

THE GOVERNMENT ACTUARY'S DEPARTMENT

The arrangements for the supply of actuarial advice to the Government and to the various departments of the public service in the United Kingdom are concentrated almost entirely in one Office, viz., the "Department of the Government Actuary" or, as it is usually known, the Government Actuary's Department. The setting up of a separate department, as part of the central government machine, to advise and to provide estimates and reports on all aspects of government business which require the professional services of an actuary, is a feature of public administration which seems to be peculiar to the United Kingdom. It is thought therefore that the following brief notes on the early history and the functions of the Department, for which we are indebted to the Government Actuary, Sir George Maddex, K.B.E., F.I.A., may be of interest to readers of the *Transactions*.

HISTORICAL

Prior to 1912, when the British system of National Health Insurance started, there were practically no actuaries in the government service except for the few who were engaged on specific duties in the National Debt Office and the Estate Duty Office. If a department required actuarial advice in the course of its day-to-day work or in connexion with projected legislation, it was the custom to employ an independent actuary engaged in consulting practice. The occasions for such consultation were rare and arose mainly in connexion with friendly societies and superannuation and pension schemes. It is true that early in the nineteenth century John Finlaison, the first Actuary to the Commissioners for the Reduction of the National Debt, became known as "the Government actuary" owing to the extent to which he was consulted officially on actuarial and statistical matters. However, no successor to that title was found until 1917, although the post of Actuary to the National Debt Office has continued in being to the present day.

The development of the government actuarial service of today started with the passing of the National Health Insurance Act of 1911, which required the setting up of new government machinery. It was clear that the administrative departments would have to

include a permanent actuarial organization, and an "office" was therefore established to advise on actuarial and financial matters generally and to undertake the extensive computations required under the scheme. The head of this small department was given the official title of Chief Actuary to the National Health Insurance Joint Committee and Sir Alfred (then Mr.) Watson, a well-known consulting actuary, was appointed to the post.

The outstanding reputation of Watson led to his advice being sought by other departments on questions not connected with Health Insurance, and during the War of 1914-18 the number and variety of matters referred to him grew rapidly. These questions did not always fall within the conventional conception of an actuarial problem. At that time the number of people, whether inside or outside the government service, who had received a formal training in statistical method, was relatively small; further, except for a few departments which were closely concerned with the collection and tabulation of their own statistical material for public purposes, the facilities available within departments for dealing with statistical questions fell far below present standards. In this situation the presence within the service of an actuary of Watson's experience and authority, with a trained staff at his disposal, was of great value.

In view of the increase of his work and responsibilities the Treasury, in 1917, conferred on the Chief Actuary the wider title of Government Actuary. He and his staff remained, however, a sub-department of the National Health Insurance Joint Committee and their services were available to other departments only in so far as their duties under the Joint Committee might permit.

Meanwhile, in 1917 also, a Committee had been set up under the chairmanship of Lord Haldane to survey the machinery of government. The somewhat anomalous position of the Government Actuary did not fail to receive attention from this body. In their Report* the Committee said, with reference to actuarial work (paragraph 18):

"The largest actuarial department is that of the Chief Actuary to the National Health Insurance Joint Committee. During the war the Government have required actuarial advice upon an increasing range of important questions, such as war pensions and shipping, and have resorted to the Chief Actuary and his trained staff for this advice to an extent which has brought about an important change in his position. The

* Report of the Machinery of Government Committee, December 1918 (Cd. 9230).

service is ceasing to be departmental in the sense of being available to a single department alone, and is now recognized as a service provided to meet the general needs of all the departments of government."

Later, in paragraph 31, they stated the case for a centralized actuarial service as follows :—

"The arrangements under which the public service as a whole is now enabled, as occasion may require, to obtain the advice of the Government Actuary, indicate a recognition of the fact that scientific work of this character may best be performed at a common centre and by a single staff, which thereby gains a variety of experience, and concentrates in itself an amount of knowledge, beyond the grasp of actuaries exclusively employed in a single department, or (as was until recently the common practice) called in to advise upon isolated problems by individual departments at different times."

The expected development in the position of the Government Actuary occurred upon the creation of the Ministry of Health in 1919. In June of that year the Treasury, "being of opinion that the position of the Government Actuary under the National Health Insurance Joint Committee was no longer appropriate, and that he should be enabled to undertake any actuarial work required for the public service," constituted his office a separate Department with its own Vote, by Treasury Minute. In intimating to departments the existence of the new service the Treasury stated that "My Lords wish to draw general attention to the fact that the Department of the Government Actuary is in a position to deal with all actuarial questions on which advice may be required from time to time by departments. Such questions should accordingly be referred in future to that Department, and in no case should outside actuaries be engaged, or consulted with a view to their employment, without the prior sanction of this Board." The Department is now one of the "central government and finance" group associated with the Treasury under the general responsibility of the Chancellor of the Exchequer, who answers for it in Parliament.

FUNCTIONS

Apart from various statutory duties placed upon the Government Actuary, the services of himself and his staff are—as already indicated—available to government departments which may require actuarial advice. The Government Actuary's Department is in some

ways a counterpart in the public service of a firm of consulting actuaries in private practice. Moreover, the references coming before it, and with which it is equipped to deal, cover not only actuarial problems in the narrow acceptance of that term but also more general questions of a financial or statistical character where the use of actuarial techniques may be specially appropriate.

Access to this centralized actuarial service has been extended, so far as staff resources permit, to the governments of colonies and other members of the Commonwealth, which may ask for the help of the Government Actuary. With the permission of the Treasury the Government Actuary has, in fact, dealt with a large variety of references on pension funds, social insurance, etc., for these governments, including for example the Channel Islands, Malta, Mauritius, most of the African Colonies and Protectorates, the West Indies, as well as for India and Ceylon. From time to time this assistance has taken the form of seconding members of his staff to carry out specific duties in those territories, although such arrangements can hardly be said to fall within the scope of its normal functions. For instance, members of the professional staff have been lent to New Zealand and to Ceylon to advise on actuarial aspects of social insurance, whilst another was seconded to the Government of India to set up the apparatus for administering new legislation relating to insurance companies. Other loans of this kind have been made for short periods.

More recently, requests for assistance have been received from certain of the boards set up to administer the nationalized industries, and the Treasury has thought it appropriate that the Government Actuary should undertake work on superannuation and analogous matters for such bodies.

For services rendered to bodies other than British Government departments fees are normally charged, based on the cost of the work done with an addition for overheads. The sums thus paid are appropriated in aid of the Department's Vote, of which they have formed in recent years a substantial proportion.

STATUTORY AND OTHER RECURRENT DUTIES

Although the matters referred to the Department in its consultant capacity are very numerous, a large part of the time of the staff is taken up with work arising from duties imposed upon the Government Actuary by statute. The most important of these are the annual review of, and the more comprehensive quinquennial enquiry into, the financial operation of the National Insurance system and

the Industrial Injuries system under the new scheme of social insurance brought into operation by the Acts of 1946. These investigations, which involve reports to Parliament, are required separately for Great Britain and Northern Ireland and they necessitate more or less continuous and close association, both on the statistical and the financial side, with the departments administering these schemes.

The periodical valuations of superannuation schemes constitute another substantial block of work. Among these is the statutory requirement—in which, however, the Government Actuary is not mentioned by name—for the periodical actuarial review of the Teachers' Superannuation schemes for England and Wales and for Scotland respectively. Provision for similar actuarial reviews of pensions and other benefit schemes is contained in the Regulations and Orders covering the superannuation arrangements for the National Health Service, the superannuation scheme for the staff of the National Coal Board, the Mineworkers' Pensions and Supplementary Industrial Injuries benefits schemes, etc. Analogous to these investigations are the recurrent valuations of certain schemes connected with the former Indian services and of a very large number of colonial schemes for the superannuation of officials in various services or for pensions to their widows and orphans.

Among statutory responsibilities of a minor character are the duty of the Government Actuary to review the working of the House of Commons Members' Fund; to provide tables for the allocation of pensions to dependants in the case of civil servants, local government officials, teachers and so on; and to make actuarial assessments of compensation, pension rights, equivalence on transfer, etc., for various classes of public officials.

In addition, more or less continuous work, not prescribed by statute or regulation, is involved in the assistance given to the administrative departments concerned with the supervision of the operations of assurance companies and friendly societies and the superannuation funds of local authorities.

ORGANIZATION

The professional staff of the Department consists of about twenty-five fully qualified actuaries and several actuarial assistants in course of training; in addition there is a small non-professional staff. Under the general direction of the Government Actuary and the Deputy Government Actuary the work is allocated among four Divisions, each under the control of a Principal Actuary—an officer

with the salary and status of an Assistant Secretary—and staffed by roughly equal numbers of professional staff of various grades. One of the Principal Actuaries is responsible, as Establishment Officer, for general office organization and staff arrangements.

The four Divisions are organized mainly on a functional basis rather than by groups of departments served. They fall into two pairs: two deal generally with social insurance matters and with references involving vital and other social statistics; the other two cover superannuation, life assurance, friendly societies, and financial matters. Each of the Divisions has its own sphere of activities defined, but there is scope for flexibility and transfer of work between them. In addition there is a non-professional computing staff, engaged mainly on bulk calculations.

RECRUITMENT

At the outset, in 1912, the professional staff of the Department was necessarily built up by the Government Actuary mainly from actuaries who were already fully or partly qualified and in the employ of insurance companies; in addition, one came from a consulting actuary's office and one or two from other branches of the public service. The pre-1914 staff was made up of these original members together with a number of new entrants aged between 18 and 20 from among successful candidates in a Civil Service entry examination.

The normal mode of recruitment of potential professional staff is now by way of the Executive Class examination. In recent years, however, this has been supplemented by bringing in a few fully-qualified or partially-qualified actuaries by the method of competition by interview; the Department also has permission to recruit an occasional university graduate who is not already a qualified actuary.

ACTUARIES IN OTHER DEPARTMENTS

It should be added that, outside the Government Actuary's Department, there are at the present time (April, 1954) a dozen fully-qualified actuaries employed in the Civil Service in a professional capacity. Of these, two are actuaries in the National Debt Office; five are in the Statistical Branch of the Admiralty; whilst the others are engaged on statistical and related duties in the General Register Office, the Ministry of Transport, the Home Office, the Board of Inland Revenue and the War Office.

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*Holders of the post of Government Actuary and
Deputy Government Actuary*

Sir Alfred Watson, K.C.B.	G.A. 1917-36 (died)
Alfred Henry	D.G.A. 1920-26 (died)
Sir George Epps, K.B.E., C.B.	D.G.A. 1926, G.A. 1936-44 (retired)
Sir Percy Harvey, K.B.E., C.B.	D.G.A. 1936, G.A. 1944-46 (died)
Sir George Maddex, K.B.E.	D.G.A. 1944, G.A. 1946-
D. A. Porteous, C.B.	D.G.A. 1946-53 (retired)
H. Tetley	D.G.A. 1953-