religious newspapers.

Britain imports three-quarters of its newsprint requirements, over 1.2 million tonnes annually, 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: International Publishing Corporation Limited (part of Reed International); Associated Newspapers Limited; Beaverbrook Newspapers Limited; the Thomson Organisation Limited; News International Limited; United Newspapers Limited; and Pearson Longman Limited.

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. The Independent Broadcasting Authority Act 1973 establishes the right of local newspapers to hold shares in companies providing local independent radio services (see p. 442).

<sup>&</sup>lt;sup>1</sup> Changes in the number of newspapers occur constantly; figures are based on the 1974 edition of *The Newspaper Press Directory*.

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. 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 their report.

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 39). All the national dailies are produced in London, but those with big circulations also print northern editions in Manchester. The Scottish Daily Express is also printed in Manchester. The leading Scottish 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, 86 morning or evening dailies and Sundays and over 700 newspapers appearing once or twice a week) provide mainly regional and local news. Some of the daily newspapers also give extensive 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.

Generally speaking, regional evening newspapers are non-political, while the morning newspapers are independent or conservative in outlook.

The total circulation of the regional morning and evening papers is estimated at about 5 million. Of the morning papers the *Journal* (Newcastle upon Tyne), the *Yorkshire Post* (Leeds) and the *Northern Echo* (Darlington) have circulations of over 100,000 and two provincial Sunday papers—the *Sunday* 

<sup>&</sup>lt;sup>1</sup> 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.

TABLE 39: 'National' Newspapers and London Evenings

Title	Controlled by	Circulation <sup>1</sup> average Jan.–June 1974
Dailies: Daily Express (1900)	Beaverbrook Newspapers Ltd.	3,226,936
Daily Mail (1896)	Associated Newspapers Ltd.	1,768,207
Daily Mirror (1903)	International Publishing Corporation Ltd.	4,192,491
The Daily Telegraph (1855)	Daily Telegraph Ltd.	1,427,439
Financial Times (1888)	Pearson Longman Ltd.	198,574
The Guardian (1821)	Guardian Newspapers Ltd.	364,635
Morning Star (1966)*	People's Press Printing Society Ltd.	49,842
The Sun (1969)	News International Ltd.	3,302,990
The Times (1785)	The Thomson Organisation Ltd.	351,205
London Evenings:  Evening News (1881)  Monday-Friday Saturday	Associated Newspapers Ltd.	817,648 608,646
Evening Standard (1827) Monday–Friday Saturday	Beaverbrook Newspapers Ltd.	522,000 345,662
Sundays: News of the World (1843)	News International Ltd.	5,872,028
The Observer (1791)	The Observer Trust	832,983
The Sunday People (1881)	International Publishing Corporation Ltd.	4,386,861
Sunday Express (1918)	Beaverbrook Newspapers Ltd.	4,059,983
Sunday Mirror (1963)	International Publishing Corporation Ltd.	4,570,712
The Sunday Telegraph (1961)	Daily Telegraph Ltd.	776,783
The Sunday Times (1822)	The Thomson Organisation Ltd.	1,505,385

<sup>&</sup>lt;sup>1</sup> 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.

Sun (Newcastle upon Tyne) and the Sunday Mercury (Birmingham)—have circulations of over 200,000. Individual circulation figures of regional evening papers start at about 1,700; most are in the 30,000–100,000 range; a few have circulations 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 are also a number of free distribution newspapers (mostly weekly),

some of which are published by orthodox newspaper publishers.

London Suburban Papers The London local weeklies (155) include papers for every district in Greater London. They are assembled mainly in groups of six to eight, 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.

Scotland

Scotland has five morning, six evening and two Sunday newspapers, in addition to the Scottish editions of the Daily Express and Sunday Express. The leading morning papers are The Scotsman, published in Edinburgh, and The Glasgow Herald. Others are: the Daily Record, published in Glasgow; the Courier and Advertiser, published in Dundee; and the Press and Journal of Aberdeen. Evening papers include 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 and the Sunday Post.

Weekly and local newspapers published in Scotland number about 130. The most widely known are the *People's Journal*, which has several local editions,

and the Weekly News.

Northern Ireland Northern Ireland has two morning newspapers, one evening paper and one Sunday paper, all published in Belfast: 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, with circulations ranging from about 4,500 to about 24,000. The majority are published by individual companies.

Wales

Wales has one daily morning newspaper, the Western Mail, published in Cardiff; it circulates mainly in southern 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, and the South Wales Evening Post, Swansea. North Wales is served by the Liverpool Echo and to a smaller extent by the Manchester Evening News.

The weekly press (over 70 papers) includes English language papers, some

of which carry articles in Welsh, and Welsh language papers.

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 five weekly newspapers of which the Isle of Man Examiner has the largest circulation.

The Periodical Press There are over 4,330 periodical publications in Britain, classified as 'general', 'specialised', 'trade', 'technical' and 'professional'. There are also some 660 'house magazines' produced by industrial undertakings, business houses or public services for the benefit of their employees and/or clients.

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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 associations.

The weekly periodicals with the highest sales in Britain are: Woman; Woman's Weekly; Woman's Own; Weekend; Woman's Realm; Radio Times; and TV Times. 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 outside Britain and are an important medium for selling British goods overseas. Their publication ranges in frequency from weekly to quarterly.

Periodicals published in England circulate throughout the United Kingdom. Weekly papers are also published in Wales, Scotland and Northern Ireland: in Wales several monthly and quarterly journals in both Welsh and English; in Scotland four monthly illustrated periodicals (Scottish Field, Scotland's Magazine, Scots Magazine and Scotland), a weekly paper devoted to farming interests (Scottish Farmer), a number of literary journals, of which the most famous is probably Blackwood's, and numerous popular magazines; and in Northern Ireland weekly, monthly and quarterly publications covering farming, the linen industry, building, motoring, politics and social work.

**News Agencies** 

There are three principal British news agencies: Reuters Ltd.; the Press Association Ltd.; and the Exchange Telegraph Company Ltd.

Reuters Ltd. is an international news organisation owned by the newspapers of Britain, Australia and New Zealand through 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 1,000 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 600,000 to 700,000 words of general news, sports, and economic services reports are received in London every day over a global network of leased cable and radio circuits. From these messages regionalised news services, specially tailored to the needs of recipients in

Britain and eight main overseas regions, are transmitted to more than 150 countries for distribution to information media, either direct or through national news agencies. Reuters Economic Services supply up-to-the-minute information to business houses throughout the world. Its computerised systems offer virtually instant coverage of the important stock and commodity markets by computer interrogation or video display. A computerised message-handling system, known as the Automatic Data Exchange, is used to speed up the handling and distribution of news.

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 public company with over 1,100 shareholders, which supplies financial and sporting news to newspapers and broadcasting organisations. Racing services are also supplied by teleprinter and telephone to subscribers in London and the provinces from offices in all important cities

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

and towns.

The Printing and Publishing Industry Training Board (PPITB) is responsible for training in the printing, publishing and professional photography industries. The responsibilities of the board (which has a chairman, a deputy chairman and 23 other members, representing employer, employee and educational interests) include 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 Board. 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 course lasting for one academic year and (2) by direct recruitment to a regional or local newspaper. Students selected

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for a pre-entry course must have gained two passes at the Advanced level of the General Certificate of Education (GCE) and be under the age of 20 at the beginning of a course. Some pre-entry students are sponsored by newspapers; the others are assisted by the NCTJ to find employment on completion of the course. The minimum educational requirement for direct entry is five GCE

passes at Ordinary level.

Under collective agreements between the employers' associations in publishing and the National Union 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, shorthand, use of language, law, public administration and current affairs is used at both kinds of course. Eight centres (five in England, and one each in Wales, Scotland and Northern Ireland) provide courses for reporters and there is one centre for newspaper photographers.

All entrants to regional and local newspapers who are under the age of 24 serve an apprenticeship of three years (two years in the case of graduates). For direct entrants apprenticeship follows six months' probation. Entrants from pre-entry courses serve three months' probation, after which apprenticeship is back-dated to the start of the probation period. After minimum qualifying service under NCTJ regulations trainees take a proficiency test which

carries a salary bonus.

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. The NCTJ courses are arranged in association with the London College of Printing and include a one-year preentry course in periodical journalism, and evening, day release, and occasional block release courses.

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. The University of Warwick provides a management course for newspaper executives in conjunction with the Newspaper Publishers Association. 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 Travelling Fellowship Scheme for the training and education of young journalists throughout the Commonwealth, about ten journalists from overseas spend four 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 parts of 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 surburban 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 as the National Association of Journalists, and the National Union of Journalists (NUI), 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 28,000 members and the IoJ about 2,000.

The main aims of the Guild of British Newspaper Editors are to sustain the dignity of editorship, to raise and safeguard the professional status of editors, to protect the rights and freedom of the press, and to improve the education and training of journalists: the Guild 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; restrictions on reporting of preliminary hearings of indictable offences (in England, Wales and Northern Ireland); the right of press representatives to be admitted to meetings of local authorities; restrictions on the publication of (a) divorce and domestic proceedings in

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courts of law, (b) 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 (c) 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. The press is also affected by the Trade Descriptions Act which imposes penalties for false or misleading descriptions of goods or services.

Of particular relevance to the work of the press are the laws on libel, 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.¹ 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 a network of independent local radio stations which is being established (see p. 442).

Users of television sets must obtain a receiving licence each year, which can be bought from most post offices. Licences for sets receiving black and white pictures cost £7 a year, and for those receiving colour pictures £12 a year. There were nearly 17.4 million receiving licences current in Britain in June 1974 of which some 11.5 million were for black and white, and nearly 5.9

million 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.

The BBC and the IBA are independent authorities in the day-to-day operations of broadcasting, including programmes and administration. The Government, however, retains ultimate control, and the Home Secretary is answerable to Parliament on broad questions of policy and may issue directions to the BBC and the IBA on a number of technical and other subjects. Both organisations are expected to show balance and due impartiality in their general presentation of programmes, particularly where matters of public policy or controversial subjects are concerned, and in this connection the Home Secretary has powers to prohibit the broadcasting of any particular item or class of item, or to revoke the licences of the BBC or IBA at any time. These are treated as major reserve powers and no formal veto has ever been placed on the broadcasting of a particular item. Both the BBC and the IBA 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,

<sup>&</sup>lt;sup>1</sup> In 1974 a committee of inquiry was appointed by the Government to look into the future of broadcasting.

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 broadcasting, music, agriculture, school broadcasting, further education, programmes for immigrants, science and engineering and charitable appeals. 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 his chief assistant, the managing directors for television, radio and external broadcasting, the directors of programmes for television and radio, 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 develop-

ment and operation of local radio stations.

The domestic services of the BBC are financed principally by an annual grant voted by Parliament (£140.8 million in 1973-74) 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 magazines and other publications dealing 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 1973-74 this amounted to over £16 million.

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 control the programme output, to control the advertising and to build, own and operate the transmitting stations for the independent television and radio networks.

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. 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 £13.7 million in the year ended March 1974. The television programme companies also pay to the IBA for transfer to the Exchequer a further sum known as the levy. Previously related to advertising revenue, the levy has, since June 1974, been related to the profits of the programme companies.

Fifteen television programme companies hold six-year 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 Independent Broadcasting Authority

The Programme Companies

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 14 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 Limited, 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 stating that special precautions are to be taken when children are likely to be viewing. There are also safeguards in the Independent Broadcasting Authority Act 1973 to prevent newspaper shareholdings in a programme company leading to results contrary to the public interest. However, the IBA believes that newspapers can bring valuable qualities to the development of television and radio and is not opposed to investment by them. 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 recreational activity in Britain and some 96 per cent of the population now watch television in their own homes. Average viewing time per head of population in 1972–73 was over 17 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 94 per cent within range of uhf transmissions. A majority of people own 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 are transmitted in colour, though receivable also in black and white.

Radio attracts its largest audiences during the mornings. In 1972-73 radio listening averaged some 9 hours a week per head of population.

BROADCASTING

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 1972-73 some 4,944 hours were broadcast on the BBC 1 national network including 840 hours of programmes produced by regional organisations for network transmission; similar figures for BBC 2 were 3,080 hours including 300 hours of regional productions. Regional studios also originate programmes of news and local interest intended for regional transmission only; these varied from 626 hours in Wales (of which 376 were in the Welsh language) to an average of over 145 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 I 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 1972-73 over 12 per cent of BBC 1 transmissions were devoted to schools and further education broadcasts and 15.5 per cent of

BBC 2 transmissions to Open University lectures (see p. 156).

During 1972-73 BBC television programmes won 21 international awards and more than 7,000 screen hours of programmes were sold to more than 90

countries overseas.

The first regular independent television broadcasts began in London in 1955. ITV transmissions are provided on a regional basis by 15 programme companies. In 1972-73 over 9,000 hours of different programmes were shown over the independent television network: 7,300 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 nationally networked. About 1,200 hours consisted mainly of programmes imported from overseas for showing largely on the national network.

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, in and between programmes.

BBC Radio

Independent

Television

BBC Radio provides listeners with four alternative national channels, each of which has a distinct character. Radio 1, broadcasting some 12 hours a day, provides a programme of 'pop' music, while Radio 2, broadcasting over 20 hours a day, provides light music as well as being the principal channel for the coverage of sport. Radio 3, broadcasting some 17 hours a day, provides continuous, 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, broadcasting 17 hours a day, is the main speech programme, providing the principal news and information service of the BBC; in addition it presents a wide range of drama, 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, local radio stations provide between 9 and 13 hours of locally produced programmes each day, normally during the early morning, lunchtime 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 is popular programming 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 subsidiary, Independent Radio News, gives national and international news to the other independent stations. In December 1973 a third station, Radio Clyde, began broadcasting in the Glasgow area. Birmingham Broadcasting and Radio Piccadilly in Manchester began broadcasting in the spring of 1974 and stations for Tyneside and Wearside, Swansea, Sheffield and Rotherham, Liverpool and Edinburgh are expected to begin operating at the end of 1974.

BBC 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 40 languages (including English) for a total of some 750 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 and Europe.

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 70 hours a week in Arabic to half an hour in Nepali. The BBC's English by Radio and Television Service is the most extensive language teaching undertaking in the world. Some 280 radio programmes of English lessons are broadcast weekly with explanations in 27 other languages, and recorded lessons are supplied to some 200 stations in over 77 countries. English by Television programmes are shown in more than 50 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

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weekly of World Service programmes in nearly 50 countries. The Transcription Service offers programmes to more than 100 countries.

Another part of the external services is the Monitoring Service which listens to and reports on foreign broadcasts, supplying a daily flow of significant news and comment from overseas to the BBC, the Press, and the Government.

Transmitting Stations and Studios Programme links are generally rented by the BBC from the Post Office, although some are provided by the BBC with Post Office agreement. The operation and maintenance of the transmitting stations from which its various programmes are sent out are, however, solely a BBC responsibility.

BBC

For its domestic radio programmes, the BBC uses 141 studios in London and the regions, and for its external services 49 in London. In addition, there are 37 semi-automatic studios which can be operated by programme officials without engineering staff. Each BBC local radio station has 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.

IBA

The IBA transmits programmes from 47 vhf and about 130 uhf stations throughout Britain, programme links being provided by the Post Office. Independent television programmes are produced at studio centres in Aberdeen, Belfast, Birmingham, Bristol, Cardiff, Carlisle, Dover, 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 or national broadcasting. A number of new studios have also been built for colour television.

Advertising

The BBC does not give publicity to any individual firm or organised interest 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 or, without the consent of the Home Secretary, broadcast any matter for payment.

Advertisements are broadcast on independent television and 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 giving guidance about the types and methods of advertisement that may not be used. Some types of advertising are prohibited, notably that of cigarettes (under a government ruling of 1965) and for

betting. Advertisements may not be inserted in certain types of programme, for example, in broadcasts to schools.

#### 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 also transmitted periodically under rules agreed between the major political parties, the BBC and the IBA.

### Technical Developments

The Home Secretary is advised on the technical aspects of television and vhf sound broadcasting by the Television Advisory Committee, which consists of an independent chairman, the Directors General of the BBC and IBA, independent members, and representatives from the radio industry and interested government departments.

Research into technical problems is carried out by the scientific and engineering staffs of the BBC, the IBA, 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, 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. During 1972 IBA engineers introduced the world's first fully digital field rate standards converter (DICE) which improves the interchange of programmes between areas using the 525lines system (for example, North America) and those using the 625-lines system (for example, Europe). In early 1973 the IBA began tests of an experimental digital data broadcasting system ('Oracle') for transmitting the written word in the vertical interval of television signals. The BBC has a system known as Ceefax and future developments will combine the best features of both systems.

#### 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 Conference 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 news-film to some 172 television organisations in 97 countries and is the most widely used newsfilm agency in the world, and a member of the International Television Federation (Intertel), which produces high-quality information programmes which are exchanged overseas. United Press International and Independent Television News jointly provide an international newsfilm

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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. 161), 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 Centre in Glasgow, run by the Thomson Foundation, a charitable trust.

The BBC and the IBA participate in the work of the International Telecommunications 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 Leisure and Sport

There is a large variety of leisure and sporting opportunities available in Britain, both inside and outside the home. An increased standard of living has enabled many more people to pursue new interests in their leisure time and an improved range of facilities is being provided.

#### LEISURE

Home Interests In Britain, as in many other countries, a considerable proportion of people's time is spent in their homes; on a weekday evening, for instance, seven out of eight of the adult population are likely to be found at home, watching television, reading newspapers or books, listening to the radio or the record player, playing musical instruments (guitars are particularly popular among young people), or entertaining friends. Many people also have hobbies, for example, gardening, home decorating and repairing, and car maintenance. The increased percentage of households owning motor cars (52 per cent in 1971 compared with 46 per cent in 1967) has encouraged people to take more holidays away from home and to visit the countryside, stately homes, historic buildings and museums. All these interests are catered for by numerous magazines and periodicals.

About one-third of the total population are registered members of public libraries. Book sales have increased—a widening range of titles, including works

of scholarship, being produced in the cheaper paperback form.

Sales of long playing records by manufacturers have increased sharply during the past decade, the 1973 figure being 121.7 million. The production of 'extended play' or 'single records'—on the weekly sales of which the 'pop' music popularity ratings, known as the 'Top Ten' and 'Top Twenty', are calculated—reached its peak in 1964; the 1973 manufacturers' sales figure was 74.9 million.

Most families do home decorating and painting. Gardening is another major interest; at least half the families in Britain have some garden in spite of the high proportion of the population living in urban areas. In many places there are large garden centres where people purchase shrubs and other plants for outdoor and indoor cultivation. In addition some families have allotments—plots of land rented for cultivation. Thousands of local horticultural societies are affiliated to the National Allotment Garden Society and there are many unaffiliated societies. The numerous flower and vegetable shows held in town and country are very popular, and there is a large attendance at the most important of them, including the annual Chelsea Flower Show.

Entertainments Outside the Home

The diversity of entertainments outside the home includes, for young people, discotheques and pop concerts. The cinemas, many of which show international as well as British films, are popular among young people, although audiences in general have been declining for several years. Theatres appeal to all age groups throughout Britain; although the theatre-going public is not a large one, the subsidised repertory theatres (see p. 417) are well supported. Ballet, opera and concerts of classical music also have an enthusiastic and growing public while special art exhibitions often attract large audiences.

Dancing is popular among most age groups. There are many hundreds of regular dance halls throughout the country, and over 2,000 schools of dancing. These include schools of ballroom dancing as well as those teaching ballet, many of which are attended by young children. Public dances are often held in other halls, while clubs and societies hold dances occasionally in their own or hired premises. For younger people dancing to pop music is more common than formal ballroom dancing which, together with Scottish, English and Irish traditional dances, retains a following particularly among the overthirties. There is a folk dancing festival held each year at the Royal Albert Hall in London.

The public house—known as the pub or the local—is a centre of social life for a large number of people (especially men) in Britain. Pubs, besides offering a wide variety of alcoholic and non-alcoholic drinks and providing (in increasing numbers) hot and cold food, serve as places for meeting friends and for entertainment; many have, for instance, television sets, amusement machines and juke-boxes and provide facilities for playing darts, billiards, dominoes and similar games. Some also employ musicians for evening entertainment, such as piano playing, folk singing and modern jazz.

'Bingo', a game of chance played by groups of people for prizes, is organised throughout the country in converted cinemas and in club rooms and village halls; legalised by the gambling Acts of the 1960s, it provides a form of social entertainment of particular value to the elderly and lonely, and does not involve large sums of money. There are some 128 commercial gaming clubs which operate under strict legislative control. Betting shops number some 14,800. The turnover of money staked by the public on horse and greyhound racing is of the order of £1,500 million a year, most of it on horse races. Betting on football matches for smaller stakes, both at fixed odds and through football pools, is widespread.

A number of people in all age groups and occupations are actively involved in organisations such as church groups, political parties, groups of local business and professional men (for example the Rotary Clubs), trade unions, social and cultural groups, charities or voluntary social welfare agencies. The latter include citizens' rights groups which advise people on their legal rights and their entitlement to welfare benefits. Involvement by young people in voluntary work has increased and novel methods of fund raising, such as sponsoring long-distance walks, have been introduced.

Educational and cultural pursuits are an important part of some people's leisure activities; every year about 2 million people attend non-vocational adult education classes on a wide range of subjects. Thousands of people are involved in the activities of the many amateur dramatic and music-making societies.

Some of the longer-established clubs and societies are organised on a national basis and have branches throughout the country; these include the Working Men's Clubs and Institutes, the Townswomen's Guilds and the Women's Institutes. Working Men's Clubs, affiliated to the Working Men's Club and Institute Union, number about 4,000 and have some 4 million members; primarily social and recreational in nature, the clubs aim at providing amenities and entertainments of a very high standard. Some 2,728 Townswomen's Guilds, with a total membership of over 200,000, are affiliated to the National Union of Townswomen's Guilds. The guilds are educational as well as social in purpose, and they co-operate in many public welfare activities. The aim of the National Federation of Women's Institutes is to

Clubs and Groups improve rural life and amenities; in villages throughout England and Wales there are over 9,300 institutes with a total of over 440,000 members. In Scotland and Northern Ireland there are Women's Rural Institutes with similar aims and interests.

In addition there are clubs and associations catering for all kinds of interest and hobby, for example, chess, bridge, stamp collecting, wine making, archaeology, and rambling.

Holidays

In 1973 some 40.5 million holidays (that is, four or more nights away from home) were taken in Great Britain by British residents while the number of holiday visits taken abroad was 8.25 million compared with just over 5 million in 1966. The popularity of foreign travel is attributable to several factors besides rising incomes: the attraction of the sun which makes Spain, France and Italy the most popular destinations for the British tourist; the many charter and other airline services provided; and the ability of the travel trade to provide reasonably priced holidays. A by-product has been an increase in the number of adults who, with the help of radio and television programmes and by attending adult classes, are studying foreign languages to add to what they learned at school. Of those who stay in Britain many enjoy active holidays, such as canoeing, sailing and pony-trekking; camping under canvas, in caravans and in specially equipped vehicles, is popular.

#### SPORT

The traditionally widespread interest in sport among participants and spectators has been stimulated by regular broadcast coverage (particularly television) of the major sporting events. Large crowds attend such occasions as the association football 'Cup Final' at Wembley Stadium, the international rugby matches at Twickenham and Cardiff Arms Park, the Wimbledon lawn tennis championships, the classic horse races, and some of the cricket Test Matches, and millions more watch them on television.

Sportsmen may be professional (paid players) or amateurs. Some sports, for example, rugby union football, hockey and rowing, are entirely amateur but in other sports the distinction between amateur and professional status is less strictly defined. Nevertheless an important feature of British sport is its amateur element—people who devote time and energy to organising sport and to teaching and training, as well as the many thousands of all ages who engage in sport for pleasure alone.

General Administration and Promotion The Government does not undertake the organisation or the direct promotion of individual sports in Britain; there is, however, a Minister of State with responsibility for sport in the Department of the Environment, and the policy of the Government is to foster the development of all aspects of physical recreation, stimulating the provision of sports facilities and encouraging their use to the fullest capacity.

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 Great Britain), 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. They award grants and loans for sports development, coaching and administration to the governing bodies of sport and to other national organisations; 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 the national governing and representative bodies of sport and physical recreation. The Sports Council is linked with nine regional sports councils in England on which are represented local authorities and sports interests in each region.

Sport and physical recreation in Northern Ireland are promoted by the Northern Ireland Sports Council which was set up in 1973. The council has powers to establish sport and recreation centres, to organise activities and to pay grants to voluntary organisations and assist them in other ways. The Department of Community Relations is responsible for supervising grants for

sport and recreational activities.

A bibliographic service about sport is provided by the United Kingdom National Documentation Centre for Sport, Physical Recreation and Recreation 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. Voluntary bodies and private concerns also make substantial provisions for sport in Britain, but the largest provision is made by local authorities which made available some £42.6 million in 1972–73.

Facilities for Sport The law requires all publicly maintained schools in Britain to provide for the physical education (for example, gymnastics, games, athletics, dancing and swimming) of their pupils. Schools in the national systems (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 a number of areas, physical education facilities in schools are available to the whole community outside school hours. Facilities for, and instruction in, many kinds of sport are likewise provided at the independent preparatory and public schools and at the universities (some of which have departments of physical education). Local authorities are the main providers of land and large-scale facilities used by the community for recreation, for example, playing fields, gymnasia, tennis courts, golf courses, boating lakes, swimming baths and sports centres and many arrange further education classes in various physical education subjects. Large industrial firms often provide sports facilities for their employees and, in many cases, make them available for the public.

Composite National Bodies Among the national voluntary bodies most closely connected with the general development of sport 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 overall size of the British team; 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 overall management of the team.

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. With a council composed of representatives of the governing bodies of sport, a number of educational bodies, voluntary youth organisations, physical education associations, local authorities and individuals, the NPFA gives advice on the provision and layout of sports facilities, including small recreation centres, on matters relating to the recreational needs of children from their earliest years, and on the establishment of playgrounds and play leadership schemes. It also distributes each year grants to some 500 playing field, playground and local recreational centre schemes. The NPFA is a national charity established by royal charter. It derives its funds mainly from voluntary contributions, but 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 through sport for the disabled, arranges sports meetings at the Stoke Mandeville Sports Stadium for the Paralysed and Other Disabled, and encourages the provision of facilities (including sports clubs) for physically disabled people.

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 in Britain.

National centres, some of which were initially financed by funds from voluntary sources, are maintained by the Sports Councils and provide recreational 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 extensional activities.

sively by local clubs and the local community generally.

One centre has been developed as a national sailing centre; two are primarily used as training centres for mountain activities, including climbing and rescue techniques; and a fourth provides training for outdoor activities such as walking, climbing, sailing and field studies. A national water sports centre was opened in 1973. Combined facilities for ranges of sports are provided at the other centres which include the Crystal Palace National Sports Centre in London and the National Sports Centre for Wales in Cardiff. The centre at Crystal Palace has a main stadium seating 12,000 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 Cardiff centre is supported by local authorities, as well as by Sports Council grants.

In addition to the national sports centres, other centres—such as the Meadowbank Sports Centre administered by Edinburgh Corporation—cater for a wide range of recreational activities and often attract more than purely local interest. Some 200 indoor sports centres serve local rather than national needs; many 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—the first sports centre of its kind in the

In Northern Ireland the first multi-purpose sports centre was opened in 1973.

**POPULAR SPORTS** Some of the major sports in Britain are described below.

#### 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 250 clubs are registered with the English Football Association (FA) and some 37,000 clubs are affiliated to regional or district associations. The English FA organises an annual cup competition, the final of which is played in Wembley Stadium watched by some 100,000 spectators; a similar competition is run by the Scottish and Welsh Football Associations.

The principal professional games in England and Wales are controlled by the Football League which comprises 92 professional clubs and in Scotland by the Scottish Football League (37 clubs); the clubs play in four divisions in England and Wales and two in Scotland. During the season attendances at Football League matches total about 25 million and at Scottish league matches around 3 million. Altogether there are about 7,000-8,000 professional footballers; these are greatly outnumbered by the nearly I million amateurs (including schoolboys and members of the armed forces).

National teams representing England, Wales, Scotland and Northern Ireland compete against each other annually and take part in European competitions and the World Cup competition.

#### **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 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, 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 boxing, 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 who 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 makes tours to 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 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 which is mainly a sport of the Scottish Highlands. The deer are preserved in 'deer forests' and are protected during close seasons.

The most popular country sport is fishing, there being some 2.3 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 match angling—a competitive form of coarse fishing by weight. 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).

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 many towns and villages, some of which are owned by local authorities. The main event of the golfing year is the Open Golf Championship and other important events include the Walker Cup match for amateurs and the Ryder Cup match for professionals, both being 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 Championships.

Another motor sport is motor cycle racing. The governing body is 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 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 race courses in Great Britain. Over 900 days' racing are held each year and 13,000 horses are in

training in Great Britain.

The racing of greyhounds after a mechanical hare takes place at some 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 (1 July-30 June). Some 10,000 registered greyhounds are in training under the National Greyhound Racing Club Rules.

Betting takes place on horse and greyhound racing, 'bookmakers' providing facilities on and off race courses and greyhound tracks. Bets laid off course, mainly through licensed betting offices, comprise 86 per cent of the betting turnover. A form of pool betting (totalisator betting) is organised on and off course by the Horserace Totalisator Board (HTB). Most greyhound tracks operate their own totalisators under strict local authority control. 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 breeds of horses (including the work of the National Stud at Newmarket) and horse racing in general.

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.

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 some 24,000 members, the society is also the parent body of the Pony Club and the Riding Club movement. The Pony Club and the Riding Clubs run their own national championships, the latter organising the annual Riding Club Horseshoe Long Distance Ride which is a test of stamina for horses and riders.

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 prescribing 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 15,000 members and 950 shows are affiliated to it. The two major show jumping events 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 English, Welsh, Scottish and Irish rugby football unions. International matches between England, Scotland, Wales, Ireland and France are played each year and there are tours by international teams. County championships are

organised by the English Rugby Union.

Rugby League football is played mostly in the north of England. The governing body 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.

#### Sailing

Sailing has always been popular on Britain's inland and coastal waters. The Royal Yachting Association has over 1,500 clubs and 40,000 members. It also has many recognised schools giving courses for novices, organises a National Sailing Centre 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 in the Isle of Wight and major events are held at other British sailing centres.

#### **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 and Wales.

### Sport

#### **Governing Body**

Aerosports: Private Flying British Light Aviation Centre Gliding British Gliding Association British Parachute Association Parachuting Archery Grand National Archery Society Badminton Association of England Badminton Amateur Basket Ball Association Basket Ball Billiards and Snooker Billiards and Snooker Control Council English Bowling Association Bowls British Canoe Union Canoeing

Croquet Association

Cycling:

Cycle Racing British Cycling Federation
Touring Cyclists' Touring Club

Fencing Amateur Fencing Association

Gymnastics British Amateur Gymnastics Association
Hockey Association of England (men)
All England Women's Hockey Association

Judo British Judo Association

Lacrosse All England Women's Lacrosse Association

Mountaineering
Netball
Netball
Orienteering
Polo
Rowing
Shootian (Target)

British Mountaineering Council
All England Netball Association
British Orienteering Federation
Hurlingham Polo Association
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
Swimming: Amateur Swimming Association

Underwater Swimming British Sub Aqua Club

Table Tennis English Table Tennis Association
Tenpin Bowling British Tenpin Bowling Association
Volley Ball English Volleyball Association
Water Skiing British Water Ski Federation

Weightlifting British Amateur Weightlifters' Association
Wrestling British Amateur Wrestling Association

## Appendix

#### Currency

The unit of currency is the pound sterling divided into 100 new pence (p). There are six denominations: 50p; 10p; 5p; 2p; 1p; and  $\frac{1}{2}p$ .

#### Metric Equivalents for British Weights and Measures

Adoption of Metric System The Metrication Board was set up in 1969 to promote the planning and publicising of the changeover to the international system of units for weights and measures throughout the economy and educational system, mainly by 1975.

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Length
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Area

```
1 square inch =
                                                6.451 square centimetres
 144 square inches
                            1 square foot
                                         = 929.03 square centimetres
                                               0.836 square metre
   9 square feet
                           1 square yard =
                       =
4,840 square yards
                       =
                           1 acre
                                         =
                                                0.405 hectare
 640 acres
                                               2.59 square kilometres
                           1 square mile =
```

Capacity

```
1 pint = 0.568 litre

2 pints = 1 quart = 1.136 litres

4 quarts = 1 gallon = 4.546 litres

8 gallons = 1 bushel = 36.37 litres

8 bushels = 1 quarter = 2.909 hectolitres
```

Weight (Avoirdupois)

```
1 ounce (oz.)
                                                 = 28.35 grammes
                           1 pound (lb.)
                                                    0.454 kilogramme
  16 oz.
                      =
  14 lb.
                           1 stone (st.)
                                                     6.35 kilogrammes
                      _
 112 lb.
                          1 hundredweight (cwt.) = 50.8 kilogrammes
                      =
                                                 = 1.016 tonnes
  20 cwt. (2,240 lb.)
                      =
                           1 long ton
                                                      0.907 tonne
                         1 short ton
2,000 lb.
```

Double Conversion Tables for Measures and Weights (Note: the central figures represent either of the two columns beside them, as the case may be, for example, 1 centimetre = 0.394 inch, and 1 inch = 2.540 centimetres.)

Centi- metres		Inches	Metres		Yards	Kilo- metres		Miles	Hec- tares		Acres
2.540	1	0.394	0.914	1	1.094	1.609	1	0.621	0.404	1	2.471
5.080	2	0.787	1.829	2	2.187	3.219	2	1.243	0.809	2	4.942
7.620	3	1.181	2.743	3	3.281	4.828	3	1.864	1.214	3	7.413
10.160	4	1.575	3.658	4	4.374	6.437	4	2.485	1.619	4	9.884
12.700	5	1.969	4.572	5	5.468	8.047	5	3.107	2.023	5	12.355
15.240	6	2.362	5.486	6	6.562	9.656	6	3.728	2.428	6	14.826
17.780	7	2.756	6.401	7	7.655	11.266	7	4.350	2.833	7	17.298
20.320	8	3.150	7.315	8	8.749	12.875	8	4.971	3.237	8	19.769
22.860	9	3.543	8.230	9	9.843	14.484	9	5.592	3.642	9	22.240
25.400	10	3.937	9.144	10	10.936	16.094	10	6.214	4.047	10	24.711

Kilo- grammes	Av. Pounds		Litres		Pints	Litres		Metri Quin per Gallons Hecta		ŗ	Hun- dred- weight per Acre
0.454	1	2.205	0.568	1	1.760	4.546	1	0.220	1.255	1	0.797
0.907	2	4.409	1.136	2	3.520	9.092	2	0.440	2.511	2	1.593
1.361	3	6.614	1.705	3	5.279	13.638	3	0.660	3.766	3	2.390
1.814	4	8.818	2.273	4	7.039	18.184	4	0.880	5.021	4	3.186
2.268	5	11.023	2.841	5	8.799	22.730	5	1.100	6.277	5	3.983
2.722	6	13.228	3.409	6	10.559	27.276	6	1.320	7.532	6	4.780
3.175	7	15.432	3.978	7	12.319	31.822	7	1.540	8.787	7	5.576
3.629	8	17.637	4.546	8	14.078	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  $\frac{9}{8}$ , then add 32.

## Bibliography

This bibliography is in no sense comprehensive: it is only intended to be a guide to further reading on the subjects covered in this handbook.

Readers are asked to note that in Britain the Central Office of Information reference documents marked with an asterisk may be obtained, on payment of a charge, from the Central Office of Information, Reference Division Distribution Unit, Hercules Road, London SE1 7DU; and overseas they may be obtained from British Information Offices.

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).

Acts of Parliament referred to in the text can be obtained at varying prices from H.M. Stationery Office and its agents overseas.

International Standard Book Numbers (ISBN) should be quoted when ordering publications. So that readers will be supplied with the latest edition no ISBNs are given for annual and periodical publications.

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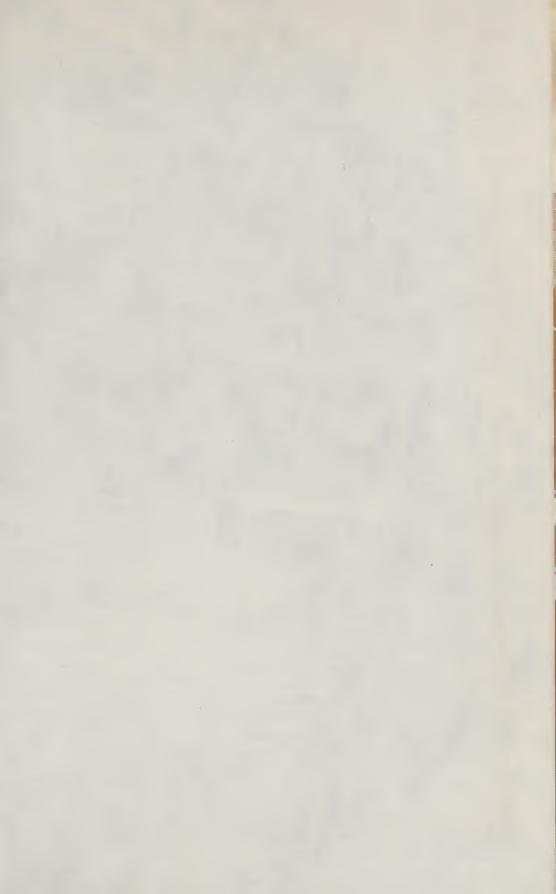
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Traditional materials have contributed to the varied pattern of building seen in Britain. Some materials are illustrated here: flint cobble; sandstone contrast; timber framing; carved brick; oolite stone roofs; reed thatching; pebble dash; ornamental lead work; and cast iron. The end papers show modern architecture using mainly steel framing and concrete, glass, and brick.





