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THE APPOINTED ACTUARY

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The Life Assurance Companies Bill has made considerable alterations with regard to the accounts of Assurance Societies, but this is really for well-established offices as this is a very beneficial measure. (Company Chairman, 1871[1]).

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1. INTRODUCTION

1.1 A paper about the Appointed Actuary is essentially a paper about prudential supervision of life insurance companies. The system which has operated in the UK since the mid-1970's is only partly one of Government supervision. Through the professional role of the Appointed Actuary, it also contains elements of a system of self-regulation with the Institute and Faculty of Actuaries standing in place of SRO's. Unlike the self-regulatory arrangements of the Financial Services Act, though, this second part of the system has grown up by custom and practice and in certain respects it is not codified. However it enables the Insurance Companies Act to be operated successfully.

1.2 The plan of the paper is that the rest of this introductory section describes the main features of the system and explains why it relies so heavily on the Appointed Actuary. Part 2 describes the practical work of supervision, focusing on GAD. Parts 3 and 4 consider what is involved in practice for Appointed Actuaries and management, and Part 5 likewise for Consulting Actuaries. The very unpleasant problems which can confront an Appointed Actuary when his company gets into difficulties are discussed in Part 6. The remainder of the paper deals with a variety of matters affecting Appointed Actuaries. The Appendices include an index of references to the Guidance Note; a summary of the legislation and Guidance Note; and notes on developments in other countries.

1.3 In form, the system consists of supervision by the Government of insurance companies. The Insurance Companies Act 1982 places certain responsibilities on, and vests certain powers in, the Secretary of State. They are administered by the Department of Trade and Industry (DTI) with advice from the Government Actuary's Department (GAD). The principle underlying the Act is that companies should be free to manage and develop their businesses as they think fit, provided that the financial condition of each company satisfies certain standards. In the nature of things, these standards must largely be actuarially determined. This principle, which is of very long standing, focuses attention on the company's actuary and his work; the legislation has always recognised this in one way or another.

1.4 Competition within the life insurance industry became more intense in the 1960's with the development of new classes of business, which brought new players into the field who were not imbued with the traditional management practices of the industry including the actuarial aspects of management. Following this, there was some strengthening of the supervisory regime including, in the 1973 Act, a new requirement that all companies should appoint a named actuary and notify the appointment to the Secretary of State. Previously, companies had only to produce actuarial valuations at specified intervals; there was no requirement for the continuous involvement of an actuary. However in 1974 several life offices became insolvent, the first insolvencies since the 1930's and perhaps the most serious such episode since the collapses in the 1860's which led to the first Insurance Companies Act[2]. One result was the passage of the Policyholders Protection Act 1976 which created a safety net for policyholders of insolvent companies. No further supervisory legislation beyond the 1973 Act was thought to be necessary, but nonetheless significant weaknesses in the system remained. In particular, although each company was required to have an Appointed Actuary, the statutory functions were not enlarged. More than the bare requirements of the statute was needed from him, however, if the system was to work successfully. The Institute and Faculty therefore broke with tradition and issued the Guidance Note now known as GN1[3], which aims to complete the description*. Many of the rules contained in this document are basically those proven over many years as sound management practice in the life insurance industry, but there were some significant new requirements**.

1.5 The guidance note makes it clear that the Appointed Actuary is in a special position in that he is appointed and remunerated by the company, and thus forms part of the management team responsible to the directors, and at the same time he has responsibilities and obligations to the DTI by reason of his statutory duties, which arise from the Department's supervisory functions aimed at the protection of policyholders. This applies to both employee actuaries and consultants.

1.6 The guidance note imposes one important requirement which goes beyond the Actuary's statutory duties. The Act requires an investigation to be made only at specific intervals, but the Appointed Actuary is required by GN1 to take all reasonable steps to ensure that he is, *at all times* satisfied that if he were to carry out an investigation, the position would be satisfactory. Thus the Actuary is given an ongoing responsibility, which requires him to

*The Institute and Faculty meetings on the draft of GN1[5] and Thornton's paper and the discussion on it[6] show the diverse views held then about the issue of Guidance Notes, which is now regarded as a commonplace exercise.

**In 1973, Skerman described the actuary's role as evaluating the likely financial consequences of various courses of action; on this basis making recommendations as to premiums and valuation bases (including valuation of assets) and as to the distribution of profits; and explaining these activities to others. He stated that this had not changed for many years[4].

monitor all developments in the company which may impact on its financial condition, and to report to the company in certain circumstances. Much flows from this.

1.7 These two points—the Actuary's special position and his ongoing responsibility—are the cornerstones of the system. The first, although perhaps implicit, is hardly made clear in the Act, while the second is not in the Act at all. Yet the Act could not be operated successfully without them. In this way, the system goes beyond reliance on a professional to perform a specified function, which is a common procedure elsewhere. Both the points mentioned have implications for company managements as well as for actuaries.

1.8 The public is best served by life assurance companies which are at once financially sound and free to innovate. Company managements, the profession and the supervisory authorities have a common interest that the industry is in this condition. The Insurance Companies Act, with the necessary support of the Appointed Actuary system, is aimed at this target. Indeed, supervision and good management practices merge into one another. For the system to operate successfully, recognition of the actuary's wider role and support for it are needed from all three of the parties mentioned, the supervisors, the profession, and management. The quotation at the head of the paper suggests that this common interest was recognised as early as the first legislation. Although this paper has been written from a supervisory point of view, it is hoped that the basic principles in it are common ground with the other parties.

1.9 So the supervision system, including the Appointed Actuary, is not fully codified. Its efficiency depends on one individual in each company, who is not subject to an immediate check. The system is partly based on custom and practice, and involves delegations which are not spelt out in the legislation. The Financial Services Act has changed the public perception of what a regulatory system should look like and such an arrangement could now appear insufficient. By relying on professional responsibility, however, our system can be more flexible, less onerous on management, and cheap to run. The results over the last decade or so in terms of stability of offices and (the first priority) the protection of policyholders' interests have been reasonably good. As circumstances change, however, the system needs to develop.

1.10 The reliance on non-statutory guidance notes is both a strength and a weakness. On the strength side, Guidance Notes allow companies far more freedom of action than statutory provisions covering the same ground would do. On the other hand, those who are likely to get into difficulties—and this applies especially to managements—are in the nature of things also likely to ignore the Guidance Notes. It is they, if anyone, who will feel that it is not for the Institute and Faculty to tell them how to run their companies. Companies and actuaries who are scrupulous to observe Guidance Notes are inherently less likely to get into difficulties anyway.

1.11 The paper will show that the actuary needs to be at the table when important plans are formed and decisions made, so that he can influence them from inception. Also, he should have the opportunity of commenting on them at the highest level and his comments should be heeded. The ground of his comments will be the effect which any proposed course of action would have on the company's developing financial condition. This is helpful to the supervisors, who only know of things after they have happened (maybe long after, as the accounts and returns do not have to be submitted until six months after the end of the company's financial year). Their aim is that things don't go wrong and that damage to policyholders' interests is limited if they do. For a senior manager or consultant to have these public professional responsibilities is a valuable safeguard, which would not exist if the actuary had a quasi-auditing position independent of management.

1.12 A number of matters have to be addressed by the Institute and Faculty in order to maintain the system: professional conduct and discipline; professional principles and standards; qualification standards; education and training; research. All these must be so dealt with as to maintain the supervisors' confidence in the profession.

1.13 Above all, the system depends on the standards and conduct of individual actuaries who carry considerable responsibilities sometimes in difficult circumstances. This, in turn, depends on the quality and cohesiveness of the profession. It is for the Institute and Faculty to exercise leadership in this regard.

1.14 In this paper, the role of the Appointed Actuary will be looked at on three levels:

(i) What is needed for the efficient running and development of the company when things are going reasonably well. The Appointed Actuary needs to be in a position where he can make his full contribution to the company's development and prosperity as well as ensuring that the company does not move to level (ii).

(ii) Arrangements for management need to be such as will operate successfully in bad times as well as good. It is even more important that the Appointed Actuary is in a position to make his full contribution if the company is doing badly. But adversity is no time to restructure, so arrangements should be set up from the beginning with the necessary resilience.

(iii) If there are really serious difficulties, which cast doubt on whether the company can or should continue trading, then the Actuary will have a crucial and very difficult role to play.

1.15 From the supervisor's point of view:

(i) While it is important the Actuary plays his proper role, companies which are genuinely doing well are no problem to the supervisors (although lightly capitalised companies require vigilance even at this level).

(ii) It is axiomatic that trouble can occur in any company, however old established or well managed. Problems which are not dealt with promptly tend to get worse. If the company does not take steps to recover, it will move to level (iii), probably sooner than its management expects.

(iii) A great deal of thought has been given over the last 15 years to the Appointed Actuary's role where there are serious difficulties, and Part 6 of the paper deals with this.

1.16 Several other countries have looked with interest at the UK system. In particular, Canada (cf Appendix 4) and the USA (cf Appendix 5) are developing their regulatory arrangements so as to place more reliance on actuaries. It is notable that both countries are looking for a "double harness" system with the regulatory authorities and the profession pulling together, and with significant responsibilities devolved to the actuarial profession. The underlying reason is that the rigid regulatory systems which used to be in force cannot cope with the variety of products now on the market, nor with swift changes in the investment scene. Actuarial discretion is seen as the key to a more flexible system, provided that the professional arrangements are such that the regulators can have confidence in the system. In both countries the point has been taken that there are implications for management, and the relation between management and actuary is on the agenda.

1.17 Some elements of the Australian system (cf Appendix 6), in particular the concept of the actuary's statutory report to management, are also of great interest and may well have an application in the UK.

2. PRACTICAL SUPERVISION

2.1 This part describes the routine of supervision, focusing in particular on the role of GAD, and how it relates to Appointed Actuaries and also to the Institute and Faculty.

2.2 The documents governing supervision are the Act and Regulations, summarised in Appendix 2, and the Guidance Note GN1, summarised in Appendix 3. The routine day to day work of supervision is carried out by the staffs of DTI Insurance Division and of GAD, who work as one team albeit they are housed in separate buildings. In total this amounts to just over 80 people, covering both life and non-life work. This includes 6½ full time equivalent qualified actuaries dealing with life assurance matters. The cost is recovered by charging fees to insurance companies, the rate for 1988–89 being £6,000 per company, (life or non-life)*. The financial value of GAD's work (including overheads and support services) would be in the region of £700,000 in the same year.

2.3 The normal routine focuses on the receipt and scrutiny of annual returns. As about 80% of companies have accounting years ending on December 31, there is a large inflow of returns to DTI at the end of June; the

*The fees are lower for very small companies rest come in at intervals over the year. After checking that the returns are complete and properly signed etc., DTI pass a copy to GAD. There they receive an initial scrutiny (which might take up to half a day for a large company) as a result of which the company is allotted a priority rating. The ratings run from 1 (companies which do not hold the required solvency margin, or where apparent weakness in the valuation basis suggests that this may be the case) to 4.

2.4 The next stage is a full examination of the returns. The priority classification affects the order in which companies are dealt with and, to some extent, the type of scrutiny they receive. The time taken by a full examination is measured in person-days, and a complex case can take more than a week. The object of examination is:

(a) To monitor that the Act and Regulations have been complied with. This means checking that the returns have been made out correctly, that the actuary's valuation accords with the regulations and Guidance Notes, that the required solvency margin is held, and that other statutory requirements have been met.
(b) To look at the company dynamically; the returns and any other information available are used to assess the way in which its financial state is developing. Potential problems or dangerous trends should be identified at this stage. In recent years with-profit companies have received increased attention to identify cases where over-distribution may be affecting the strength of the company.

This parallels but does not duplicate work by the Appointed Actuary: (a) parallels the valuation, and (b) the 'financial condition' report which the actuary is presumed to make to his Board (although it is not required by law) but which is not included in the returns nor shown to the supervisory authorities.

2.5 The usual procedure is for GAD to write to the company raising any queries about the valuation. The addressee would be the company secretary or other representative, but it is preferable, and often possible, to arrange for GAD and the Appointed Actuary to correspond directly on matters relating to the valuation. Once in a position to assess the state of the company in relation to the Act, GAD reports to DTI. This completes the first stage of GAD's work.

2.6 Matters pass on to the second stage if the examination reveals a matter of concern. At this stage, DTI and GAD will work as a team, and can respond to the problem in a variety of ways. Taking the alternatives in ascending order, the first step would probably be to ask for further information. The situation might be discussed with the company, especially if their plans appear to be unsuitable, or if matters seem to be moving in a direction likely to cause difficulty. Ultimately, it can be necessary to consider whether grounds for formal intervention exist.

2.7 GAD would play a part, often a major part, at this stage. As well as internal discussions with DTI, GAD will be assisting in correspondence with the company and taking part in meetings. It will often be helpful for GAD to deal directly with the actuary on actuarial aspects.

2.8 All this can, and often does, arise from events which occur in between valuations. Much senior time at GAD is spent on questions such as restructuring or other major changes in a company. A company which is in financial difficulties may take virtually the full time attention of a senior member of GAD staff for several weeks at least.

2.9 There is also a great deal of work arising from policy matters, advice on the interpretation of existing and preparation of new legislation, overseas and other general matters. The negotiation of a Directive with the European Community, for example, requires a substantial commitment of senior time.

2.10 Contact between GAD and actuaries is crucial to the smooth functioning of the Appointed Actuary system. It is not GAD's function to second-guess the company actuary. That Department's responsibility is to advise DTI on the state of the company in relation to the legislation. For this purpose, the input to GAD is the finished work of the Appointed Actuary. It would be very unusual for GAD to investigate the condition of an office itself.

2.11 Appointed Actuaries are encouraged to make informal contact with GAD, if they are doubtful about any point concerning the requirements. Questions such as "how would you react if I were to do so and so?" are in order.

2.12 To give some idea of the practical working out of the relationship between GAD and Appointed Actuaries, the following table shows statistics of meetings during 1987 involving both the Appointed Actuary and GAD staff.

Meetings involving GAD and Appointed Actuaries, 1987

Main Topic of Meeting	Numbers of Meetings	Number of Companies or Groups involved
Compliance—completeness, accuracy etc of returns	11	10
Compliance—valuation methods and assumptions	5	5
Financial condition and prospects, including bonus prospects	28	23
General: company organisation, development plans, etc.	46	22
Proposed new authorisations	3	3
Total	93	63

These numbers may be seen against the background that at the end of 1987 there were 281 companies writing long term business. Some actuaries were appointed to more than one company; in total there were 168 different persons appointed as at a recent date. (The table does not include meetings attended by GAD staff at which the Appointed Actuary was not present, although this may happen with an overseas company even though the meeting covered actuarial matters.)

2.13 The normal aim of the supervisors is that management itself should address any problem. The company's own actuary would be expected to carry out any investigations which were needed, and to advise management as required. DTI will expect management to take full note of the results of any actuarial investigations and of the advice given to it by the Appointed Actuary, and to act accordingly.

2.14 The professional back-up essential to the system is provided by the Institute and Faculty who are responsible for the education (and continuing professional education) of actuaries, research, qualification standards, professional discipline and other normal functions of a professional body, as well as for the promulgation of the all-important Guidance Notes. It is unusual for the professional bodies to be concerned in the handling of a particular case; this could occur, however, if an actuary seeks guidance from them. In practice, it falls to GAD to monitor actuarial standards, but any information obtained from the company over and above the public returns has to be regarded as "commercial in confidence" as are any dealings with the company.

2.15 The Appointed Actuary system obviously calls for close cooperation between the supervisors, represented for this purpose by GAD, and the Institute and Faculty as representing the profession. Much of this is done informally. Formal coordination is effected by the Joint Actuarial Working Party (JAWP), chaired by the Government Actuary, on which sit representatives of the Institute, Faculty and GAD with an observer from DTI. This Working Party was set up as a way of consulting the Institute and Faculty when the Valuation Regulations were first drafted, but has been retained as a permanency. Much of its time is taken up with proposals for amending or developing the Valuation Regulations. The agenda would also cover technical methods of valuation, limits on the assumptions allowed, the tests to be applied by GAD to, for example, mismatching reserves, etc. The Working Party also considers proposals for amending the Guidance Notes and any other matters concerning Appointed Actuaries or actuarial aspects of the supervision system. Taxation and disciplinary cases would however be outside its scope.

2.16 The Joint Actuarial Working Party is supported by the Valuation Research Working Party which, in response to requests from JAWP, develops valuation methods and assumptions and reports on technical questions. The research programme is more recent and less extensive than the systematic programmes operating in the USA and Canada, but it is burgeoning and has already produced one Sessional Meeting paper.

2.17 The Institute and Faculty communicate with their members by issuing Guidance Notes and Temporary Practice Notes, and also through regular programmes of meetings and in other ways. They give guidance to actuaries in individual cases. The wider aspects of their role are referred to in §1.13.

3. THE ACTUARY'S ROLE IN PRACTICE

3.1.1. What does the Appointed Actuary have to do in practice for these arrangements to work? To answer this question it is necessary to look at the operations of a life office function by function, distinguishing between Appointed Actuary items and any other management responsibilities which the actuary may have.

3.1.2 The information about life office organisation on which the next three parts of this paper are based is derived from ordinary contacts between GAD and companies and their actuaries. No systematic survey has been carried out, although such a survey would be of interest. I have written Parts 3 and 4 with the employed actuary primarily in mind, but the points apply to consultant Appointed Actuaries also; Part 5 deals with some points which are especially relevant to consultants.

3.1.3 In 1976, Barrow[(12)] commented that the profession had paid little attention to questions of life office organisation, preferring to leave these to the industry. "Some matters of general and professional interest have not been fully debated by the profession as a whole". The only paper I can find which takes up Barrow's challenge is Merricks[(13)] which includes a valuable discussion on the organisation of product development but does not deal with the Appointed Actuary. Thornton[(6)] discussed the Guidance Note but did not consider the consequences for management. The whole topic deserves new and extended treatment, from a broader viewpoint than the present paper.

3.2 *Product Development*

3.2.1 Let us take product development as an example. It is obviously crucial for the health of an office that its products are sound, ie. adequately priced, without dangerous options, and within the office's financial ability to write, as well as being marketable (and profitable). The supervisors' direct needs are that the office does not overstretch itself on new business, and that the cost of writing any contract, including the cost of any options or guarantees, is fully recognised at outset in the valuation.

3.2.2 The Guidance Note (4.2) requires the Actuary to be informed as to the premium rates and nature of contracts both for existing and new business. Particular mention is made of guarantees. The actuary must also be informed as to the marketing plans, in particular the expected volumes and costs of sales.

3.2.3 Section 5 of the Guidance Note points out that it is a prime responsibility of the Appointed Actuary to satisfy himself that the new business premium rates are 'appropriate', and some discussion as to the meaning of this word follows. Where new business strain is involved the actuary must indicate any limits on the volume of business which can be accepted, but the Guidance Note gives no other indication of what he should do if he cannot consider the rates appropriate.

3.2.4 Product development is not mentioned in the Guidance Note, presumably because it is a management function rather than a professional responsibility. It will involve the marketing, sales, administration, accounting, computers, investments, underwriting and other departments as well as actuarial. Pricing is one element which contributes to this complex. Offices appear to organise this function in a variety of ways. Some concentrate it in the actuarial or marketing departments, who consult other departments as necessary. Sometimes actuaries and other specialists are located in the marketing department for the purpose. Some have committees, in which case the function may not be located in any particular department. There may be an officer (appointed permanently or *ad hoc*) designated as being in charge of product development, but he will not usually report to the Actuary.

3.2.5 The Appointed Actuary's role can vary from a minimum where advice is given on purely actuarial aspects, with the main responsibility lying elsewhere, to one where the actuary is in charge of the whole process from idea to launch. We must distinguish between things required of the Appointed Actuary in that capacity, and tasks given him as a manager. However he can hardly advise without knowledge of the company's plans in the other areas mentioned in the previous paragraph. In particular, he will need to talk to the investment management before he can decide on the parameters for costing. He will also need information about the likely expenses.

3.2.6 The four essential minimum points seem to be that pricing is carried out in accordance with parameters approved by the Appointed Actuary, that he has sufficient information to select appropriate parameters, that he is consulted on the benefit design and that his final approval is required before launch can be authorised.

3.2.7 In many offices, the pricing function is located within the Actuarial Department. In this case, it will be carried out under the actuary's control. He will necessarily be in a position to comment on questions of benefit design. But in some offices there is an actuarial pricing section in the marketing department or wherever responsibility for product development is placed. In this case, the relationship between this pricing section and the Appointed Actuary needs to be defined so that the actuary can set the necessary guidelines. The actuary must consider the reserving implications of proposed new products, and the reserving basis will presumably enter into the pricing calculations, so that pricing cannot be totally independent of the Appointed Actuary however matters are organised.

3.2.8 Product development is generally recognised by management as a function requiring a great deal of coordination within the office. There should therefore be little difficulty over the actuary's need to consider and comment on policy design as it develops, to talk to the investment manager etc. But his standing for doing so needs to be recognised by management.

3.2.9 The level at which final approval is given for a new product seems to vary between offices. If the decision rests with a senior executive committee, it is essential for the Appointed Actuary to be a member of this committee (this should be seen as necessary anyway). If approval is required by the Board or by a Directors Committee, it needs to be established that the Actuary, if not a Director, attends the relevant meetings, or at least receives papers beforehand and has an opportunity to comment. If approval is given by an individual, such as the Chief Executive, there may be no opening for formal arrangements but it should be common routine to obtain the actuary's "nihil obstat".

3.3 *Investment Management*

3.3.1 Another important function is investment management. Consider a company issuing non-linked business, where the company carries the risk of investment and the actuary has to look at the matching position as part of his valuation. It is rare for the Appointed Actuary himself to be the Investment Manager, although this is not completely unknown, especially where assets are closely matched to non-profit liabilities. There may be an investment department headed either by a manager answering directly to the Chief Executive (ie. on the same level as the Appointed Actuary) or possibly by a Director. In some cases investment management is a Board function, with a manager answering directly to the Board. Sometimes it is contracted out to an outside manager (which might be another company within the group), who may report at either executive or Board level. It is normal to control investment managers through some form of guideline, monitored by reporting back. Offices of any size will often have an Investment Committee for this purpose, usually containing executives but sometimes of Directors only.

3.3.2 The Guidance Note requires the Appointed Actuary to have information about the existing investments and the continuing investment policy (4.2). It points out that policy is a responsibility of the Directors, as is the valuation of assets in the balance sheet (6.5). In valuing the liabilities, however, the actuary must assess the nature of the existing portfolio and consider what return is likely to be realised (6.6). He must pay regard to the relationship between the outstanding terms of the assets and of the liabilities. The importance of this varies from one case to another, but can be critical for certain classes of business (6.7). The dangers are increased if the policies include alternative guarantees or options (6.9). The Appointed Actuary is required to decide whether the investment policy is or could become inappropriate. If this is the case, he must advise the company of the constraints on investment policy necessary to protect the policyholders (6.10).

3.3.3 The Valuation of Liabilities Regulations[10] require that the actuary's valuation shall take into account the nature and term of the assets and shall include appropriate provision against the effect of possible future changes in the value of the assets relative to liabilities. The Fourth Schedule return[9] requires the actuary to state the basis of the provision made for any mismatching between the nature and term of the assets held and the liabilities valued. So the actuary has ample reason to take an interest in the existing portfolio and in investment policy. How is he to do this?

3.3.4 Although some actuaries specialise in investment work, it is not recognised as being one of the normal functions of a life office actuary. The Appointed Actuary is not, in that capacity, expected to be an Investment Manager or to concern himself with the selection of individual assets. But as the general direction of investment policy and any guidelines given to the Investment Manager must tie in with actuarial considerations, the Appointed Actuary needs to input his views at an early stage in their formation. He also needs to be involved in any process of monitoring investment management against the guidelines or more generally. Where there is an Investment Committee, therefore, the actuary should sit on it, although in the author's experience this is by no means always the case. Attendance at the Committee would probably suffice if it is a Board Committee and the actuary is not a Director. In offices which eschew committees, the actuary should arrange for informal consultation, and it will be best if the need for this is recognised by the Board. In the author's view, it is not enough to rely on both the actuary and the Investment Manager being gregarious.

3.3.5 To sum all this up from the supervisory point of view, the actuary must be in a position to say "if you follow this policy, I will have to strengthen my valuation basis or put up an additional mismatching reserve"—and to say this *before* investment is authorised or guidelines issued.

3.4 *Other Functions*

3.4 The same procedure should be followed with other functions, ie. consider what the Actuary needs to do in practice, in order to fulfill the Guidance Note. As a general rule the Actuary should be in a position to advise on any proposal which will affect the financial condition of the office *before* a decision is made, and *preferably* at an early stage of planning.

4. THE ACTUARY'S POSITION IN MANAGEMENT

4.1 Having considered what the Appointed Actuary should contribute to various functions within the company, we now ask what position he needs to hold in the company so that he can do so. Where should he fit into its structure? The statutory duties of the Appointed Actuary, even as filled out by the Guidance Note, do not form a full-time job in themselves. Even in a large office, where the volume of work will be considerable, they can hardly form the sole responsibility of as senior an executive as the Actuary should be if he is to be effective. He will therefore have other management duties. But because offices structure themselves in such a variety of ways there is no completely typical arrangement.

4.2. *The Single Office*

4.2.1 If we look first at an office which is not part of a group and has no insurance subsidiaries, a common arrangement is for the Actuary to be in the second tier of management, answering directly to the Chief Executive. There will be other executives on the same level responsible for matters such as administration, sales and marketing, investment, accounts, finance etc. Some of these, although answering directly to the Chief Executive, may rank at a lower level. The Actuary is not always the most senior of this group; for example the investment or marketing executives may be on the Board while the Actuary is not.

4.2.2 The Actuary may take on some of the other responsibilities, and the question arises whether there is a conflict of responsibility which unacceptedly hampers his professional role. This probably will not matter while the company is at level (i). Things will be going well and the company's plans are unlikely to create professional problems for the Actuary. But if circumstances turn against the company, a conflict of responsibility can lead to the wrong course being taken.

4.2.3 Quite often the Actuary takes on the financial responsibility; this obviously fits in well. An Actuary who is Director of Finance (whatever the precise title) will be in a stronger position and the responsibilities are unlikely to pull in different directions.

4.2.4 Administration may also be combined with the actuarial role although this is unusual in the larger offices. However the combination of Actuary and Life Manager is not uncommon among medium or smaller sized offices. This is unlikely to present a problem—and at least the Actuary can be sure of his data!

4.2.5. The obviously difficult combination is with Marketing, because the Marketing Executive will necessarily take a different view than the Actuary on many important questions. The wish for attractive contracts and high sales, if not checked, can lead to underpricing, the inclusion of improper options, or under-reserving, so as to enable more business to be written within a given capitalisation. There may be less keeness to control new business expenses. On all these points the Marketing Executive may quite properly oppose the Actuary's requirements, and if the Actuary holds both responsibilities he will not know which corner to fight for. Nor will the Chief Executive or Board know which corner he is—or should be—fighting. This combination is rare in its pure form, although it has been known to occur, but an Actuary who is also Chief Executive of a small proprietary office may shoulder a significant part of the marketing responsibility.

4.2.6 A commoner variation in small propietary offices with few executives is for the Chief Executive also to be the Actuary. This has a number of obvious disadvantages. Such a company will only succeed if the Chief Executive is a commercially oriented person, and his prime responsibility will be seen as developing the company's business and producing results for the shareholders. The Actuary is needed as a check and balance; these functions cannot be combined in one person. All the problems raised in §4.2.5 are present but even more strongly. This may be looked at the other way round; being also the Actuary may make the Marketing or Chief Executive too cautious.

4.2.7 It may be supportable to combine the positions of Chief Executive and Appointed Actuary while the office is at level (i) and all seems to be going well, but the strains inherent in this double role will show up at level (ii). It would seem to become almost impossible and certainly profoundly unsatisfactory at level (iii). In the author's view the combination should be regarded as a last resort, and the use of a consultant should always be carefully considered.

4.2.8 The combination of Chief Executive and Actuary is also found in a number of leading mutual offices. Although the remarks made above may still apply in theory, the practical situation contains important safeguards. These offices have a well established tradition of actuarial involvement in management at the highest level. The Deputy Actuary, on whom much of the Actuary's responsibility will fall, is usually an important figure in management. While there are of course marketing pressures, the extreme pressure from shareholders for results which may be found in a small and (hopefully) expanding office is not present. The ultimate purpose of supervision, and hence of the Appointed Actuary system, is to protect policyholders, and in a mutual office the Board to which management answers is itself responsible to with-profit policyholders. In spite of these points, though, I feel that the arguments against the combination are strong, and the responsibilities have in fact been separated in several cases in recent years.

4.2.9 It is uncommon for the Actuary to be the Investment Manager, this is perhaps most likely to occur where there is a portfolio closely matching bond or annuity business.

4.2.10 It is rare, but not completely unknown, for the Actuary to be at a lower level than has just been described. It is very doubtful whether an Actuary who is too far down in the structure can have the authority to discharge his professional responsibilities properly, and I do not regard such an arrangement as being adequate for the purposes of the Insurance Companies Acts.

4.3 *Groups of Companies*

4.3.1 Many life offices are part of groups of companies. If the owning company acts merely as a shareholder, looking for a return on its investments but taking no appreciable part in the management, the position as far as the Appointed Actuary is concerned will be the same as in §4.2. But in most groups there is a greater or lesser degree of central direction. Also, the management of various companies within the group may be wholly or partly integrated. At the extreme, several companies may have a common management running what is in practice one organisation. It can be a problem to know how to interpret the Guidance Note in these circumstances. The difficulty is illustrated by a simple example. Section 3.3 of GN1 concerns the relationship between the Appointed Actuary and the Board of Directors. But which Board? That of the life office to which he is Appointed and whose valuation he makes may, in every day life, be merely a legal formality. Real authority may lie with the Board of another company which is not an insurance company and to which he has not been Appointed. The Guidance Note does not seem to envisage this situation.

4.3.2 To consider this in more detail, consider the hypothetical example shown in figure 1.

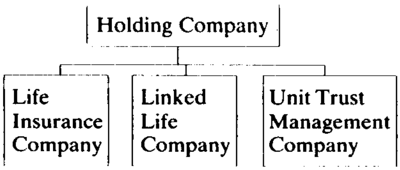

Figure 1

The management is completely integrated; the three operating companies and the holding company have common executives and other staff and are run as one unit, the different parts acting like departments within a single company. In this case, what was said in Part 3 and §4.2 applies, but to the combined management organisation rather than to the individual company. For instance, one would expect to find the actuary in the tier of management answering directly to the (common) Chief Executive, etc. The Actuary must interpret GN1 in relation to the combined management, and management must accept the requirements of the insurance supervisory system, ie. matters must be so ordered within the group that the Actuary can genuinely meet the requirements of GN1 interpreted in this way.

4.3.3 The Actuary's certificate and valuation returns, and all legal formalities appertaining to the Appointed Actuary, must of course be specific to each operating company which writes life assurance. The separate identities of each subsidiary will come to the fore if the group gets into difficulties, because legally each is a separate entity. So the actuary must ensure that he is satisfying the Guidance Note in relation to each company at the same time as interpreting it in relation to the real centre of authority in the Group.

4.3.4 Very often management will not be so fully integrated.

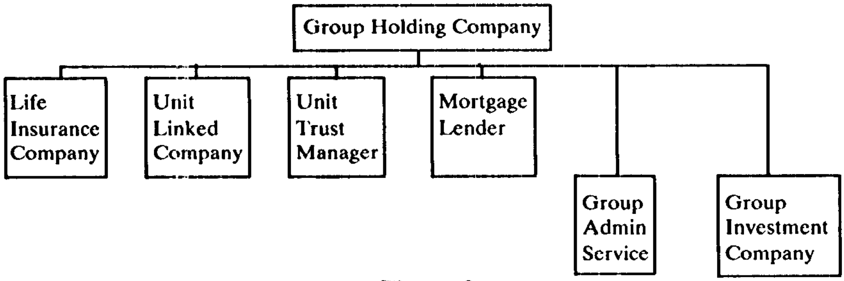

Figure 2

Figure 2 shows another hypothetical group providing retail financial services. The Actuary is Appointed to two subsidiaries which both write insurance business and have a wholly integrated management. Other subsidiaries carry on other financial service businesses, but management is only partly common. Finally, there are subsidiaries providing group services, including investment management. Even if the holding company exercises close supervision over the subsidiary managements, it is still separate; for example, the Group Chief Executive may be different from the Chief Executive of the insurance companies. The insurance company boards may be "in-house" boards composed entirely of executives of those companies or of the holding company, perhaps with the Chief Executive of the holding company as Chairman. The Actuary's primary relationship is now with his own Boards and management, but he must also relate to the holding company management as decisions to which he should input may well be taken at that level. It is unlikely, though, that he will have the sort of relationship with the Group Board which GN1 envisages between him and his own company Board. Once again the Guidance Note must be interpreted at two levels, one relating to the formal position in the insurance companies which in this case is also partly the practical position, and another level relating to the group.

4.3.5 Another feature of Figure 2 is that investment management is a group function, dealt with in this case by a fellow subsidiary company. The investment managers, therefore, answer to a different Board of Directors than the Actuary. In this set up it is even more important than usual to have good communications between the Actuary and the Investment Manager. Very likely there will be some form of Investment Committee liaising between the subsidiaries, and it is important that the Actuary should be on this Committee.

4.3.6 A group can be much more complicated than Figure 2. The holding company may itself be a subsidiary, there may be a wider variety of businesses included, some answering to other intermediate holding companies. Group service companies to which the Actuary has to relate may be more remote in terms of reporting lines. Many variations are possible. Often the structure is in course of change. It is suggested that, whatever the situation, three principles should be followed.

(a) The Appointed Actuary must interpret GN1 as applying to the real centres of authority. Every Appointed Actuary should go through GN1 point by point, following the approach outlined in this paper, and consider exactly how he would fulfil each point in the actual circumstances of his group at levels (i), (ii) and, as far as it can be envisaged, the crisis situation of level (iii).
(b) At the same time he must remember that his legal responsibilities relate to a specific company within the group. He must be able to satisfy GN1 in relation to that company.
(c) Management *at all levels* in the group needs to accept that, as a consequence of having a life insurance business within the group, the Appointed Actuary must be in a position to do what is required by GN1 as interpreted above, notwithstanding that all of this is not directly required by legislation.

4.3.7 All this probably applies to a composite office much as it does to a group.

4.3.8 In practice the finances of the life office and its reserving needs may be affected by the way in which the group is organised, and in particular by intra-group transactions (see paper by Kerr and Rogers[7]). This raises two further questions. Firstly, as the Appointed Actuary must take account of financial arrangements at group level, he should not only be aware of these but should make his due input to the decisions leading to their creation. Secondly, there may be an actuary at group level; the title Group Chief Actuary for someone who is not an Appointed Actuary does occur. How does this actuary relate to the Appointed Actuary? In general, one prefers the Appointed Actuary's post to be seen as the senior actuarial post in the organisation, but does this always meet the requirements of modern group structure?

4.3.9 Nowadays many groups cover a wide field of financial services, and life assurance is often not their primary business. If a group's major business is, say, banking or general insurance then this determines what practices and requirements will be familiar to group management. Typically, such groups are highly respectable and properly managed, but the practical needs of life business and the role of the Appointed Actuary are not part of the group culture. Decisions relevant to the Appointed Actuary are very likely taken by an intermediate holding company board, or possibly even by the Main Board, which will spend little time on life assurance and will not be familiar with the

Appointed Actuary's special position. This cannot but increase the actuary's difficulties, regardless of the quality of management of the group as a whole.

4.3.10 Sometimes a life office has subsidiaries which are themselves life offices—eg. Managed Fund or Unit Linked companies. Very often management is completely integrated, so that the subsidiary is a separate company in little more than name. A middle-grade actuary—eg. a pensions actuary—might well be Appointed to a subsidiary, but he will not be in as senior a position in relation to the integrated management as an Appointed Actuary should be. Here I feel it rests with the Chief Actuary to the main life office to ensure that the subsidiary Actuaries are able to perform their professional functions satisfactorily—this is implicit in Section 8.4 of GN1.

4.4 *Branches of Overseas Companies*

4.4.1 Companies from overseas present yet another variation. A number of well established operations are branches of companies which have their head offices in countries outside the EEC, and some newer operations have begun more recently. For historical reasons, these companies usually come from countries whose actuarial professions are broadly similar to our own. Supervision in the head office country will almost certainly be different from our own, however, and there has to be some compromise on both sides, especially in such matters as preparation of returns. It is a feature of the Insurance Companies Act that it regards the global business of such a company as one. Thus, if there is a branch operating in the UK, the DTI returns have to cover the global business of the company, the valuation regulations will apply to this global business and the solvency margin will have to relate to it. This problem can be mitigated, eg. in the case of an Australian company by setting up a statutory fund, but there are still several cases where the DTI has to take cognizance of the global business of a large international life office whose head office is outside the EEC.

4.4.2 Typically, the UK branch will have a local Chief Executive and a local actuary. However, the local actuary cannot be Appointed Actuary to the company, because he cannot take responsibility for global reserves, nor in practice can he obtain the information described in GN1 or carry out the responsibilities given there in relation to the whole company. He could do this for his branch but, however separate management may be in practice, the Act does not permit the branch to be the unit of supervision. The Chief Actuary to the company, who will be located at the Head Office overseas, is the only actuary in a position to satisfy the Guidance Note and to sign the statutory certificate and returns covering the global business. Naturally he will be primarily concerned with the requirements of the insurance supervisors in the Head Office country, and with their conception of the duties required of a Chief Actuary. In practice, some reliance has to be placed on the quality of actuarial management in the Head Office country, and on the position of actuaries in general there.

4.4.3 Another complication is that the overseas Chief Actuary may not be a member of the Institute or Faculty. This not an insuperable obstacle as the DTI has power to dispense with the requirement for this qualification. Fellows of the Society or of the Australian Institute, whose background and training is not too dissimilar to our own, would normally be acceptable instead of an Institute or Faculty Fellow, provided that the actuary becomes subject to the Guidance Notes through Affiliate Membership of the Institute. In practice, reliance is placed on the UK branch actuary to advise his Chief Actuary about UK requirements; obviously this cannot help where the local branch is small and has no actuary.

4.4.4 In many countries the mode of qualification and the role of the actuary are so different from ours that there are great difficulties in recognising the Head Office actuary for UK statutory purposes. This is not a reflection on the quality of the actuarial profession in those other countries; the problem is simply that their mode of organisation does not fit into the UK professional system. In general, any problems are not with the actuaries themselves, but arise because the systems to which they are accustomed (bonus, valuation, supervisory, etc.) differ from ours and may be difficult to fit into the UK regime. The company may choose to avoid these problems by operating through a UK subsidiary company (which can be taken as the unit of supervision) rather than a branch.

4.4.5 Offices from some countries are legally able to parcel their business into separate funds, in such fashion that the fund can be taken as the unit of supervision. This greatly simplifies the returns required of a large overseas office. The Actuary has to sign only for the relevant fund, but certain parts of the Guidance Note (eg. access to the Board of Directors) must obviously relate to the company as a whole. There is an anology here with the Actuary to a subsidiary company mentioned in §4.3.7; inevitably there is a degree of reliance on the professionalism of the company's Chief Actuary if another actuary takes responsibility for a particular fund.

4.4.6 These problems do not arise when the Head Office is in another Member State of the EEC. In this case, the DTI has only to supervise the business written in the UK. The UK actuary can sign for this business, but (as in §4.4.4) it appears that parts of the Guidance Note should be interpreted in relation to the company as a whole rather than the UK branch.

5. THE CONSULTING ACTUARY

5.1 For about 20% of companies, the Appointed Actuary is a consultant. A consultant's responsibilities are, of course, just the same as those of an in-house Appointed Actuary. He is appointed by and is responsible to management and combines this with his public professional responsibilities. But as he is outside the organisation with no executive responsibilities, the question has to be approached in a different way.

5.2 The advantages for the office of having a consultant rather than an in-house actuary are that it can draw on a ready-made actuarial organisation staffed with experienced professionals who will be able to guide it through the many pitfalls which face a new or small office. The weight carried by a senior partner in a consultancy and his experience at dealing with the authorities may be of no small value to the company. They are also appreciated by the supervisors. As against this, once the office has attained sufficient size to keep an in-house actuary employed full-time, the running costs of an internal department may be less than consultancy fees. An in-house actuary is available to take executive responsibilities, and management may feel that he can be better integrated into the organisation.

5.3 A common pattern, therefore, is for a new or very small office to place all its actuarial work in the hands of a consultant. As the office grows, it may employ actuaries of its own but nonetheless retain the consultant as Appointed Actuary, and in a general advisory role. Eventually, the office may grow to the point where it can dispense with the consultant altogether and have its own in-house Appointed Actuary. At this stage, the consultant is sometimes still retained in a background role, while relinquishing the statutory function.

5.4 Looked at from the supervisory angle, the consultant is just as much required to carry out GN1 as an in-house actuary is. But, as he is not on the spot, he may not know what is happening. Taking up some of the points mentioned earlier, he needs to be involved in product development even if the company has in-house actuarial staff. He should make due input to investment policy. In general, he should receive all the management information which an in-house actuary would get, and should input to the decisions to which an in-house actuary would contribute. He may do so by means of prior advice or by setting guidelines, rather than by direct participation.

5.5. A consulting actuary is at a distance from the company, and will probably be in contact with one, or only a few, people in the company. It is very important to be sure that his advice does reach the right people, and that its import is fully appreciated. A close client/adviser relationship is essential. But this is fundamental to all consulting work, and an actuary who can find his way through the conflicting interests of the parties to a pension scheme should pass muster as an Appointed Actuary. The relationship should extend to Board level, and it will be best if as a routine matter the Actuary receives copies of Board papers and minutes and can attend Board meetings at his own request, in particular when company finance is on the agenda. A good relationship with the auditor is particularly important as the actuary may not be able himself to check the accuracy of the data he receives. It is necessary for management to be responsive to the consultant's needs.

6. WHEN THERE ARE SEVERE PROBLEMS*

6.1 The foregoing discussion is mainly concerned with offices which are doing well (level (i)) and it was pointed out that the arrangements must be resilient so that they will work well if the office does badly and drops to level (ii). Only so can it hope to recover to level (i). Level (iii) envisages that the company has severe financial problems. It will be doubtful whether it can continue to write new business. It could be that its solvency is in question. Unless the Appointed Actuary can operate effectively there will be little hope of recovery.

6.2 Severe problems occur broadly in two ways**. "Creeping Insolvency" is a developing situation which may take several years to erode the solvency of a life office. For example, an office which spends too much money but does not write enough new business has continually to fund deficiencies in the life fund and the point must come where these can no longer be supported. Trouble can also strike quickly—the "Potentially Crippling Situation". This can take a number of forms: the investments may be mis-matched, the policies may contain guarantees which come home to roost, or assets may unexpectedly lose their value. It can occur through mere administrative accident.

6.3 The Guidance Note approaches this by way of the Actuary's Certificate. Section 3.2 requires the Actuary to advise the company as soon as he considers that its course of action, or proposed action, is likely to lead him to withhold or qualify subsequent certificates. If, in spite of his warning, the company persists in its action, the Actuary is directed to advise the Department of Trade and Industry after so informing the company.

6.4 As an employee of the company, or a consultant, the Actuary's duty is to the Board of Directors. But Section 3.2 modifies this and requires that in certain circumstances the Actuary's professional duty must override this.

6.5 The Guidance Note also deals with situations of near-insolvency. Section 7 points out that more rigorous standards must be applied if solvency is in question. Where adverse factors are under the control of the company, the Actuary must assess the limits within which the company must act, and advise the company of the necessity for these limits. He must consider the factors outside the company's control which could lead to insolvency and take whatever action he considers necessary, paying the most scrupulous regard to prudent judgement.

6.6 Severe difficulties place great personal stress on management, at a time when a cool head is most needed. They also cause an enormous amount of extra work; senior management can be occupied virtually full-time for an

*This section is based on the author's experience of 1974 and of lesser events since then.

**This follows Le Grys[14], whose paper contains a valuable discussion of the problems which can afflict a developing life office. Ferguson[15] gives a graphic account of an actually crippling situation. Both papers should be read by every Appointed Actuary.

extended period by plans for solving the problem. The Actuary, in particular, will acquire a large extra workload. The problems will probably be new to him. A mistaken action, however well intentioned, can actually make things worse. As a key member of the management team the Actuary will have a commitment to the recovery of the company, but in these circumstances he must also stand back sufficiently to take an objective view of the prospects. It can be helpful to take on outside help for the duration. A Consulting Actuary will not only provide an extra pair of hands but will probably have experience of difficult situations and is in a better position to be objective.

6.7 The first step for management is obviously to assess the damage and form a plan of action. As soon as this has been done, a responsible management will inform DTI of the problem and tell them what action is proposed. This is important because the company's position in relation to statutory requirements will have changed from that known to the DTI. DTI and GAD will have to consider whether the company's plans are satisfactory and whether there is any action which the DTI could or should take.

6.8 As well as getting matters on the right foot with the DTI, this course has the great advantage of opening up communications between the Appointed Actuary and GAD. As GAD will need to satisfy themselves as to the proposed action, the sooner they and the Appointed Actuary can talk about the problems the better. If there is a serious problem therefore, the Actuary should not rush to activate Section 3.2 of the guidance note, but should first advise his company to contact the DTI (as well as doing everything he can to alleviate the problem).

6.9 The most difficult, but fortunately rare, cases are those where management refuses to recognise that there is a problem. This creates an exceedingly difficult situation for the actuary. His right of direct access to the Board (Section 3.3 of GN1) enables him to alert Directors or the Chairman. If the company is part of a group, there will be a higher authority to whom he can. refer. He can discuss the situation with GAD, although there may be problems of confidentiality. GAD will keep professional confidences as far as it can, but in the final analysis we are actuarial advisers to the DTI and may have a duty to pass on information learnt about the state of the company. Only as a last resort should he take the final step of applying Section 3.2, and report the matter to the DTI. What he must *not* do is nothing.

6.10 Section 3.2 does not tie in well with the wording of the Actuary's certificate(9) which has been changed since GN1 was written. The Guidance Note appears to need reconsideration on this account. In the meantime, it is suggested that the Actuary should interpret Section 3.2 as referring to any situation where the assets do not currently cover the liabilities and solvency margin, or seem unlikely to do so at the end of the year.

6.11 It will help any Appointed Actuary faced with these problems to obtain advice from outside. As explained in §8.2.2, the Institute or Faculty can be consulted in confidence, and will advise what action is required by the Guidance Note. It is not only in the interests of the actuary himself to check that he is working within these requirements, in a situation which is probably new to him. The Guidance Note is the product of much thought and experience; following the line it indicates is likely to prove helpful to the company and its policyholders.

6.12 He can also consult a senior outside actuary in confidence. A consultant retained by the company for occasional references might be useful here, or the Institute or Faculty could put him in touch with a suitable person. Finally, he will be well advised to discuss the matter with GAD before burning his boats and applying Section 3.2, to ensure that the authorities take as serious a view of the situation as he does.

6.13 Creeping insolvency is less dramatic. The Actuary should have seen the problem coming but it may be hard to determine the point at which to act. It is quite likely that the situation will already be known to the authorities, in which case the Actuary will be in a continuing dialogue with GAD. If not, he should alert GAD in any way that he can at as early a stage as possible.

6.14 The general rule, amply proved by experience, is that trouble can almost always be averted *if it is dealt with early*. The Actuary should use all possible means to prevent the situation ever reaching the Section 3.2 stage.

6.15 DTI as well as the company management will have difficult decisions to take. Various powers of intervention are set out in the Act, together with the grounds on which each may be exercised. Much will depend on how these relate to the particular circumstances of each case. It may be said, though, that DTI will wish to see either the company restored to health, or an orderly closure or reorganisation (a "soft landing"). In general the objective is to protect the interests of existing policyholders and also of potential future policyholders; DTI may therefore have to consider whether new business should continue to be written and if so on what conditions. Recovery is easier if the problems do not become public knowledge so every effort is made to maintain confidentiality where it is right to do so, but the point can come where the case has to become public knowledge in the interests of those who would otherwise have become policyholders.

7. CONFLICTS OF FINANCIAL INTEREST

7.1 It was explained in §4.1 that the Actuary, unless a consultant, is necessarily an executive of the company. He is in a different position from his fellow executives in one important respect (see §1.5) but as he should be a full member of management it is better not to distinguish him further than that. In particular, he should be able to participate in the usual forms of executive remuneration even though these may in some degree create a conflict of interest. This can take three main forms:

(a) A shareholding in the company, either purchased, or received via share options
(b) Remuneration related to profits via an incentive scheme
(c) A with-profits policy. With terminal bonuses, this is a sharper problem than it used to be.

Any conflict arises because the actuary, through his valuation, can determine the profit which will affect the value of his interest.

7.2 The Institute and Faculty's general approach to a conflict of interest is:

> He must consider the extent of the conflict and whether it is such as to make it improper for him to act. If he is satisfied that it is proper for him to act he should only do so after there has been a full disclosure to the client of the conflict of interest[16].

GN1 (Section 2.3) instructs the Appointed Actuary to withdraw from the position if his interests are large enough or of a nature to produce a conflict. If the situation is temporary, a report by another actuary should be obtained.

7.3 At the Institute's and Faculty's request, the disclosure point was met by Regulation 29 of the Accounts and Statements Regulations[9] which requires the Actuary's interest to be disclosed in the returns. Given this, it is thought that the sort of interest mentioned above, in a reasonable quantum, would not make it improper for him to act. But there could be circumstances in which disclosure would not be enough.

7.4 A different sort of conflict can arise if remuneration is exceptionally high (eg. including a very large mortgage on preferential terms) which could be used to bring pressure on the actuary in a difficult situation. There is no rule to solve this problem, except not to get into it.

8. MISCELLANEOUS COMMENTS ON THE GUIDANCE NOTE

8.1 This part comments on sections of the Guidance Note which have not been dealt with elsewhere in the paper.

8.2 *Help and Advice from the Professional Body*

8.2.1 Section 1.2 encourages actuaries to consult their professional body if they are doubtful of the right course to adopt. It is not only in a level (iii) crisis situation that they may wish to do so. The locus of the Institute and Faculty is to advise how Guidance Notes apply to the facts of any particular case and an Actuary who is in any doubt whether his proposed course of action accords with GN1 should consult them.

8.2.2 Advice is sought by approaching an Honorary Secretary. The case would normally be dealt with by him and the Chairman of the Professional Guidance Committee of the Institute or Faculty by letter, meeting or telephone call, and an urgent case would be despatched promptly. Advice may be sought and will be given in total confidence. Although cases may be reported after the event to the Professional Guidance Committee for discussion of the principles involved, this can be done anonymously so that confidentiality is preserved. I would like to think that every member of the profession has a right to consult his professional body in confidence and need tell neither his employer nor the authorities that he has done so. The fly in the ointment is the legal duty of confidentiality to one's employer, which might sometimes limit that right.

8.2.3 Some problems can only be resolved by the Institute and Faculty working together with the DTI and GAD. Rules of confidentiality on both sides will hamper this, and in such a case it is a help if the Actuary can give his consent to professional matters being disclosed by the Institute or Faculty and GAD to the other.

8.3 *Change of Actuary*

8.3.1 Section 2.2 of the Guidance Note requires an Actuary who is offered Appointment to consult his immediate predecessor (if he has not already worked in close touch with him) to discuss whether there are any professional reasons why he should not accept the Appointment. This should always be done, and acceptance of the post should not be confirmed until it has been. The procedure is intended to guard against a company trying to change actuaries for improper reasons, eg. to get a weaker valuation. It must be pointed out that neither the authorities nor the Institute and Faculty can keep an Appointed Actuary's job for him. A company may have legitimate reasons for making a change. But if it appears to the new actuary from consultations with his predecessor that the reasons may be dubious, or that he will be faced with a position of professional difficulty if he takes the job, he should consult his professional body before accepting the appointment, and both he and the outgoing actuary should authorise it to talk to GAD on the matter. The aim is that the company does not gain improperly by the change; it needs the Institute or Faculty and GAD to work together to achieve this.

8.3.2 The outgoing actuary should of course respond to the request and give the incoming actuary all the information which he should be given. Once again there is the possibility of a problem with the legal duty of confidentiality to the employer.

8.3.3 GAD's interest will inevitably be aroused if an Appointed Actuary leaves his post without an obvious "natural" reason such as retirement, moving to a better job, etc. It is in everyone's interest for the actuary concerned to explain the circumstances to the Government Actuary, to avoid any unnecessary worries. For example, the Canadian Institute requires an outgoing valuation actuary to inform the Superintendent of Insurance and the auditor if his exit was due to a dispute about his conduct under that Institute's

Recommendations. In New York State, the reason for any change has to be notified to the Department of Insurance by the company along with the change itself. A requirement in GN1 would be helpful, but something more informative than an official notification is required.

8.4 *Access to the Board*

8.4.1 Section 3.3 of GN1 states that the actuary must have a right of direct access to the board of directors. In one sense this defines the position of the Actuary as someone who has access. In the normal case of a company at level (i), however, the phrase "access to the board" understates the need which is rather to develop a relationship of mutual trust and confidence. The actuary should ensure that directors have sufficient understanding of actuarial matters to know when they require his advice, and to appreciate its importance. Contact should be direct and personal, not at one remove.

8.4.2 This section also defines the level at which the Actuary can "blow the whistle" if things are going wrong. He has the right, indeed the duty, to go over the heads of a management which is unwilling to recognise that there is a problem. (See §6.9). As was pointed out in §4.3, in a group of companies the Board which matters will not necessarily be that of the company to which he is Appointed; the Actuary should interpret Section 3.3 in the light of the actual situation in the group.

8.4.3 The Actuary's relationship with the board will probably work out differently in every company. In some he is a director. Where he is not, it is often usual for the Actuary to attend at board meetings only when matters directly concerning his Department are discussed, but not otherwise. There are cases where contact is less than this. Boards vary greatly in their composition; some include a number of executives but in others the Chief Executive is the only executive director. Some boards are much closer to the business than others. The chairman and non-executive directors of a subsidiary of an overseas group may only spend a small part of their time in this country, in which case there is little opportunity for the Actuary to form a good relationship.

8.4.4 Having stated the problem, I can only say that the Actuary should aim for as close a relationship with the Board as possible. It would help if GN1 was more specific about the relationship required. It is important that the Board recognises the need for a close relationship.

8.5 *Ongoing Responsibility*

8.5.1 The additional requirement imposed by Section 4.1, that the Actuary should take all reasonable steps to ensure that the financial condition of the office is satisfactory at any point of time, not merely at annual valuation dates, needs to be interpreted with common sense. Obviously, the Actuary cannot obtain fresh data and carry out a valuation every day. The following is suggested as a practical approach:

(a) The Actuary must have sufficient information to be aware of the dynamics of the company. This implies information as to expenses, flow of new business, investment returns etc, so that he will quickly become aware of deviations from the expected path.
(b) Based on his knowledge of the dynamics of the company, the Actuary can set reasonable intervals for data to be produced and looked at. For example, many offices have some form of quarterly valuation check.

8.5.2 Sections 4.2 and 4.3 of the Guidance Note outline the information which the Actuary should have, and it is very important that this information does in fact reach him, and on time. Much of it should be needed by management anyway, so a good deal rests on the quality of the company's management information system. In this way, the requirements of the Appointed Actuary help to reinforce good management. All this is probably easy for an in-house actuary to arrange, but it may not be so easy for a consultant. DTI would be worried if it appeared that an Appointed Actuary was not receiving the information which he required, whatever the reason for the shortcoming. They would see this as reflecting on the quality of management, as well as impairing the Actuary's ability to do his job. However, unlike in Australia, the Guidance Note gives no indication what the Actuary should do if he cannot get the information.

8.5.3 Some items of information which appear relevant but are not included in Section 4.2 are

The company's tax position
The actual (as against the expected) volume of sales

Section 4.3 refers to "any other relevant information". Actuaries should consider whether there is any other information they need and make the necessary arrangements. It would be helpful if the Guidance Note required the Actuary to specify any further information which he requires.

8.6 *Actuarial Investigations*

8.6.1 Much of section 6 of the Guidance Note concerns valuation technicalities, which are outside the scope of this paper.

8.6.2 Section 6.2 requires the Actuary to satisfy himself as to the data, if necessary asking management for written assurances as to its correctness and completeness. The Regulations require him to certify, if such be the case, that proper records have been kept by the company, adequate for the purposes of the valuation. Obviously a valuation is no better than the data on which it is based. In some companies, the production of valuation data from the original policy records lies within the executive responsibilities of the Actuary. But in many companies this is not the case. Nor is it the case where the Actuary is a consultant. The instructions to auditors require them to check the processes by which valuation data are produced from original records, but this does not absolve the Actuary from responsibility*.

8.6.3 It is interesting to note that Australian legislation requires the Actuary to certify the accuracy of the valuation data. The company has to certify the accuracy of valuation data given to an outside consulting actuary.

8.6.4 In GAD's experience, bad data have been rare as a cause of difficulty among life offices, but vigilance is always required.

8.6.5 Section 6.3 of the Guidance Note provides that the valuation methods must be appropriate. If the Actuary is using innovative methods, it is not sufficient for him to complete the valuation using these and submit a Fourth Schedule describing them. Although it may be GAD's duty to scrutinize and comment on valuation methods in the first instance, the profession as a whole should be the arbiter of what methods are permissible. The Actuary who proposes new developments, perhaps to deal with new types of policy, should take steps to secure general acceptance of his ideas within the profession, eg. by raising them at meetings, or presenting a paper to the Institute, Faculty, or one of the actuarial societies**.

8.7 *The Actuary as Manager or Director*

8.7 Section 8.2 of the Guidance Note points out that an Appointed Actuary who holds a managerial appointment or is on the Board is, in a sense, in a two hat situation and needs to make it clear to his colleagues in what capacity he is speaking at any time. Obviously he must be clear himself. The point is a simple one, requiring no further comment, but it should not be overlooked. It is especially important—and difficult—if the company is in difficulty.

8.8 *Other Actuaries involved with the Company*

8.8 The sections of the Guidance Note concerning other actuaries who may be Directors, Managers, or otherwise concerned with the company are also of great importance. Section 8.1 says, in effect, that more will be expected of a life assurance director if he is also a qualified actuary than would be otherwise. This may not be strictly logical but it is nonetheless true. To have a senior actuary on the Board can be a real assistance to an Appointed Actuary. In general, the Guidance Note does not require the managerial or director

*I understand that some consulting actuaries give the auditor a list of points concerning the data on which they wish the auditors to give them comfort.

**On some points, GAD will have to advise what methods or bases are suitable to meet statutory needs (eg mismatching reserves) but this is a different point.

actuary to agree with the Appointed Actuary but he must not trump him with a professional card.

9. QUALIFICATION STANDARDS

"Qualification standards do not test for or measure competence—they establish the basis on which it can be assumed that competence exists"[17]

9.1 It is usual to look at a standard on two axes—knowledge and experience or, knowledge which can be tested by examination and knowledge which is gained by experience. Both need to be kept up-to-date.

9.2 *Examinable Knowledge*

9.2.1 As regards examinable knowledge, the Institute and Faculty syllabuses are thought to be sufficient. Both curricula include other subjects beside life assurance and go considerably beyond what is required to be even a well-rounded Appointed Actuary. This is to provide for other career paths within the profession.

9.2.2 The Institute has re-introduced specialization, so that a candidate need take only one of the four final subjects at Specialist (S) level. The other three are taken at Ordinary (O) level. The question arises whether Appointment should be limited to those who passed the S level life assurance examination. Given that examinable knowledge will become out-of-date, it is thought that the purpose of examinations is two-fold. Firstly, it provides an understanding of basic concepts and methods which can subsequently be developed in practice and kept up to date by some form of continuing education. Secondly, the S level demonstrates the ability to master and apply an actuarial subject in depth. Given these two, the actuary should be able to keep himself up to date. The O-level examination in life assurance gives a grounding in that subject which could be built on by further study. It is thought that, with the present degree of specialisation, actuaries who have qualified by any of the four routes are acceptable. This would need re-considering, though, were specialization to become more deep-cut.

9.2.3 The Institute and Faculty examinations in life office practice are based on law and practice in the UK and so assume the British supervisory system, even though that system is not itself in the examination syllabus. It is a question whether an examination on law and supervisory practice should be required (it is for enrolled actuaries in the USA). Where the actuary has trained in this country, he will be familiar with the British system. He should have absorbed the ethos of the profession especially in relation to the Appointed Actuary. The obvious anomaly is the FIA or FFA who trained abroad. In spite of having followed a course of study and taken examinations predicated on UK law and practice, those actuaries will not have actual knowledge or experience of it and will not have worked in the milieu of the

Appointed Actuary. There is a case for an examination on supervisory law and practice as a requirement for an Appointed Actuary; perhaps the case for a "relevant UK experience" requirement is stronger.

9.2.4 Knowledge studied for examinations will get out of date. At present there is no continuing education requirement, such as is under consideration in the USA*, and the Guidance Note makes no reference to the need to keep knowledge up to date. However the professional bodies offer ample facilities for present and future Appointed Actuaries to keep themselves informed as to developments. This can be done via Institute and Faculty meetings and papers, other material in the Journal and Transactions, the meetings of other actuarial societies, and the new programme of convention and seminar style meetings promoted by the Institute. The Actuarial Education Service can also provide material. It is a question whether some form of continuing education requirement should be created. At the very least, there should be a reference to the need in the Guidance Note**.

9.3 *Experience Requirement*

9.3.1 The Guidance Note (2.1) requires that an Actuary should not accept Appointment if he does not have the necessary practical experience. Such an actuary may, however, accept Appointment if there is a professional and formal arrangement for recourse to an experienced actuary.

9.3.2 At present the Institute imposes a 3-year experience requirement for the Fellowship. The experience must be on actuarial work of some sort, but not necessarily in life assurance. The Faculty has no corresponding requirement.

9.3.3 The Regulations(9) require Appointed Actuaries to be aged 30 or over, which might be termed a maturity requirement. But as far as the legislation is concerned, the actuary need not have worked in actuarial work of any sort beyond what is required for the Institute's experience requirement. In particular experience in life assurance is nowhere specified as a condition for Appointment.

9.3.4 This contrasts with the proposed USA requirement for "at least three years of reasonably current experience involving significant responsibility in the practices governing the valuation of Life Insurance business"(17).

9.4 Bringing these threads together, it is considered that the duty of Appointed Actuary is more exacting than other statutory functions, so that the ordinary actuarial qualification is not sufficient. Something more than ordinary professional abilities is required, but it is not easy to define what the "something more" is. Objectivity and the ability to influence top management

*Regulations for Enrolled Actuaries were raised recently.

**There is an interesting comparison with the New York requirement (A5.8) and the American Academy proposal (A5.12) are part of it. It might be described as senior executive or partnership quality. But neither an outside supervisory body nor the professional bodies can easily assess this. Although there is a natural wish to play safe, it is important not to place too many obstacles in the way of entry over and above the ordinary actuarial qualification so that the path of younger and less experienced actuaries is not blocked unnecessarily.

9.5 Appointment is made by the company. As the actuary normally occupies a senior post with important responsibilities, companies have every reason to choose competent and experienced people, so that the lack of a relevant experience requirement is not felt in practice as often as might be expected. It is only certain special cases which are likely to cause problems. However, small new companies which cannot afford experienced senior actuaries can be difficult to handle and may severely test the actuary's wisdom and inter-personal skills. While the age 30 rule does at least prevent such companies from appointing technically brilliant actuaries who, by reason of their youth, cannot have much business experience, a relevant UK experience requirement (say 5 years after qualification) would be a better rule.

9.6 *Overseas Cases*

9.6.1 It was explained in §4.4.3, that in certain circumstances the DTI will permit actuaries who are not Fellows of the Institute or Faculty to be Appointed. Two points may be made here. Firstly, this might seem just the case for a "relevant UK experience" qualification. Reference to §4.4.3 however will show that this would not be practicable in the circumstances. Secondly, where the company is located in this country, so that the special circumstances described do not exist, an Actuary without a UK qualification would only be permitted if good reason was seen why a Fellow of the Institute or Faculty should not be Appointed. Even if good reason were found, there would be the same problems with Appointment of an actuary with continental style qualifications as were described in §4.4.4. However the European Community is expected to introduce a Directive covering Mutual Recognition of Qualifications; the details are not yet finalised but this point will clearly have to be reconsidered.

9.6.2 Finally, it is necessary to say how helpful it would be if the Institute and Faculty were to adopt a common approach to all questions of qualification.

10. DISCIPLINE

10.1 It will be generally agreed that any system of regulation must be backed up by disciplinary arrangements. The Appointed Actuary is not subject, in that capacity, to the "fit and proper" powers of the DTI, although he may be so subject as a director or manager. Thus the burden of professional discipline falls on the professional bodies. In this connection they have two tasks: to enforce the various guidance notes, and where necessary to exclude an individual from the possibility of Appointment.

10.2 The procedures are set out in Institute Bye-law 66 and Faculty Rule 36. They are concerned with unprofessional conduct*. The Institute Bye-law refers to guidance as a factor to be taken into account in assessing this. Even so, the definition of unprofessional conduct is legally controlled and will not necessarily cover breaches of the guidance notes of importance to the supervisors. Cases have been so rare that there is very little experience to draw on. Thus discussion is necessarily limited.

10.3 The only way in which the Institute or Faculty can deny a member the possibility of Appointment is to remove him from membership, which removes him from the profession altogether. This is a drastic action, rightly reserved for the most severe cases. From a supervisory point of view, though, the objective is merely that a person who has shown himself unfit for the responsibility does not become an Appointed Actuary. There is no objection to such a person continuing in non-statutory actuarial work. It is a separate question, and one purely for the professional bodies, whether matters should be taken further than that.

10.4 It does seem that the Bye-law and Rule are not appropriate for the task required. This is a matter for concern, because the supervisors and the public must feel that there is an effective system and the will to operate it, or they will in the end lose confidence in the profession. The amendments made to the Institute bye-law in 1988 are helpful as far as they go, but they were not directed at this particular point. I understand, though, that the Institute is studying the question further. A joint development by the Institute and Faculty would be helpful.

11. CURRENT ISSUES

11.1 At present issues are arising from outside and inside the system.

11.2 *Changes in the Financial Services Industry*

11.2.1 An increasing number of life offices are controlled by groups which also provide other financial services, or which have interests outside the UK. In some cases the British life office is the core business of the group, in others this is not so and the life office is the junior partner of a bank or unit trust group (or perhaps, in the future, a building society). In other cases, the main business is overseas, usually but not always life assurance.

11.3 These are natural developments which one does not wish to hinder. But group management hailing from outside the UK life assurance industry will not be imbued with the ethos of the Appointed Actuary system as it

*The Faculty rule also covers conduct bringing the Faculty into disrepute.

affects management. It may see the various financial services as differing from each other only in technical ways, and not fundamentally in the arrangements needed for managing them. This will make it more difficult for the Appointed Actuary to maintain his position within management.

11.4 There is also a risk that the position of the Appointed Actuary will be diluted, simply because there is so much other business within the Group. The trends towards closer integration (see §4.3.8) may not be helpful. All this points to the importance of maintaining and strengthening the support given to the Appointed Actuary by the professional bodies and the supervisory authorities.

11.5 At present the various retail financial service industries are supervised separately, either by different divisions of the DTI, or by other bodies. It is natural that the supervisory rules (eg. capital requirements and other restrictions on business) should differ from one to another, because the nature of the business supervised differs. I do not know whether there is the sort of consistency between them which could be described as a level playing field. It is note-worthy that in some other countries (eg. Canada) various supervisors have been brought together in one organisation. There are general problems here which are outside the scope of this paper, but it is obvious that any such move could dilute the part played by actuaries in the supervisory office itself. But the Appointed Actuary system needs strong support from the supervisors.

11.6 The common factor is the uniqueness of the Appointed Actuary system. There is nothing like it in any of the other retail financial services. If actuaries—and life offices—wish to keep and develop the system, they must make sure that its nature and advantages are more widely understood than is the case at present.

11.7 *1992*

11.7.1 It will not be clear for some time just what the single European market will amount to in terms of unification of the market for retail financial services. If it is to amount to anything significant, though, the difference between our supervisory system and those in other Member States is bound to become an issue. In most of those countries life assurance is much more heavily regulated than here. There is nothing like the Appointed Actuary role as known to us in the UK. Indeed in some Member States the Valuation Actuary's work is a matter of computation only. As a result there are not the same opportunities for innovation nor the same ability to respond to the stimulus of change. It would be difficult to preserve the Appointed Actuary's role if there were to be any approximation of systems to some common medium. It would then be difficult to preserve the commercial freedom of our system, which we regard as so valuable.

11.8 A special meeting was held at the International Congress of Actuaries in Helsinki in July 1988 on the topic of Life Assurance Reserving and

Regulation. The presentations to this meeting showed that, in many countries, change in regulatory systems has been driven by changes in the market for financial services and also by changes in the investment scene. But it appeared that at least some of the Member States were not expecting such changes to occur, at any rate not so as to affect life assurance.

11.9 *Changes in the Life Assurance Market*

11.9.1 Massive changes are occurring in the market within which life assurance companies sell their wares

— the requirement of polarisation and the "best advice rule" both stemming from the Financial Services Act. These change the shape of the market for new business, to the benefit of some offices and the disadvantages of others.
— the general "loosening up" which has led various types of institutions to enter what was traditionally the market of other types.
— noteable among new developments are the new pension vehicles introduced by the Social Security Act 1986.

This picks out only the major changes. While these may not appear directly relevant to the Appointed Actuary, this degree of change will put any supervisory system under strain because it requires many companies to make major changes in the way that they operate. In our system, this strain will bear on the Appointed Actuary. Those of companies which are less successful at adapting will encounter at least some of the problems mentioned earlier in this paper.

11.10 With-profits business deserves a special mention. Probably the most important sales factor for this class of business is the maturity value including bonuses. Companies are not now allowed to make competing projections of future maturity values. But actual payouts for policies maturing now are closely scrutinised by intermediaries; league tables are also published. The intermediaries, who are working under the best advice rule, have to consider not only the current level of payout, but whether an office is likely to maintain its ranking in the league table over the future. This has two effects:

— pressure to over-distribute. Although any distribution is the directors responsibility, the pressure bears directly on the actuary whose advice is pivotal and who may be under pressure from a management wishing to maximise the distribution.
— as intermediaries must now analyse the position of each office and consider its future, the actuary's presentation of his valuation gains a new importance.

11.11 Another turn of the screw is that bonuses probably have to be reined back because interest rates (and inflation) are not as high as they used to be. This is a large subject, and I will just point out that it adds to the pressure on the company and on its Appointed Actuary.

11.12 The Institute and Faculty have responded to these problems by issuing an Exposure Draft* of a new Guidance Note which was discussed at a

*EXD 5, published by the Institute and Faculty of Actuaries in May 1988.

special meeting of the Institute on 27 June 1988. The bones of the draft, which is subject to revision in detail, are to require the actuary to report in writing to his directors on "the appropriateness of the proposed allocation and its implications for the future conduct of the business" before any allocation of profits is made to either policyholders or shareholders. The report must deal with the way in which the allocation is to be financed, the effect of continuing the allocation policy proposed, and the bonus prospects in different investment scenarios. The actuary must recommend changes either in the allocation or the conduct of the company's business if they are necessary for the company to meet its statutory solvency requirement or to fulfill the reasonable expectations of existing and potential policyholders.

11.13 The Guidance Note also proposes that the actuary should be required to report to his directors following an actuarial valuation, whether or not an allocation of profits is involved. In many cases the two remits would doubtless be covered by one report. Both reports are internal, that is they are not intended for publication and the draft Guidance Note imposes no requirement that they should be shown to the DTI.

11.14 Unlike Australian legislation, the Insurance Companies Act contains no requirement for the directors to receive or consider a report from the actuary. The proposed reports do not go beyond the practice of a well managed office, so the actuary should be able to fulfill this new duty in the great majority of cases, often with little change from present practice. It is of course the few other cases which cause problems to the supervisors. As pointed out in §1.10 the companies most likely to get into difficulties are those most likely to ignore Guidance Notes. The existence of the Institute and Faculty's requirements should nonetheless help to firm up the actuary's report even in these cases. If the DTI needs to look at the affairs of a company in detail, and finds that the actuary's report has been ignored or his recommendations not followed, it is likely to question management pretty closely as to the reasons for doing so. At first blush they would see this as reflecting on the suitability of management. In those circumstances, GAD would be looking at the contents of the actuary's report to see whether it was in fact adequate to the situation.

11.15 The same Exposure Draft proposed a revision of Section 3.2 of the Guidance Note, which requires the Appointed Actuary to report directly to the DTI in certain circumstances. There is no doubt that this section needs revision, and the proposal was remitted for further consideration. Recently the Auditing Practice Committee has issued guidelines for auditors covering rather similar circumstances, which would repay study. The auditors have the backing of a statutory requirement which is, however, expressed in quite general terms and refers to the possibility of guidance notes.

11.16 At another meeting on 27 June, the Institute adopted a new disciplinary code. While doubtless an improvement on the old, it has to be said that the new code does not meet the problems mentioned in Part 10 of this paper. These remain unsolved.

12. ACKNOWLEDGEMENTS

More people than can be named here have helped me in preparing this paper. Thanks are due to colleagues in both GAD and DTI and to friends in the profession here and abroad. Particular mention must be made of the numerous Appointed Actuaries who have suggested points—perhaps unwittingly! However I alone am responsible for the paper's imperfections, and for the opinions in it which are of course personal and not an expression of official views.

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(9) INSURANCE COMPANIES (ACCOUNTS AND STATEMENTS) REGULATIONS 1983 (SI. 1983 No. 1811)

(10) INSURANCE COMPANIES REGULATIONS 1981 (SI 1981 No. 1654). Part V covers Valuation of Assets, Part VI that of Liabilities.

(12) In reference (5), *JIA* **103**, 137.

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(15) FERGUSON, D G R (1976). Life Office Solvency and Insolvency. *JIASS* **22**, 1.

(16) INSTITUTE OF ACTUARIES: Memorandum on Professional Conduct and Practice para 9. The Faculty has not issued a formal Memorandum but in general follows the same line as the Institute.

(17) AMERICAN ACADEMY OF ACTUARIES (1985): Standards for Valuation Actuaries, Discussion Draft.

APPENDIX 1

Index of References to Guidance Note GN1

Section of GN1	Paragraph of this paper
1.2	8.2
2.1	9.3.1
2.2	8.3
2.3	7.2
3.2	6, 11.15
3.3	4.3.1, 6.9, 8.4
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8.1	8.8
8.2	8.7
8.4	4.3.2

APPENDIX 2

The Insurance Companies Act 1982 and Regulations

1. The Act gives supervisory powers and responsibilities which are administered by the Department of Trade and Industry with actuarial advice from the Government Actuary's Department.

2. Under the Act, a company requires authorisation from the Secretary of State in order to write insurance business in the United Kingdom. DTI will require an application for authorisation to include a business plan, details of the proposed contracts and of the proposed valuation basis, and an Actuary's Certificate concerning the adequacy of the capital to support the proposed business. In practice, therefore, the company must have an Actuary at this stage, although it is not required to make a formal appointment until business is written.

3. During the first five years after authorisation, the company will have to submit details of new contracts to DTI at the time of launch. It will also have to submit quarterly accounts and returns; these are much briefer than the annual returns and do not include an actuarial valuation. The same requirements may be placed on a company in difficulties if DTI sees a need to supervise more closely than usual.

4. In normal operation, the main requirement on a company is to submit the annual accounts and returns, details of which are set out in the Accounts and Statement Regulations 1983. These include an actuarial valuation as prescribed in Schedule 4 in which the Actuary describes his valuation basis. This valuation determines the liabilities, which fall to be compared with the assets taken broadly at market value. The statement of solvency (Form 9) compares the actual margin between assets and liabilities (the "free assets") with the required solvency margin, which is an amount calculated on a formula relating to the liabilities and the sum at risk. Schedule 5 (required every fifth year) sets out tabulations of the business in force. The accounts and returns are public documents, and in principle it should be possible for an outside actuary who cannot get further information from the company to use them to assess its state and prospects.

5. Provided these disclosures are made, and that a satisfactory financial position is maintained, the company can broadly write such business as it thinks fit on such terms as it chooses (and can sell). It does not have to get DTI's approval for its contracts, nor for matters such as pricing, underwriting, investment policy, marketing and selling methods and mode of operation generally. Certain rules, including those relating to the share of surplus allocated to policyholders and the proper use of long-term assets, have to be obeyed.

6. The company must of course comply with other legislation such as the Companies Acts and the Financial Services Act. However these have little

effect on the Appointed Actuary's statutory role, because the Insurance Companies Act and Regulations provide a self-contained arrangement for prudential supervision.

7. The Act gives the Secretary of State the power to intervene in the affairs of the company if certain grounds exist for so doing. The principal ground would be that the company does not have the required solvency margin. The Act provides a range of actions which may be taken on this ground, including the issue of an order stopping the company from writing any further new business. It is also possible, eg., to require further information to be supplied; this could be an interim actuarial valuation, or more details about specified assets. Various requirements may be placed on investment dealings, the company may be required to maintain assets in the UK at a specified level, or to place specified assets in custody.

8. Intervention is also permitted if there is a threat to solvency or to the reasonable expectations of policyholders or potential policyholders. Much the same range of action is possible, except that an order stopping new business and certain other actions are not permitted on these grounds alone.

9. It is also a ground for intervention if the Secretary of State rules that a Controller, Director or Manager is not a fit and proper person for the post. (Authorisation may not be granted to a company where this is potentially the case). This section does not apply to the Appointed Actuary in that capacity, although it may well apply to him in another capacity, eg. as a Manager.

10. Only the briefest account of the Insurance Companies Regulations 1981 which govern the valuation of assets and liabilities can be given here. It should be noted that assets have to be shown in the returns at, basically, market value, and certain assets are inadmissible. (This means that liabilities have to be so valued that they can fairly be compared with the market value of assets, rather than with cost or book value.)

11. Regulation 54, which is fundamental for the profession, requires that the valuation of liabilities must be carried out on actuarial principles with prudent assumptions and making proper provision for all the liabilities. It further requires the actuarial reserve so calculated to be, in total, greater than a minimum level which is described in some detail in Regulations 55 to 64. This includes a requirement that the liability valuation takes into account the nature and term of the assets and the value placed upon them, and includes appropriate provision against the effect of possible future changes in their value. The Institute and Faculty Guidance Note GN8 and TPN 2 supplement these Regulations.

Documentation

Insurance Companies Act 1982
The Insurance Companies Regulations 1981 (SI 1981 No 1654)
The Insurance Companies (Accounts and Statement) Regulations 1983 (SI 1983 No. 1811)

A fuller account is given in:

PICKFORD, M A (1982): The Insurance Companies Act 1981 and some of the associated regulations, *JIASS* **26.**

APPENDIX 3

Institute and Faculty Guidance Notes

1. Two Guidance Notes for Appointed Actuaries have been issued. GN1, first issued in May 1975, described the duties and responsibilities of the Appointed Actuary. GN8, first issued in October 1983, deals with the technical basis of actuarial variations and is not further considered in this paper. Guidance Notes are written and kept under review by the Joint Life Assurance Standards Committee of the Institute and Faculty of Actuaries, and are issued under the authority of the councils of these two bodies. They are binding on members (including Affiliate Members) of the Institute and Faculty.

2. The heart of GN1 is Section 3, which points out that the Appointed Actuary has a double responsibility, to the company and to the DTI "by reason of his statutory duties, which arise from the Department's supervisory function aimed at the protection of policyholders". (In this regard, the DTI is seen as representing the public interest.) These two aspects of Appointment do not normally conflict. However, in the ultimate position where the Actuary envisages qualifying his certificate and the company has refused to heed his warnings of impending danger, the second responsibility requires the Appointed Actuary to report the situation directly to the DTI.

3. This section also points out that the Appointed Actuary has, in that capacity, an advisory role (even though he may also be an executive). The responsibility for managing the company rests with the Board, to which the Appointed Actuary must have right of direct access.

4. Albeit the statute only requires the company to obtained yearly actuarial valuations, Section 4.1 of GN1 gives the actuary a continuous responsibility. He must take all reasonable steps to be satisfied at any time that the financial position is satisfactory.

5. The rest of the Guidance Note will be summarised briefly here. Section 4.2 contains a list of information which the actuary must have, on an up to date basis. This includes, among other items, information on the contracts being sold and the premium rates, and on the volume and costs of sales. He must also receive information about existing investments and the investment policy, and about the level of expenses. Under Section 4.3, all this information, together with some other items, must be supplied by the company.

6. Section 5 of the Guidance Note deals with premium rates and policy conditions. The actuary is to satisfy himself that the premium rates being charged for new business are appropriate. If a commercially justifiable basis would produce significant new business strain (ie. writing the business absorbs a significant amount of capital) he must advise the company of any limits on the volume of business that can be accepted. This section discusses the

background to his assessment and the factors which must be taken into account.

7. Section 6, dealing with actuarial investigations, sets out matters which the actuary should take into account but does not lay down technical methods or bases.

8. The treatment of assets is covered by this Section. The actuary must assess the nature of the portfolio and the likely return, and must pay regard to the relationship between the term of the assets and that of the liabilities. If he considers that the investment policy pursued by the Directors is or could become inappropriate to the liabilities, he must advise the company of the constraints on investment policy necessary to protect the position of policyholders.

9. Section 7 points out that, where solvency is in question, particularly rigorous standards must be applied. The actuary's duty is "to assess the limits within which the company must act and to advise the company of the necessity for these limits".

10. Part B (sections 8 and 9) of the Guidance Note deals with the Appointed Actuary as Director or Manager, and also with other actuaries in the organisation. It points out that the Appointed Actuary may at times be expressing views as a member of management or, perhaps, one Director among many. At other times he will be advising as the Appointed Actuary. He must make sure that the others concerned understand the position.

11. Another actuary who is a Director or Manager can be of great help in assisting a full understanding of the actuarial issues, but he must be careful not to act in such a way as to diminish the status of the Appointed Actuary.

12. An external actuary who is called on to express an opinion on the Appointed Actuary's valuation must also take care to respect the status of the Appointed Actuary, although this does not preclude him from making properly reasoned comments where appropriate or necessary.

Documentation

GN1: 'Actuaries and Long-Term Insurance Business': published in *Members Handbook* of Institute of Actuaries and *Yearbook* of Faculty of Actuaries.

APPENDIX 4

The Valuation Actuary in Canada

1. Traditionally, actuaries have had a strong role in the Canadian life assurance industry, as in the UK. However, legislation first required Canadian companies to appoint a Valuation Actuary in 1978. The Canadian and British Insurance Companies Acts, as then amended, require the appointment to be made by Board resolution, a certified copy of which has to be filed with the Office of the Superintendent of Financial Institutions, the supervisory authority. Similar documentation is required on termination of appointment. A Valuation Actuary has to be a Fellow of the Canadian Institute of Actuaries.

2. Before that time, regulations had laid down in detail the valuation bases and methods to be used by companies. The 1978 amendments continue to specify a method—the modified net premium method—as a minimum valuation standard. The interest and risk rates, however, are chosen by the Valuation Actuary as being "appropriate to the circumstances of the company and the policies in force". The rates also have to be acceptable to the Superintendent.

3. The Act also requires that all financial statements published by the company, whether for presentation to policyholders, shareholders or the public, must show the same reserves.

4. The actuary's report, which is attached to the annual statement made to the Superintendent, has to describe the valuation bases, and also certify that the reserves make "good and sufficient provision" for all guaranteed obligations.

5. The Act does not give the Valuation Actuary any statutory function except in relation to annual valuations.

6. In order to support the 1978 transfer of responsibilities to the Valuation Actuary, the CIA issued Opinion No. 6, which requires the Valuation Actuary to report directly to the Superintendent of Insurance in certain circumstances. This will arise if he ceases to be the Valuation Actuary because of a dispute with the company over relevant matters, or if his report is altered without his agreement, or publication of it is deferred.

7. The CIA also published detailed recommendations for financial reporting, which provide a set of instructions for the choice of valuation assumptions, for carrying out the valuation and for reporting.

8. In 1985, following an approach by the Superintendent, the CIA re-examined the recommendations in the light of contemporary developments in the life assurance industry. It was felt that the system had not kept pace with the issue of new products, and also that the recommendations, being general in nature, were of insufficient help to Valuation Actuaries when faced by

commercial pressures. Moreover, if the supervisors were to become concerned about the work of a Valuation Actuary (ie. about the reserving standards of a company) the recommendations were not specific enough for them to make a challenge. It was concluded that the guidance given to Valuation Actuaries was insufficient, and insufficiently precise. It was recommended that the CIA commission "Valuation Technique Papers" on specific topics, covering either the choice of a particular assumption or the valuation of a particular type of plan. These papers would lay down methods and formulae for determining assumptions and margins. Maximum or minimum assumptions might be specified. Practical examples would be included. Papers would be updated, new ones commissioned, obsolete ones withdrawn. The papers would describe techniques that are capable of being performed by the average actuary, ie. advanced statistical techniques would not be used unless approximations were possible. The CIA would require Valuation Actuaries to be familiar with the contents of these papers and to use only the approved techniques unless a departure could be justified. To date, two papers have been issued, an Exposure Draft of a third is in issue and other work is understood to be in progress.

9. Also in 1985, the CIA Special Committee on the Role of the Valuation Actuary reported. They saw the need for a stronger, more responsible and more visible role. There is an implication that the position of Valuation Actuary was sometimes too low in the company hierarchy, and that this responsibility should be taken by the Chief Actuary.

10. The report recommended that the actuary should have a continuing and ongoing role. This would require him to establish access to and involvement in management decisions which affect the developing financial situation of the company. It would also require provisions corresponding to Section 3.2 of GN 1. He would have to be involved in some manner in pricing of new products, reinsurance arrangements, underwriting policy, plans for distributing surplus etc. He should be developing risk analysis scenarios, especially considering economic risks.

11. It was also recommended that the Valuation Actuary's report should be extended to cover new as well as existing business, and to cover any significant factor which may impact on the company's ability to meet its obligations. This would require the report to consider matching of assets and liabilities, which would in turn require the Valuation Actuary to be conversant with investment policy, and to review the quality of assets regularly with the Investment Officer.

12. It was also a concern that the Valuation Actuary should appear to be professionally independent, not simply a tool in managements hands. "Credibility, perceived objectivity and ability to influence top management" are required.

13. It is understood that the Canadian profession and the Superintendent's Office are working towards achieving these recommendations. A project exists for complete revision of the insurance legislation.

14. The requirement that the same reserves should be shown in all financial statements means that statements reporting income, eg. for shareholder use, have to be based on statutory reserves. Recent proposals point towards a system of reserves and appropriated surplus, where the reserve would be appropriate for reporting income, while the reserve together with surplus would have to be held in order to satisfy the supervisory authorities.

Documentation

Canadian and British Insurance Companies Act (as amended)

Canadian Institute of Actuaries (1979): Opinion CIA-6 and Recommendations for Insurance Company Financial Reporting (contained in the CIA Blue Book).

Canadian Institute of Actuaries (1985): Interim Report of the CIA Task Force on Term Insurance Valuation, and subsequent Valuation Technique papers.

Canadian Institute of Actuaries (1985): Report of the Special Committee on the Role of the Valuation Actuary.

BRENDER, PROFESSOR A. (1987): 'Solvency Requirements for Life Insurers in Canada'. Working Paper Series in Actuarial Science of the University of Waterloo, Ontario.

APPENDIX 5

The Valuation Actuary in the USA

1. In the USA, each State has an Insurance Commissioner responsible for regulating insurance companies domiciled in that State. The statutory regimes and working practices differ slightly between States, according to local requirements. The National Association of Insurance Commissioners (NAIC) has a coordinating role, and issues model laws which the States adopt with or without modification. According to the latest Society of Actuaries Year Book, twenty of the fifty State Insurance Commissioners have actuaries (FSA or ASA) on their staff.

2. The Actuary to a USA company has not usually had the management role traditional in the UK. For a long time, the valuation responsibility was limited to seeing that procedures had been performed correctly, and that reserves met minimum legal requirements. These latter were precisely defined in terms of prescribed methods, with specified interest rates and mortality rates. The Valuation Actuary was not normally concerned with investment policy or the valuation of assets, and often was not concerned with product pricing either. However in June 1975 the NAIC adopted a new requirement, that the company's annual statement must contain an actuarial opinion. Among other items, an Actuary giving a positive opinion was required to state that the reserves and other actuarial matters accorded with commonly accepted actuarial standards, that they made good and sufficient provision for all guaranteed policy obligations, and that they included all such provision which ought to be established. The opinion also stated that the reserves complied with legislative requirements. Since then, the American Academy of Actuaries has issued recommendations and interpretations to guide Actuaries in giving these opinions.

3. From the late 1970's onwards, the old valuation methods seemed increasingly inadequate. Investment prices and yields became more volatile, whereas the old methods were based on the concept of yields moving only slowly. Companies introduced "interest-sensitive" products, often giving the policyholder numerous options which could become onerous as investment conditions changed. Because of legal requirements, these policies also carried guaranteed cash surrender values. The financial services marketplace has become increasingly competitive. Another development during this period was the enactment by States of guarantee fund laws for life insurance companies. In time, it was no longer felt possible to prescribe specific statutory valuation standards appropriate for all products under all circumstances. These important changes suggested a public interest need to assign more responsibility to the Actuary. His professional judgement of the reserves should be based on an analysis of the risk held by an insurer, as opposed to a

mere determination that the reserves are at least equal to a ridigly defined standard.

4. Development proceeded along several channels. One was to analyse the risks to be provided for in the balance sheet:

C-1 asset default or impairment of value

C-2 inadequate product pricing

C-3 interest rate fluctuations

C-4 general business risk not encompassed by C-1, C-2 or C-3.

Analysis of the C-3 risk pointed to the deficiencies of the old valuation system, which assumed only one path for future events: this suggested the need for analysis of future cash flows under a variety of assumptions.

5. The Joint Committee on the Role of the Valuation Actuary, which reported in February 1985, recommended that each State enact a statute requiring companies to appoint a Valuation Actuary and to inform the State Regulator of that and any subsequent appointment. The Committee also called for the establishment of valuation principles and the development of practices for both solvency and solidity purposes. They envisaged that the statutory requirements would evolve so as to place more weight on the professional judgement of the Valuation Actuary. His assumptions and methods would be fully described in his report to management, which would be available to regulators on a confidential basis. This system envisaged an actuarial opinion to the effect that reserves cover "reasonable" deviations from expected assumptions, and that the reserves plus designated surplus covered "plausible" deviations, which are assumed to have a lower than reasonable probability of occurring. (Current thinking assigns a risk of ruin of 5%, 10% or 25% to the reasonable deviation, 1% to the plausible).

6. The Committee recommended further work in four directions: to develop the proposed legislative changes; to continue research on valuation principles; to develop the education of students and of practising actuaries to support the new system, and to develop and codify actuarial principles and standards. All these are being pursued.

7. The State of New York, which regulates many of the larger offices, has introduced new rules which encourage the use of Valuation Actuaries. These rules address the point that lower reserves than are traditionally defined in the statute could be justified while interest rates are high. The new rules permit lower reserves to be established provided they are supported by an Actuarial Opinion and Memorandum. These arrangements apply only to certain categories of contract, and the testing required is cash flow testing on eight specified deterministic scenarios for interest rates. A "scenario" is a set of yield curves which are assumed to apply over the future period considered, and other experience including lapses are related to these.

8. The Actuary (described as the "Qualified Actuary") who is to provide the opinion is appointed by the Company Board. The appointment has to be notified to the Regulators as does any change and the reason for it. The notice of appointment has to state the qualifications of the Actuary. In the case of an Actuary who is an FSA, a specimen notice, drafted by an advisory committee appointed by the New York Insurance Department, includes the statement "I am familiar with current valuation laws and procedures". An ASA who is qualified by virtue of membership of the American Academy of Actuaries would be expected to have had six years of valuation experience. The specimen notice adds "In addition, I have attended Valuation Actuary Seminars in 1984, 1985 and 1986 and have kept abreast of all written work in the Transactions of the Society of Actuaries on cash flow analysis and contingency risk."

9. The specimen New York opinion includes a statement that the Actuary has relied upon data prepared by a named official of the company, and on the stated investment policy of the company and the projected investment cash flows as provided by the Chief Investment Officer.

10. It remains to be seen how the situation will develop in the United States. One strand of opinion sees the statutory definition of reserve levels disappearing, with reserves being based on cash flow projections and backed up by an opinion from the Valuation Actuary. However the cash flow methods are complex, and if projections are to be stochastic and related to a risk of ruin the calculations and results would be very voluminous. Some doubt whether valuation standards resting purely on professionally-promulgated standards without the backing of legislation can be maintained at a satisfactory level in a highly competitive market. Another view is that a level of reserves sufficient to cover reasonable deviations should be laid down statutorily, but that cash flow tests should be used to define the designated surplus which companies have to hold in addition. The latter would rest on opinions by the Valuation Actuary.

11. One advantage of the cash flow valuation methods is that they necessarily require the Actuary to enter into a dialogue with management in general, and specifically with the Investment Managers. Once a set of interest rate scenarios has been defined, questions to be discussed include: "What will the company's investment policy be in each scenario? What would the strategy be for distribution of profits? For policies where interest is credited to an accumulated account, what crediting strategy would be followed?"

12. The American Academy of Actuaries has issued a discussion draft on the qualifications required for Valuation Actuary. The draft calls for a "comprehensive and current knowledge of the subject" and enumerates certain areas of the Society's syllabus which are pertinent. Substantial emphasis is placed on updating and maintaining knowledge by continued study and practice. Valuation Actuaries are expected to have at least three years of reasonably current experience involving significant responsibility for

valuation, and are expected to acquire knowledge of new developments. (Both the Society and Academy are considering the introduction of a general requirement for Continuing Professional Education.)

13. In conclusion, developments in the USA are being pursued systematically over a broad front. Research into valuation methods is being carried on, along with the development of cash flow projection techniques. The Society has developed a programme of meetings aimed at the needs of Valuation Actuaries, while the Academy is developing qualification standards. The State Regulators are considering the development of laws and regulations, and a limited experiment employing new methods is being tried in the State of New York.

14. Several points in the American developments provide useful suggestions for application in the UK, but the main lesson to be learned is from the American recognition that wide ranging and coordinated support is needed if a wider role for the Actuary is to be developed and maintained in the highly competitive financial services industry.

Documentation

Society of Actuaries (1987): The Valuation Actuary Handbook. This excellent compilation contains extracts from the relevant reports as well as much explanatory material.

APPENDIX 6

The Valuation Actuary in Australia

1. The broad outline of the Life Insurance Act 1945 (as amended) is not dissimilar to that of the UK Insurance Companies Acts, but there are differences of detail. In Australia, life insurance companies are supervised by a Federal Commissioner, who is appointed by the Governor General and answers to the Treasurer (equivalent to the Chancellor of the Exchequer). The Act specifies that actuarial advice must be available to the Commissioner. There is little statutory control over policies, premium rates, and other business details, but the company actuary has a number of important duties. The Act clearly envisages that every company will have an actuary although there is no formal provision for one to be Appointed, nor for Appointments to be notified to the Commissioner. As far as the Act is concerned, the various duties could be performed by different actuaries.

2. Section 78 requires companies to obtain actuarial approval for the premium rate before any policy can be issued. The Commissioner may require the company to obtain and submit to him an actuarial report on the premiums for any class of policy; if the actuary considers that the rate is not suitable, the report must state what rate would be approved. In approving a premium rate, the actuary must have regard to the maximum rate of commission, and Section 79 prevents the company from paying higher commission than the actuary allowed for. The UK legislation has no corresponding provisions.

3. Actuarial valuations are required every fifth year. The actuary has to furnish the company with a written report of the results. (This is the "financial condition report".) An abstract of this report forms part of the company's returns to the Commissioners (except for the requirement that there should be a written report from which the abstract is taken, this is similar to the UK legislation). The form for the abstract is set out in the second schedule to the Act, and includes an Actuarial Certificate as to the accuracy both of the valuation itself and of the valuation data. If the actuary is a consultant, the data certificate is to be given by the principal officer of the company, and the return must include a signed statement from the actuary showing what precautions he took to ensure the accuracy of the data. The Fourth Schedule to the Act sets out the methods and assumptions to be used by the actuary; these are laid down in terms which leave little discretion to the actuary and as a result are very much simpler than the UK valuation regulations. The basis specified by these rules is a minimum; the actuary has to certify that the aggregate value which he has placed on the liabilities is not less than that on the minimum basis. The actuary's approval is required for any surplus to be distributed.

4. In a circular dated October 1978, the Commissioner set out some thoughts as to matters which could be covered in the financial condition

report, and in February 1980 a further circular requested copies of all such reports to be submitted to the Commissioner along with the statutory returns. It is understood that these reports are referred to the Australian Government Actuary's Department for examination, although this work has been hampered by staff shortages*.

5. Subsequent to these circulars, the Institute of Actuaries of Australia issued a professional standard covering the contents of the financial condition report. A revised standard was issued in December 1986. The main points of interest in connection with this paper are:

The actuary is set five targets: compliance with legislation, compliance with the Articles of Association, long term financial soundness, equity in distribution of surplus, equity in treatment of experience related policies.

The actuary must receive adequate information on specific items, broadly as listed in Section 4.3 of GN1, but he is required to specify his needs to the company, and to qualify his report or state his inability to give approval if those needs are not met.

The section on premium rates is broadly similar to the corresponding provisions of GN1.

The section on financial condition investigations envisages that the actuary will make a report over and above the statutory return. The points which he is to take into account are broadly similar to GN1, but a check list is also given.

If the investment policy is or could become inappropriate, the report should advise on the constraints on it necessary to protect policyholders. The report should also comment if the valuation of investments is unsuitable for the investigation, in which case the actuary must adopt appropriate values.

The report should be qualified if there are unresolved doubts about the data (in this case presumably the Certificate mentioned in §3 above cannot be given).

The report must comment on the main features of the methods and assumptions, giving the reasons for any changes since the previous investigation. Material changes are to be quantified. The most appropriate valuation method should be used, even though the Act envisages a net premium method. The minimum basis under the Act may be weaker than is proper for the company.

The report must comment if premium rates are or could become unsuitable.

The report should indicate the rate of bonus to be used for benefit illustrations. When dealing with surplus, the report should identify the major components of new surplus, and give reasons for the recommendation as to distribution. It should report on the short term outlook.

As the standard requires the actuary to seek equitable treatment in the distribution of surplus, it incorporates an extended section discussing this requirement.

6. At the time of writing, there are lively developments in Australia relating particularly to solvency standards and to the search for equity, which are not dealt with in this paper. There is a general recognition that developments are needed and a willingness to look at other countries (US, Canada and UK) for suggestions.

*Since this was written, the Australian Government Actuary's Department has ceased to exist.

Documentation

Life Insurance Act 1945 as amended.

Institute of Actuaries of Australia: Professional Standard No. 1 Actuarial Reports and Advice to a Life Insurance Company 1986. (This supersedes the standard published in previous Yearbook of the IAA).

ABSTRACT OF THE DISCUSSION

Mr C. M. Johnson (opening the discussion): Tonight's paper serves at least four important functions. It provides a summary of an Appointed Actuary's functional rôle and operating environment. It gives an inside view of the advantages and the concerns that the Appointed Actuary system generates for the regulatory authorities. It offers Actuaries further guidance on appropriate courses of action where circumstances are difficult. It makes suggestions for improvement or further work in a range of areas.

There will be few in this room who do not agree that an Appointed Actuary must be deeply involved in the workings of his company, whether as an employee or as a consultant. The paper seems to me to paint a picture in which the Actuary is too much of a 'one man army', sharing too little responsibility and not harnessing sufficiently the power of delegation. In practice, there is much more teamwork involved which should be strongly encouraged. Indeed, delegation and teamwork are essential in larger offices. There the size of the task is such that there are risks if one person were to try to cope alone. These views would lead me to change the emphasis of the paper in a number of places and, on occasion, to a different conclusion.

Section 1.3 underplays the importance of the company's accountants (both internal and external) in formulating and maintaining satisfactory financial standards. In § 1.9 we are told that the efficiency of the supervision system depends on one individual in each company, the Appointed Actuary, who is not subject to immediate check. This undersells the contribution made by the other professionals on a company's financial team. Investigation, interpretation, quality, checking and control are all substantially enhanced by the input of lawyers, accountants and other actuaries. Section 3.3.4 states that where there is an investment committee the Actuary should sit on it. It may well be that the Actuary has a management rôle to play. However, an Appointed Actuary should not need to be a committee member, unless this proves to be the only way to obtain the necessary information. In most circumstances it should be sufficient to communicate guidelines to investment management and then monitor developments. In the smaller company this might include monthly discussion with the senior investment manager backed up by a regular report on investment transactions from the company's investment accounting function. In a larger company another actuary might be given support responsibility and be asked to monitor progress and prepare a regular report—quarterly or half-yearly—establishing the asset and liability matching position, commenting on trends, summarizing developments against guidelines and suggesting changes as necessary. The paper recognizes the importance of a company's wider management team and the way that the Appointed Actuary should relate to it. I particularly liked the suggested checklist in § 4.3.6. I would add that through good, clear and timely communication, the Actuary should do everything possible to explain matters financial to wider management.

Turning to the comments on newer and proprietary companies in § 4.2, I found myself unconvinced that the arguments were anything like clear cut. The author talks of 'the extreme pressure from shareholders for results' for a proprietary company and suggests that the potential conflicts for a mutual's management are smaller, because they are only responsible to policyholders. I suspect the pressure in the proprietary company is overstated and conflict in the mutual understated! On this twin point of conflict and pressure, the policyholders cannot be seen as anything like a homogeneous group. The interests of policyholders with high existing fund values would be very different to those of new entrants. For example, long-standing pensions policyholders of a mutual who are nearing retirement may well take a much harsher view of new business strain than the shareholders of a proprietary company. All investors—policyholders and shareholders alike—will seek a return on their outlay and, given today's environment, a mutual office may well find that it needs to be just as demanding on results if it is to sustain its terminal and reversionary bonus levels. In addition a proprietary company has the advantage that it can readily seek further capital from its shareholders. Indeed, the shareholders of a newer, smaller company are likely to be expecting to have to provide more capital, rather than to extract capital. Newer and/or proprietary companies have no monopoly on adopting a competitive stance, and recent history shows that they have no monopoly on running into difficulties.

Whilst the paper refers in several places to the likely effects of various courses of action on an office's future, I was struck by the lack of any direct comment on how the Actuary should achieve an understanding of the important cause and effect relationships. No direct reference was made to 'Financial Forecasting'. This is a very important part of an Actuary's responsibilities and a fundamental element of the financial control of a life office. Projecting, on realistic bases, both the existing portfolio and future new business over a period of at least three years should cover, as a minimum, revenue accounts for each main category of business, liabilities, assets, the expected overall tax situation (including changes in any deferred taxation reserve), and from these surplus and the statutory solvency position. The results from such work are critical to explaining to wider management where the company's financial position is going and why. Guidance Note 1 refers to 'investigations of the financial condition of the office' and goes into some detail explaining the main parameters. I would like to see it go further to include a separate section on financial projections briefly discussing the process, making recommendations on suitable forecasting frequencies, projection periods and sensitivity tests and commenting upon reporting to the company's management. Guidance might cover possible courses of action where the projections identified a deteriorating trend or a specific future problem of some sort.

There is little if anything on financial forecasting in the current examination syllabus. The developments described in the paper for other countries, particularly the United States of America, are driving at just the sort of information which should flow from projections of an office's future situation. I would find a reasonably comprehensive three-year financial forecast of great value—especially one which gave an indication of the sensitivity of the outcome to variations in the key parameters. However, knowing the protest which would arise if I asked for this, I feel constrained to seek something simpler. So I would ask for a matching rectangle summarizing the company's position at the valuation date, with each main asset and liability type separately identified, and including unappropriated surplus, shareholders' funds etc., where appropriate. To help interpret this I would also request a short—maybe two to three page—report on the key features of the match which the rectangle depicted. The Bank of England regularly sits down with the companies it regulates to have an informal discussion on progress. This helps build the relationship and allows each party to gain a feel for how the other operates. Would it not be very valuable for the DTI and GAD to adopt a similar approach?

Mr R. E. Brimblecombe: I start by making comments from a professional point of view as *inter alia* the Appointed Actuary of a large proprietary composite office. The author was rather dismissive of guidance notes in Section 10; there are great advantages in notes being used as surrogate legislation. They are subjected to exposure to the profession, and whilst the final decision on any guidance has to be left to Council, they can be said to reflect the majority views of the profession. Guidance rather than legislation allows far more flexibility in the use of actuarial judgement. A system of guidance notes offers flexibility in that they can be changed from time to time to reflect changes in the market or to rectify any practical points of intepretation that have arisen.

In §4.2, the author refers to the undesirability of the Appointed Actuary also being the chief executive in a small proprietary company. However, is that situation not better than the position in other companies or groups where the Appointed Actuary is well down the pecking order? In §4.3, the author points out the difficulties of the Appointed Actuary in a group situation. It is perhaps unrealistic to expect groups to ensure that at the holding board level the directors should always take into account the position of the Appointed Actuary. In §§4.3.2 and 4.3.6 it is suggested that 'the Actuary must interpret GN1 in relation to the combined management' and again 'the Appointed Actuary must interpret GN1 as applying to the real centres of authority'. I wonder whether in reality this is likely to be a practical proposition. Even less so is the comment that 'management must accept the situation'. Whilst not necessarily agreeing with the philosophy, one could believe the directorate of a holding company of a large conglomerate feeling they should pay little attention to a life assurance company which may only be one small part of the organization.

The author appears to dismiss the situation in a composite office in one line. It might be felt that a composite insurance company or group would operate in much the same way as a pure life company. This may, of course, be true in the larger companies, but elsewhere it has to be recognized that the

Actuary is likely to have even less say on management issues, for example on investment, as they will be corporate functions. Furthermore there will be more individuals in the group trying for senior management/board positions. In particular the Appointed Actuary, unless he is also the chief executive officer of the life division, is unlikely to be on the board.

I wholeheartedly support the comments in Section 3 about the Actuary's rôle in product development and investment management. In particular, in these days of increasing competition, there is a danger that even if there is a marketing actuary his views may be squashed by the marketing director. It is vitally important for a marketing actuary to have a direct line either to the finance director, who is an actuary, or to the Appointed Actuary, and this should be made clear to insurance management. Similar comments apply to investment, where I suspect that the Appointed Actuary is even less able to exercise influence. I believe some of the companies that have got into difficulty in the past would not have done so had the Actuary been more powerful in this area. There may be a need for strengthening of the Actuary's powers so that he is always in a position to point out the financial consequences of following a particular investment policy.

It is no longer realistic to expect the Appointed Actuary's post to be the senior actuarial post in an organization. A greater rôle for the chief actuary is one way of strengthening the position of the actuary generally. Assuming the chief actuary is also the chief actuarial officer, he also has professional duties to supervise other actuaries in the organization under the Memorandum of Professional Conduct and Practice. The difficulty I have with this concept is in connection with the professional relationship between the chief actuary and other actuaries who are senior managers or directors, and the Appointed Actuary. In §4.3.10 the author refers to the fact that supervision of subsidiary actuaries is implicit in Section 8.4 of GN1. I would suggest that this is not a strict reading of that paragraph. It states *inter alia* that "he should at all times take care to respect the status of the Appointed Actuary" and indeed the author in §8.8 refers to it being important that the managerial or director actuary "must not trump the Appointed Actuary with a professional card". Nevertheless it would help from a professional point of view if the chief actuary's position was strengthened; this might mean some changes in how supervisors view the Appointed Actuary. With continuing, and growing, interest in embedded values it is likely that financial targets for remuneration may be set in relation to increases in those embedded values. The Actuary who certifies the embedded value and also directly benefits (or otherwise!) from the calculations might find himself in a difficult professional position. This is in addition to the conflicts of interest discussed in Section 7. I would have great difficulty with the situation described in Section 10 where an individual actuary is deemed to be unfit to become or remain an Appointed Actuary whilst continuing in non-statutory work. In practical terms I think this could lead to grave professional problems and it is not surprising that the 1988 amendments to the Bye-laws did not address this particular point even though the paper states that the Institute is studying the question further.

Section 11.10 *et seq.* deal with the position regarding bonus declarations and the exposure draft EXD 5, indicating the kind of report that should be produced to the board. Whilst from a professional point of view a strengthening in this area is helpful, from an industry point of view this may be going too far. The Actuary's advice to the board is needed, not only on bonus declarations, but, perhaps equally vitally, at times when investment policy is being discussed, new business plans are being developed and new products are being designed. It would clearly be unrealistic to lay down exactly in what circumstances directors have to take actuarial advice. Directors have fiduciary duties under the Companies Acts in relation to the running of their business and must be allowed to run those businesses. In addition it would be improper of them to hide behind an actuarial report every time—this would be a particular concern in small offices or conglomerates. Most directors in well-managed offices will already take the advice of the Actuary; indeed, any director who failed to take and listen to professional advice in undertaking their duties as directors would be failing in those duties in the same way as if they ignored advice from a lawyer or accountant.

Mr C. B. Russell (a visitor): There has been much discussion about the merits of supervision by regulation or by guidance notes. The primary distinction is that the former is supervision by Parliament, while the latter is supervision by the profession using its monopoly powers. Practice note GN1 does not interpret legislation, it does not even clarify what is professional behaviour, it seeks to impose a regime upon a particular industry. How can such use of monopoly powers be justified? It is benevolent and for the benefit for the consumer, but do not all monopolies say that? Second, it may be argued that in 1973 the profession was given monopoly powers by Parliament. That is a fair point, but attitudes have changed somewhat in the last 15 years. Section 6 can be used to illustrate the implications of this extra statutory supervision. Life assurance is capital intensive, and a new company may simply utilize its capital at the rate and in the way it wishes. There may be no intention to raise further capital until it becomes necessary. At that point the financial position will be marginal and any delay could tip the balance.

I endorse the comment in §3.2 that approaching the authorities without the agreement of the company is an absolute last resort. It may be that the Actuary advises his company to contact the DTI and the company requests the Actuary to make the approach. It is then that the problems start. The Actuary may have suggested the approach on the grounds that under GN1 he is not satisfied that the position is satisfactory. There is no indication in GN1 as to what satisfactory means. It does not appear to mean solvent. Indeed GN1 refers to the position being satisfactory were there to be a Section 18 investigation into the condition of the long-term fund. The author refers to the condition of the company rather than of the long-term fund. This appears indicative of the gulf in opinion which can exist. I assume that GN1 is unconcerned with the availability of the EEC solvency margin, but is that the general view? What happens if the Actuary suggests an approach to the authorities on the grounds that he is not satisfied. Do the authorities realize the extent to which they can undermine the position of the Appointed Actuary? Even if they do they have little choice, since they must act towards the company according to the law and not according to the guidance notes. Just imagine the scenario: 'The Actuary has some theoretical problem with his professional guidelines, but we have been to the DTI and agreed that there is really no problem.' In that situation the GAD may well advise the Appointed Actuary to consult his professional body. They can only advise him to act on the GN1 which leads back to DTI. I make no criticism of the authorities. They must act under the law. It is the system which is flawed.

In Section 6 the author lists the problems which can face a company, but rather understates them and offers some facile solutions. It is easy to say that action must be taken. The problem is in knowing when action must be taken. A company which raises additional capital before it needs to will never be in a position of needing capital. I found unrealistic the suggestion that the Actuary should discuss a problem with GAD before going to DTI. We are told in §6.9 that GAD cannot respect confidentiality. In effect what that Section is saying is that the Actuary should approach the authorities to ask whether he should approach the authorities. No such easy solution exists.

There should be no extension of utilization of the monopoly powers enjoyed by the profession unless the statutory position of guidance notes can be clarified. The Financial Services Act might be a model, though an imperfect one. However there must be clarification of the meaning of satisfactory, as used in GN1, as to the state of a fund or company.

Mr F. B. Corby: Any discussion on the rôle of the Appointed Actuary is concerned also with the prudential supervision of life insurance companies. It is interesting to be reminded of the debates of the early 1970s, in particular how we decided and announced the intention to issue a guidance note quickly after certain events occurred, and how difficult some of the discussions were. I was surprised by the author's analogy between the two actuarial professional bodies and SROs. Quite apart from the fact that the latter are of relatively recent introduction, the analogy itself is flawed. The author noted this in §1.3, where he says that the legislation has always recognized the extent to which standards have been focused on the company's actuary and his work. There is, therefore, a continuity and a sense of evolution in the process of supervision. Where deficiencies have been shown to exist, legislation, the production of guidelines and their refinement have been introduced to correct them.

Section 1.3 also reminds us that we have supervision of insurance companies by Government acting through the DTI. Under this structure our guidance notes should be directed to ensuring that actuaries, and this goes beyond the Appointed Actuary, know what is expected of them and how they should act. The Institute and the Faculty are professional bodies and have the responsibility for the conduct of their members, but they are not, and never should be, SROs regulating insurance companies. Any attempt to use the profession to regulate the insurance industry is unacceptable. We should not move to a position where the responsibility for the conduct of the business of an insurance company, which is properly that of the company's board of directors, is diluted.

I am in favour of contact between the Appointed Actuary and the Government Actuary's Department. This is something that should be more regular and formalized, but it should not interfere with the proper line of responsibility of a company's board of directors. Clearly the objective of the legislation is the protection of policyholders' interests, but I wonder whether the author interprets this requirement too narrowly. For the without-profit policyholders of whatever type, their concern must solely be with their contractual rights. For the with-profit policyholders solvency and the ability to pay when due are obviously important, but so too is the way in which the office is managing the many conflicts of interest which are inherent in the with-profit policies themselves. These are the same whether the office is wholly mutual in regard to its with-profit policyholders or almost wholly mutual as in the case of a proprietary office. The supervisory process should give much more attention to how any office is managing its capital resources. If this were done then the regulators would perforce have to give specific attention as to whether a company was conducting its affairs profitably, with all the implications of that word. If a business is run unprofitably over any period, it will inevitably cause problems for the regulator. Insurance supervision as a whole appears to give insufficient weight to this aspect.

The author has included a section on the Actuary's position in management. The essential thing is that the Appointed Actuary should feel comfortable that he is able to carry out the duties required of him by statute and in accordance with the requirements of the profession and, in particular, that all the information that he requires is made properly available to him and in a timely manner. Particular problems can arise in the case of new groupings of companies in part forced by the changing market place and by Section 16 of the 1982 Insurance Companies Act. In the case of my own group of companies, the holding company, which includes on its board the group non-executive directors, is not an insurance company. The holding company board is, therefore, in a position of having indirect rather than direct responsibility for the welfare of the with-profit policyholders in the various operating companies. To ensure that they are properly able to carry out their ultimate responsibility to policyholders the board of the holding company has established a committee consisting largely of non-executive directors, to ensure that the board as a whole, and in particular the non-executive directors, are as well informed as they were before the holding company was established. The Appointed Actuary takes part in all discussions of this committee and, of course, has direct access as of right to the chief executive of the group and to the holding company board. The holding company emerged from an insurance company. It may not be such an obvious step to take when a financial services group is formed from a different starting point, where the concept of concern for policyholders' interests and the recognition of the role of the Appointed Actuary is not as strongly entrenched.

I believe that, on the whole, we have the required structure, the legislation, the guidance notes and the Policyholders' Protection Act as a safety-net, near enough right. We ought now to concentrate on how it is operated. I have already suggested more concentration on the profitability of companies and how the estate is being managed. To help do this I suggest we try to take a lesson from how banking supervision works. This is a more continuous process, involving regular meetings between senior officials of a bank and supervisory authority. When there are problems in the insurance industry there is obviously an on-going dialogue between the company and supervisor, but this is something that should be taking place continuously and involving all companies. As things stand at present formal contact of the sort I have in mind is all too readily associated with problems. What the process should be concerned about is the avoidance of problems. I suggest that regular meetings either once, or preferably twice, a year, could be held between the chief executive and the supervisors, supported by the Appointed Actuary and the GAD respectively. Such meetings should be disciplined and structured. It would spread the workload over the year and take the time pressure away from the examination of returns, which would be seen as a far less important part of the overall supervisory process. More importantly it would enable the regulators to concentrate much more on the future and the problems that could arise. I have no wish to detract from the rôle of the Appointed Actuary and the importance of his being able to carry out his duties effectively. However it is vital that we do not confuse the issue of responsibility. The ultimate responsibility rests with the company and its board on the one hand, advised by the Appointed Actuary, as appropriate, and the regulatory authority, advised by the GAD, on the other.

Sir Mark Weinberg (a visitor): I must declare that I cannot formally speak in my capacity as Deputy Chairman of the SIB. I note that the author's paper starts off with a statement that a paper about the Appointed Actuary is essentially a paper about the prudential supervision of life assurance companies. He might have gone on to say that the Insurance Companies Act itself is about prudential supervision of insurance companies: life and other. Over the years, as a result of the Hilary Scott Committee and other events, various *ad hoc* provisions designed to enhance the interests of consumers have been bolted on, but it remains in essence an Act dealing with prudential supervision. The Financial Services Act, however, is intended to secure significantly wider ends. Except in the case of life assurance companies the Financial Services Act regulatory system covers both prudential supervision and the securing of wider benefits to investors. In the case of life assurance companies, prudential supervision remains the province of the Insurance Companies Act and the DTI, and the Financial Services Act regime is confined to the territory of investor benefit. I am using the term investor benefit, instead of the more usual 'investor protection' to underline the fact that the Financial Services Act seeks to further the interest of investors in a positive way, and not merely to protect them against insolvency, misrepresentation, or inadequate advice. Investor protection under the Financial Services Act has a number of different strands, but the main one is the belief that investors will benefit most in a truly competitive market place embracing competition between independent intermediaries, company sales forces and no doubt other evolving and still to evolve systems of distribution. In turn one of the key elements in a competitive market place is transparency: the ready availability of sufficient information to enable investors, guided no doubt by their own advisors, by the press, and in future by specialist information services, to choose between the various investment products, insurance based and non-insurance based, in the market. It is important to stress that the Financial Services Act is based on the premise that all forms of investment compete with each other for investors' money, so that the ordinary investor should, in principle, be given an equivalent level of information about the various types of investment in the market place. The stock market has a long history of improving the information available to investors and transparency has been further advanced by the changes produced by 'Big Bang', and those accompanying the introduction of the Financial Services Act itself. Unit trusts too have had a reasonable high degree of transparency, leaving aside the mysteries of unit pricing which have now been tackled by the new regulatory system.

Life assurance, however, does not tend to have a high degree of transparency. To a large extent, this is a by-product of the complexity of the vehicle itself, although it must be conceded that this inherent complexity has been compounded by a large amount of product differentiation which has often obscured the structure of the product and indeed has sometimes been designed to do just that. This has been particularly true in the field of unit-linked insurance. The key advantage of unit-linking is that it lends itself to explicit description of the charging and benefit structure. Much of the history of unit-linked assurance developments since then has involved the adding of further complexities, some undoubtedly for good technical or consumer benefit reasons, albeit at a cost of reduced transparency, whilst some have undoubtedly been directly aimed at reducing transparency and ease of comparison. As a by-product of continuing arguments about competition between independent intermediaries and tied agents and about the commission regime, attention swung during the progress of the Financial Services Bill through Parliament to the subject of disclosure of expenses and charges. The SIB has already prohibited offices from making future projections on their own bases. This provision is aimed quite simply at avoiding misleading comparisons and at heading off false competition between offices through bidding up projection rates. This is decidedly not aimed at reducing transparency and genuine competition based on real differences between the products of different offices and the SIB is very much committed to improving the standard of disclosure in regard to charges and expenses. Following the publication of the Peat Marwick report, the SIB has been grappling with this problem and a consultation paper is due to be published during the course of the next month. It would be premature to discuss what it will propose, but it is pretty clear that in the case of unit-linked policies the problem is essentially a technical one, and we should be able to produce a solution which will make it possible for the ordinary investor to make meaningful comparisons between different products in the market place.

Mainstream with-profit policies present quite different problems. The point has been made that, if with-profits assurance were to be invented today, it would never be allowed to be sold, because it cuts so fundamentally across the system of clear terms of business and transparency envisaged by the Financial Services Act. Yet the fact is that, despite the absence of clear terms of business, the freedom to vary discontinued benefits at will and the opacity of triennial compound reversionary bonus, etc., with-profits policies have given very good value to millions of policyholders over the years and I would find it difficult to contemplate any regulatory body bringing out regulations which would undermine the future of with-profits assurance.

The equivalence lobby is still calling for meaningful disclosure of charges or expenses in relation to with-profit policies and is expecting the SIB to find some simple way of expressing the percentage of the premium going to the investment benefit for these policies. There will probably never be a simple way of giving information of this nature, and it will be quite some time before even such exercises as inter-office expense comparisons will provide information for the professional adviser to evaluate. Potential investors and their advisors, the press, etc., will have to be given what information it is practical to provide to enable them, as far as it is possible, to make comparisons between various with-profit policies and between with-profits policies and other forms of investment, assured or otherwise. This will include information on such matters as expenses, financial strength, investment strategy and bonus policy. The Appointed Actuary is uniquely positioned to assist in all these areas. In fact it is difficult to know how the information will come without his involvement. The SIB has to encourage the actuarial profession to give leadership in finding increasingly objective solutions to the problem of comparisons and to seek to resolve the conflicts of interest by using its rules of professional ethics. This is not a question of asking the Actuary or the Institute of Actuaries to act as regulators or as a regulatory body, it simply means that they have an inescapable rôle to play.

Mr J. Goford: There are three financial rôles in a life office—those of Appointed Actuary, the product development actuary and the financial controller. The Appointed Actuary has to advise on current solvency and its progress; to perform checks on the accuracy of policy data; to advise on capital requirements, particularly under varying production expense and demographic conditions; to advise on transfers from the long-term fund; to advise on the company's profit criterion and the appropriateness of new product premiums; to liaise with the product development actuary on the reserve basis for currently sold and prospective products; to complete the DTI returns; to advise on matching of assets and liabilities and to advise on bonus distribution. The responsibilities of the product development actuary and the financial controller are not within the purview of the Appointed Actuary. The product development actuary's duties are to ensure that the company's profit criterion is well defined and agreed; to ensure that the assumptions used are appropriate to the market and the economic conditions likely to be experienced; to perform accurate and timely profit tests of new and existing products as market and economic conditions change; to report and advise on profit tests; to liaise and interact with the marketing function to achieve the optimal product design and with the Appointed Actuary on the reserve basis to be used in profit testing. The financial controller's responsibilities are to supervise the accuracy and credibility of the projection model; to report on the earnings projections of the company, on variances and reasons for variances from those projections; to advise on opportunities from beneficial variances and corrective action from adverse variances; to supervise and report on the monitoring of key financial controls, production, expenses and lapses and investment income; to supervise management and shareholder reporting; to supervise matching and to advise on the suitability of shareholders' assets.

The proper rôle of the board, as delegated to management, is to make commercial decisions and should not be usurped by the Appointed Actuary. Defining the limits of the Appointed Actuary actually strengthens rather than weakens the rôle. In particular I would disagree with the implication of § 3.2.6 that the Appointed Actuary should 'approve' premium rates. That approval must fall within the domain of the board. The Appointed Actuary can use his normal process of advice in establishing the actuarial reserves in order to express his reservations about a product. He does not need to 'approve' premium rates or products. To do so could put the Appointed Actuary in the position of appearing to be obstructive and delivering absolute judgements of approval or non-approval. He can express his views more precisely by indicating the reserving and capital consequences of inappropriate rates. This approach is also consistent with his more general rôle of monitoring the effects of too high and too low production volumes on reserves and capital requirements.

If a consultant is Appointed Actuary he needs a contact within the company to keep in day-to-day touch with developments and, in particular, to keep track of the creditability of data. He will also need regular projections of medium-term financial results. I am inclined to think that the Appointed Actuary is better in-house. The advantages of a consultant outlined in Section 5 may be obtained either by a regular monthly meeting or by an audit commissioned by the Appointed Actuary of his reserving and bonus approach. This can be a constructive, non-threatening exercise of great value to an Appointed Actuary.

The best test of effectiveness is to ask what is expected in advance and test the outcome at the end of the period against the expectation for that period. The DTI have three-year projections for new companies. Most companies will, by now, be doing some sort of projection for the medium term. The value of the comparison between the actual revenue account and that expected for the period is not so much in the amounts of the differences as in the explanations for them. An extrapolation of the explanations as opposed to the amounts can give some early insight into developing problems such as those likely to lead to insolvency. At the end of § 1.9 the author says that the results of relying on professional responsibility in terms of stability and the protection of policyholders' interests have been reasonably good. I would say that the results have been more than reasonably good, they have been excellent—for unit-linked products and for the guaranteed benefits under conventional products. We can genuinely say to those seeking best advice on the security of guaranteed benefits—leave it up to us. Where we can do better is in the realm of policyholders' reasonable expectations which is more governed by commercial decisions.

Mr J. L. Maroney (in a written contribution which was read to the meeting): I have read this paper with great interest as amending legislation is currently before the Australian Federal Parliament introducing the statutory position of the Appointed Actuary to the Life Insurance Act. Overall, I believe that the industry in Australia has much to gain by understanding the manner in which the Appointed Actuary in the United Kingdom has contributed to the success of the industry.

However, I was concerned to read the footnote to Appendix 6 which stated that since this paper was written the Australian Government Actuary's Department has ceased to exist. As the current Australian Government Actuary I feel impelled to reject that statement and clarify the situation. The office of the Australian Government Actuary was created in 1977 when the rôles of Commonwealth Actuary and Life Insurance Commissioner were separated for the first time. The Australian Government Actuary has never been a statutory position. It has been part of the Treasurer's portfolio and responsible to the Secretary to the Treasury. With the creation of the Insurance and Superannuation Commissioner on 23 November 1987, responsibility for the office of the Australian Government Actuary was transferred from the Secretary to the Commissioner. The Commissioner's first annual report to Parliament states that "the office of the Australian Government Actuary is established as a separate office within the Commission". A copy of that report will be deposited in the Institute's library. Thus it should be understood that the office of the Australian Government Actuary continues to exist in a not dissimilar form to that in which it has always existed. There has never been an Australian Government Actuary's Department in Australia, hence it has not ceased to exist.

Mr B. Richardson (a visitor): The author has presented a review of the responsibilities of the Appointed Actuary with particular emphasis on the relation between the supervision of life insurance companies and their actuaries. The review is timely because a number of current issues referred to in § 11 of the paper illustrate the conflicts the Appointed Actuary needs to resolve in formulating financial reports for his board and, more particularly, bonus recommendations for with-profit business. As a non-actuary chief executive I have no difficulty whatever in identifying with the need to avoid both 'crippling insolvency' and the 'potentially crippling situation'. At the same time the increasingly competitive market place and the concept of 'best advice' can, and do, have a significant impact on the ability to generate a satisfactory level of new business at reasonable cost. This is an important requirement in the context of meeting policyholders' reasonable expectations, but must be achieved in a with-profits office without over-distribution. Against the background of possible lower future investment returns I would suggest that the robustness of the working relationship between the Appointed Actuary and the marketing executive is of major significance. It is therefore imperative for the Appointed Actuary to be fully informed about all aspects of the company's activities, but no amount of investigation and calculation will produce definitive and precise answers to the questions of contract pricing and rates of bonus. There is a pressing need for the implications of current and possible future developments to be frequently discussed at board and management levels. It is only in this way that potential problems, whether perceived to affect life offices in general or the Appointed Actuary's own office in particular, can be dealt with early. The stimulation of such discussion and the reasoned presentation of current recommendations in the context of longer-term financial strategy are key responsibilities of the Appointed Actuary.

I have no disagreement with the paper and would stress that the Appointed Actuary should be seen as the director of finance in a life office and as such should be a party, from their inception, to all important plans and decisions, to evaluating the likely financial impact of certain courses of action in both the short- and long-term. It is very important that the uniqueness of the Appointed Actuary system is clearly understood by non-actuary directors: that a person holding such an appointment is, to an extent, apart from the rest of the directors and management, and that, in certain circumstances of perceived difficulty, such a person is encouraged by the actuarial profession and the supervisory authority to consult with other actuaries of appropriate experience and/or the GAD. It would be appropriate for guidelines on the rôle of the Appointed Actuary and the system of supervision to be issued to non-actuary directors of life offices or of holding companies with a life company subsidiary. This may seem unnecessary in the case of an established office, but I would suggest totally appropriate for new, small life offices or where there is a group management of a different culture. It must be helpful to the Appointed Actuary in his rôle if there is a strong presence of financially articulate non-executive directors on the life company board.

Mr A. G. O'Leary: In § 11.7.1 the author points out that the other member countries of the Common Market are more regulated, that the position of Appointed Actuary as we know it is unknown and he states that "It would be difficult to preserve the Appointed Actuary's rôle if there were to be any approximation of systems to some common medium. It would then be difficult to preserve the commercial freedom of our system, which we regard as so valuable." This warning should be taken very seriously. The first Life Services Directive is due to be published very shortly and although all the indications are that progress will be very slow, this marks the first stage on the road to a harmonized approach to life assurance in Europe. However slowly it may come there will be a day when all European countries work to a single system which is recognized by all the others. This harmonized system may be like ours or it may be like the continental one, but since ours is basically a judgemental system and theirs a regulated one it is very hard to see how one can find any compromise position between them. It is likely that before this day comes many companies will have extended their operation to a European level and many U.K. life companies, at present operating as separate companies, will be just members of a group. To quote § 11.3 of the paper "group management hailing from outside the U.K. life assurance industry will not be imbued with the ethos of the Appointed Actuary system as it affects management". If we desire to see current professional involvement continue and our key rôle maintained, then we must work to bring that result about. If we do nothing then the difficulty of other countries changing their professional standards and their methods to allow a less regulated system will lead to the common harmonized result being closer to the continental pattern than ours. Other countries would have a difficult enough task even if they were strongly motivated to follow us. At the moment the opposite is true and they would prefer to continue along the lines they understand and are accustomed to.

It has already been decided to devote a part of the 1989 Harrogate Convention to a consideration of '1992'. I hope that actuaries will give their full support to this initiative which could prove vital for the preservation of the profession as we know it. The first stage in this campaign must be to convince our European colleagues of the advantages of our system. The first test of our success is likely to be when the Community introduces its directive covering mutual recognition of qualifications. That will provide a forum for us to express our views and persuade other European countries' actuaries to give us some support. This is a vital matter in which all actuaries should take an interest. Inertia may lead to a loss of the standards and position we value. It will be difficult to find the right opportunities for action and I hope, therefore, that Harrogate will receive the effort and support it deserves.

Mr A. Spedding: In § 1.8 the author recognizes the important rôle of the Appointed Actuary and refers to the need for support of it by the three other parties involved: the supervisory authorities, the profession (that is the Institute and Faculty), and the management of the company. It should first be recognized that judgements have to be made by the Appointed Actuary on three main aspects: the ability of the fund to meet the minimum valuation and solvency margin requirements, both of which are based on the net premium method of valuation, a method not noted for its realism; the ability of the fund to meet liabilities as and when they arise; and the equitable treatment of different generations and types of policyholders. These latter two aspects are, of course, investigated using very much more realistic methods than the net premium valuation. It is possible for some conflict to arise between these three objectives. By steering an ultra conservative course on the first there can be near certainty of achieving this objective, but, equally, near certainty of failing, for example, to achieve an equitable distribution of surplus.

These judgements by the Appointed Actuary have usually to be made at a time when complete financial information may not be available, and there is much reliance on advice on the potential performance of the investments. If the company subsequently finds itself in difficulty, the supervisory authorities must then start making judgements on the judgements of the Appointed Actuary. These judgements on judgements are often made many months after the Appointed Actuary's judgements are made, almost always with the benefit of fuller and more up-to-date information, certainly with the benefit of hindsight and, possibly, on the basis of different information on the performance and potential of the investments. Thus we have a subjective judgement made at a different time in different circumstances on a subjective judgement made earlier by the Appointed Actuary. If the supervisory authorities are critical of the judgements made previously by the Appointed Actuary, it is to be hoped that the matter would be taken up with the Appointed Actuary and the Institute for a full investigation rather than seek to have the company take action against the Appointed Actuary. Were this latter course of action to be followed it would be tantamount to the supervisory authorities not only acting as judge, jury and executioner, but even denying the Actuary a trial.

In §§4.2.6–4.2.8 the author expresses more concern when the rôles of Chief Executive and Appointed Actuary are combined in a small proprietary office than when combined in a mutual office. Although no mutual office which has its Chief Executive as its Appointed Actuary has got into difficulties it is a less than satisfactory situation. This concentration of power in the hands of one person is akin to the situation where the Chief Executive is also chairman of the board. The relationship between the Appointed Actuary and the investment management is referred to in § 3.3.4. It would be preferable to have regular, frequent and documented meetings between these two. This is perhaps an area where GN1 could be expanded.

Mr G. J. Allan: The paper serves well to illustrate the strengths of the system which we currently have, encompassing the freedom and flexibility that we require from a commercial viewpoint with the desire to supervise and to protect policyholders' interests adequately. As we look around us and see the systems in other countries we see potential changes in the future as we become a closer part of the E.E.C. It is important to ensure that we build upon the strengths of the systems we have and that we look to the future to ensure that others will recognize the merits of our system. It is fair to say that there is a great deal of work performed by an Actuary in terms of the general financial management of an office, be this when looking at the past in terms of analysis of surplus or comparison of actual and expected claims, or when looking at the future in terms of bonus earning power, new business strain and profitability of new business or full scale model office projections. These areas are very important in determining the overall profitability of the company and the direction in which it is going. A system whereby there is some form of informal meeting between Appointed Actuaries, company managements, GAD and DTI would provide a setting to develop this further, although it may be that we would have to accept greater disclosure to convince everyone as to the strength and suitability of our system.

Professor S. Benjamin: The author states that at present the various retail financial service industries are supervised separately either by different divisions within the DTI or by other bodies and then he refers a little later to the famous phrase 'a level playing field'. Instead of talking generally about this, let me give one specific example. There are new financial instruments around. Quite recently I was approached by a financial institution suggesting that they could offer options on long-term investments which would be beneficial to insurance companies. I wondered whether the Appointed Actuary would be able to accept these instruments, given that the method of supervision for this other institution did not require actuarial reserves for the options. What does the Actuary do? He has a statement from the Institute about maturity guarantees, but these options are being offered by someone who does not have to declare the way in which he might set up any provisions or reserves. Where are these level playing fields?

On the subject of 1992, if we really think that the commercial freedom which we have gives better value to the community than under the regimes operating in other countries, then I am surprised that the Consumers Associations have not become involved. Perhaps we should try to get them interested in the subject.

We must be careful in preparing guidance notes that we are not setting standards for overseas offices that involve work that the client company, especially in a third world country, does not want and does not understand, but worse is inappropriate to the economy and business conditions of that country.

Mr W. M. Abbott: One reason that the Chief Actuarial Officer need not be the Appointed Actuary is that the latter function is specific to long-term insurance. The rôle of an actuary in a group could, and should, be much wider than that. The specific nature of the Appointed Actuary's rôle could limit the scope for actuarial influence on other business, with the most likely extension of influence in a group relating to general insurance business. If we accept the hypothesis that the U.K. system of life assurance supervision, which is based heavily on actuarial judgement rather than statutory valuation bases, has served the industry well, then we ought to be encouraging the application of that concept to the supervision of other financial risk businesses. I would not limit this extension just to general insurance, nor to actuaries, but to 'experts', suitably defined. Although life insurance certainly has some unique characteristics it has others in common with other financial institutions, for instance on the management of an investment mismatch risk. If a supervisory system has been set up and found successful in one area, why could it not be worked up into a success elsewhere? Although it is still in its early days, the newly formed Financial Management Section of the Institute and Faculty, to be known as FIMAG, and its international equivalent, AFIR, will be exploring such issues and are in the process of establishing non-actuarial contacts.

Mr J. H. Webb (closing the discussion): The paper is essentially about the prudential supervision of life assurance companies. In my view the system which has operated since the mid 1970s has been an outstanding success. GAD has played a major part in this success. The essence of an effective supervisory system is that problems should be picked up early and that when problems do arise action should be taken soon enough to avoid irreparable damage to policyholders' expectations. The author comments that the Financial Services Act has changed the public view of what a regulatory system should look like and that current arrangements could now appear insufficient. I take the view that the Financial Services Act has given the public a graphic demonstration of the dangers of over regulation, and that it should strengthen our determination to retain and improve the present system of life assurance supervision. The work of supervision is being done very cheaply indeed in contrast to the size of the supervisory departments in other E.C. countries or indeed with those in the U.S.A. and Canada.

Section 2.12 gives some interesting figures both about the work of the GAD and the numbers of Appointed Actuaries. I find it surprising, in view of the special duties of the Appointed Actuary and the stress put on his special status and standing in the supervisory rôle, that the authorities do not publish a regularly updated list of those concerned. It would also have been interesting to learn more about the numbers of Appointed Actuaries who are members of management and those who are consulting actuaries. The discussion about the Actuary's rôle in practice emphasizes the wide difference between companies and the inter-relationship between an Appointed Actuary's duties as such and the task given to him as a manager. It does not matter so much how the company is structured as whether the Appointed Actuary has timely information about all aspects of the company's financial management. It is not necessary to insist on formal committee membership. Everything depends on the ethos of the company. If the information flows freely then the structure should not create any problem. On the other hand if the Appointed Actuary is treated with suspicion and is only told what others feel he needs to know, any structural changes can only partially help to put matters right. The opener's plea for teamwork was excellent and wholly desirable but, as the paper emphasizes, one man does have to take personal professional responsibility at the end of the day. The author makes a strong plea for the Actuary to hold a senior position, the advantages being better information flow and the ability to intervene if unsatisfactory decisions are being taken. The relationship with the decision-taking board is also important support for this position. The arguments for a lower level post, more detailed knowledge and the ability to specialize, seem to be completely outweighed.

Mr Brimblecombe and Mr Corby were concerned about extending the Institute's guidance as a self regulatory body if this led to a downgrading of the responsibility of the board. These speakers come from companies which have the highest standards whilst regulation has to concentrate on unsatisfactory situations. I strongly endorse Mr Richardson's view that more guidance should be given to boards about their relationship with the Appointed Actuary. A strong theme runs through the paper for support for the Appointed Actuary, both from the supervisor and his professional body. We cannot effectively protect the position of an incumbent Appointed Actuary who has fallen out with his employer. The best that can be done is to ensure that his successor is fully informed of the circumstances. Our 'change of advisor' rules and the professional code are valuable here in ensuring that there are no improper reasons for making the change. It would be helpful to formalize the situation so that the GAD automatically becomes involved with a proposed change at an early stage.

The comment was made that the E.C. Directive about mutual recognition of qualifications is certain to add to the pressures for qualification standards and exacerbate the already unsatisfactory position relating to overseas branches and overseas companies. Mr O'Leary pointed out that none of us can be happy about mutual recognition without progress towards common qualification standards. In the meantime there does seem to be a considerable advantage in moving to some form of relevant U.K. experience requirement in place of the arbitrary age limitation for Appointed Actuaries.

In the Section concerning professional discipline the author is concerned that the present arrangements are not adequate. The first problem is whether they are best tackled by the profession or by the supervisory authorities. The difficulty for professional discipline is that unprofessional conduct as legally defined does not cover a negligent Appointed Actuary or one whose judgement has been found to be defective to the extent that he should not be allowed to continue in a responsible appointment. Can the Guidance Notes be made more effective? I can see great difficulties in devising a system that would permit us to forbid a member from continuing in employment as an Appointed Actuary. The supervisory authorities would have a similar problem if they were to attempt to extend their 'fit and proper powers' to Appointed Actuaries. This is effective in cases of dishonesty and concealment, but then so is our own disciplinary code. Neither of them seems to be effective in the areas of competence and negligence. A possible solution is to look at yet another set of rules analogous to those we have promulgated for member firms authorized by the Institute as a recognized professional body.

Finally, a comment about 1992, we need to take the initiative to ensure that the virtues of our system are better understood by the authorities in other E.C. countries. These include effectiveness, cheapness and minimal interference with commercial activity. We shall not achieve anything by accepting an average of the present arrangements; we must seek to persuade our partners that this is one area at least in which we have got it right. I hope that in due course we shall see the emergence of a powerful European Community Actuaries Department.

The President (Mr R. D. Corley): Our opener identified this evening's paper as the only one of its kind ever to be presented to an Ordinary General Meeting of the Institute. It is important to our profession for at least five distinct reasons. The first is its value to the newly Appointed Actuary as well as to every life office actuary who aspires to be the Appointed Actuary of his company. Reading the paper and taking note of the discussion on it, such an actuary can more quickly comprehend both the importance and the responsibility of the rôle of the Appointed Actuary. For a second reason we need only look at the care with which the author has identified the potential weaknesses in the present supervisory package. It may be that risk-free supervision would be expensive for the consumer, restrictive on the company, and perhaps impossible to achieve, but it is still essential that we examine the gaps and determine whether and how they should be closed. There is a need to develop supervision in the expectation that the environment that has been unfolding since the passing of the Financial Services Act will be putting greater pressures on life office management. Such pressures do not change the duties of the Appointed Actuary, but they can cause him to feel more isolated in performing these duties, and it is therefore essential that he is supported by proper recognition of his rôle both from within the profession and more generally.

We have an unusual system in this country in that we go beyond mere 'reliance on a professional to perform a specified function'. It has been said that a professional who is subject to guidance will seek to use his judgement to stay within the spirit of the guidelines, whilst a professional who is subject to regulation will, in the end, use his expertise to find gaps in the rules. The latter course brings down even more regulation and diminishes a profession. Over the last fifteen or so years changing circumstances have produced a need for supervision to be more intrusive. And yet, because we have had a team within the supervisory authority which understands the true nature of professionalism, we have enjoyed supervision which has established a balance between regulation operated by the supervisor and guidance promulgated by the Institute and the Faculty. The author, through his paper, has set down the value of maintaining this balance.

The final reason is the approach of 1992, which will give impetus to a move to co-ordinate the supervision of life assurance throughout the European Community. We should start doing more to identify the advantages and disadvantages of the supervisory systems which currently exist within the Community with the intention of influencing future decisions on Community-wide supervision. Without such influence the result could be rigid regulation which might diminish both the profession and the industry it serves.

I would ask you to join me in showing, in our normal manner, our appreciation of Mr Johnston's efforts.

Mr E. A. Johnston (replying): The discussion has confirmed my view that we should now focus on the relationship between the Appointed Actuary on the one hand and the board and management on the other. I do not wish to obscure the board's responsibility for management of its company. Ideally, the system merely adds an extra dimension to things which the Appointed Actuary would do anyway. Well-managed offices probably approach this ideal situation, but the problem has always been to bring the stragglers up to the standard of the many.

The discussion also suggests that we need a greater dialogue between the profession and management (including both actuaries and non-actuaries in the latter). We also need a further document, not a formal Guidance Note, but rather a Handbook for the Appointed Actuary or perhaps for management; something which would fulfil Mr Richardson's need for the non-actuary director or manager. The information about management on which my paper is based comes from *ad hoc* contacts with companies. But there is a huge range of variation between companies, and we need much more comprehensive information to sustain the dialogue or write the Handbook. A systematic survey conducted by the Institute and the Faculty would be helpful. Without such an exercise the breadth of experience which can be gathered together in any one committee is unlikely to cover the ground sufficiently.

WRITTEN CONTRIBUTIONS

Mr G. E. Barrow: For a period of ten years, 1974–84, I was a member of the Joint Committee of the Institute and the Faculty which was set up to consider the regulations for the valuation of long-term insurance liabilities and subsequently to draft the guidance notes for Appointed Actuaries. I regard this paper as an interim report on the working of the U.K. system and it gives a broadly favourable verdict. Essentially the system is judgemental and qualitative as opposed to regulatory and quantitative, and as this feature distinguishes the U.K. practice from those of our E.C. partners it may be helpful to see how this position was reached. Had the objective of Parliament been limited merely to requiring life offices to demonstrate solvency, that could have been achieved by regulation. But such a limited objective would have been both derisory and insufficient for those traditional U.K. offices (whether proprietary or mutual), having a substantial volume of with-profit business in force. Indeed the Secretary of State has been given power to intervene if he judges that in the case of long-term business a company may be unable to fulfil the reasonable expectations of the policyholders or potential policyholders. The scope of this clause—which was first enacted in the Insurance Companies (Amendment) Act of 1972 and re-enacted in the Insurance Companies' Act 1982—is uncertain, but on any reasonable interpretation it would give the Secretary of State the power to intervene if the policyholder's estate was being misused. Ultimately it is this clause which is the somewhat tenuous legal authority for the regulations being made so as to require companies to demonstrate that they are being managed properly and responsibly and not merely solvent in the sense of being able to meet their contractual liabilities to policyholders. Even a bare solvency demonstration can be a formidable test for a lightly capitalized company if the company is required to demonstrate its ability to meet its contractual liabilities in a wide range of financial situations. Such a company has little freedom to mismatch investments or to grant potentially onerous settlement options.

As is clear in the paper, the present U.K. system relies on the Appointed Actuary fulfilling his rôle and on his special responsibilities being recognized, both by his managemental colleagues and by the directors of the company. In most of the 'traditional offices' which are imbued with the proven management practices of the industry, including the actuarial constraints, this recognition is forthcoming, but I support Mr Richardson's suggestion that it would be helpful for the special position to be spelt out. The members of the Joint Committee recognized that problems might arise in offices which were unwilling to recognize the special responsibilities of the Appointed Actuary, but we thought that any such difficulty would be relatively minor and likely to be confined to newly established offices. What we did not foresee were the radical structural changes which have already affected life assurance in the U.K., changes which entail traditional offices becoming part of groupings which, if based in the U.K., are not predominantly insurance groups, or, if insurance groups, are ultimately controlled from overseas, e.g. North America, one of the E.C. countries or Australia. In either case the directors having ultimate responsibility for the capital resources of the group are unlikely to be imbued with the ethos of life insurance management as practiced in the U.K.

One possibility is that our partners in the E.C. may be persuaded to adopt a system which is qualitative and judgemental rather than purely quantitative and regulatory. Several speakers favoured this course and many continental actuaries in private discussion recognize the merits of our system. However I feel that the possibility of securing such a change is small and it is highly probable that we shall be left as the odd man out. If this happens we should recognize the possibility that the regulatory authorities in the U.K. may be faced with a direct confrontation from a group which does not accept the U.K. system. We should not underrate this possibility. It could be very frustrating for such a group, having paid a massive sum to acquire a U.K. long-term insurer, to find that their plans for subsequent expansion were frustrated by the need to sterilize the policyholders' equity, i.e. to discover that the funds accumulated out of bonus loadings had to be applied for the benefit of the participating policyholders rather than for the shareholders. It may be that the Secretary of State would have sufficient power to intervene under the reasonable expectations provisions, but I doubt whether the claim would hold if challenged in the European Court. We should recognize that in the U.K. we rely on what is ultimately a fragile framework which might not survive a determined challenge, even in the English Courts, and that any sanction imposed by the Secretary of State might not be upheld by the European Court.

In a paper which Duncan Ferguson and I wrote, which was presented at the Sydney International Conference in 1984, we discussed the question of policyholders' equity and whether the regulatory authority should have responsibility for supervising this aspect of the company's affairs. We then thought that, by reason of the complexity, the prime responsibility should be a shareholders' committee which would petition the Secretary of State to intervene if they were dissatisfied. In the five years since that paper was written my views have changed and I feel that the policyholders' rights should be explicitly recognized by statute, not merely in the English concept of equity.

Mr C. J. W. Czapiewski: Discussions are currently under way that may necessarily lead to a change in the title of this paper to 'The Appointed Life Actuary', to distinguish him from 'The Appointed Non-Life Actuary'. Few companies currently have one actuary experienced enough in both disciplines. At present there are no statutory obligations in non-life insurance for the involvement of an actuary. However, the DTI have requested views from the Institute and companies about the desirability of actuarial certification and a Working Party is studying the need for some form of actuarial assessment of the financial strength of a non-life insurance company. Problems faced in life assurance differ considerably from those faced in non-life. Until the advent of AIDS, mortality rates were not generally a major cause of concern to the life industry, as a gradual improvement occurred over the years. Conversely the non-life business has a visible underwriting cycle with loss ratios improving and worsening over time. The problem of moral hazard and the change in level of claim payments have to be allowed for, both for financial and social levels of inflation. Similarities also exist. The actuary has an overriding duty to his profession. He must consider both assets and liabilities, and their interaction, and his basis of valuation on both must be reasonable and justifiable. The principle of equity between policyholders by year of entry may be likened to that of the names in Lloyd's syndicates in a reinsurance to close, with the idea of an estate or fund to be serviced and used. Indeed many sections of this paper would require little amendment to be applicable to non-life rôle.

Mr W. Law: I would like some explanation of the figures quoted in §§2.2 and 2.12; 281 companies pay £6,000 annual fees each which, even allowing for some small companies with lower fees, comes to over double the value of GAD's work as quoted. Should companies have to pay to be regulated on a flat fee (or poll tax) basis; or would it be better for fees to be scaled by size (perhaps in much the same way as ABI fees), or would it be best for GAD to be financed out of general taxation? What happened to the 212 companies which the GAD did not meet in 1987? Were these all category 4 priority, which, I presume, had strong valuation bases with large solvency margins? What is the GAD definition of categories 2 and 3? How many fell into each of the four categories? Excluding proposed new authorizations, were the 60 other meetings in 1987 all high priority categories? What proportion of meetings were instigated by GAD as opposed to the informal contact by Appointed Actuaries encouraged in §2.11. With only 168 appointees I would hope that GAD has met each at least once, perhaps as a matter of policy when first appointed.

I support the author's suggestion in §3.1.3 that the profession needs to spend more time on the questions of life office organization and the financial consequences for management. I would like to have seen some reference in Section 11 to AIDS reserves for PHI business, and the possible financial implications of changes in life office taxation bases. Product development should be a straight forward process. The Appointed Actuary should (after any necessary consultation) be able to lay down the mortality tables, interest rate assumptions and unit costs to the marketing actuary to process premium rate tables. How many allow for development costs; advertising, computerization and new administrative systems in their product pricing? Usually the first tables show uncompetitive rates then the horsetrading starts; with over-optimistic sales forecasts, unrealistic economies of scale, no allowance for product switching, and insufficient notice of future expense levels in administering complex policies, dreamed up by the marketing executives wanting unique sales features at no extra cost! Calculating reserves should also be a mechanistic process, but how can the Appointed Actuary be satisfied as to the accuracy of the base data on which his reserve figures are set? Does he rely on sales statistics, manual record keeping or even faulty computer output? Can he rely on the auditors picking up errors in the accounts? Obviously he will carry out his own independent checks on work carried out by others on his behalf. But being prudent rather than accurate, by setting up extra reserves, can then have consequent financial implications in other directions. Section 8.5 refers to the dynamics of a life office and the need for timely management information. Such information must also be accurate and complete, but is this always the case? Good management should equate with good management information. My only advice to the Appointed Actuary in such a situation is, to paraphrase Kipling: "You must keep your head when all about are losing theirs and blaming it on you."

Mr T. J. Palmer: The system of life assurance company supervision which we have developed over the years in the U.K., with its heavy dependence on actuarial judgement rather than statutory valuation bases, has served managements, governments, and, above all, customers very well. The Guidance Notes have stood the test of time and, subject to periodic review and modification, should be the cornerstone of the Appointed Actuary concept. In today's business environment of deregulation, globalization and intense competitive pressure there may be a greater risk of life companies being managed in an imprudent or excessively short-term fashion. The ultimate responsibility for the direction and performance of a life company lies with its board, so I would favour the response taking the form of an increase in the Actuary's leverage on boards of directors to take the Guidance Notes, in something like their present form, seriously. I do not believe that the cause of more effective and practical supervision would be advanced by, in effect, creating more detailed and specific accountabilities for the Appointed Actuary. Of course the Appointed Actuary has an *in extremis* duty to report concerns about his company to the DTI. This is intended to be, and should be seen as, a last resort rather than a fundamental principle of day-to-day operation. The analogy which the author draws with SROs in his introduction is not altogether happy. Although I accept that the perspective of a sick company would be different, that of a healthy company must be that an actuary in the senior management team who is also an Appointed Actuary is no more and no less concerned than his Chief Executive and fellow team members to achieve the optimum balance between conflicting pressures of prudential financial management and a dynamic marketing strategy. In such a context the 'big stick' of statutory responsibility and the requirements of the Guidance Notes are simply part of the framework of good practice within which the team as a whole operates.

I would argue strongly that any Chief Executive would be deluding himself if he were tempted to think that, because the Appointed Actuary has the statutory responsibility and he has not, the resolution of policy dilemmas of the organization could be delegated. Responsibilities which are that important cannot be left to float around at some intermediate organizational level. The perspective from which I write is that of a long-established, financially strong, and ethical organization and the author is very properly, at least in part, concerned with the problems of companies that get into difficulties. That does not change the principles, but 'best practice' ought to reflect the situation of essentially healthy organizations.

Concerning the relationship between life companies which are part of a group of companies and the holding company organization, which is examined in § 4.3, the paper accepts rather too readily the assumption that subsidiary company boards in such structures will be run as legal formalities. It is true that the day-to-day decision-making for such subsidiaries will be handled within the executive structure and that board membership at this level will rarely include outside directors. However, there are two important safeguards which should not be overlooked. The responsibilities of the board, whether there are any outside directors or not, whether the companies are wholly-owned or not, are very real. Appointed Actuaries are in a strong position to insist that valuation reports and bonus declarations are treated seriously and not as formalities. Holding company boards are increasingly sensitive to their responsibilities, commonly include independent directors, and make increasing use of audit committees to facilitate an independent review of key financial control and decision-making areas. If the Appointed Actuary's rôle and relationship with his own board is taken seriously the super-ordinate responsibility of the holding company board for actuarial matters will similarly be taken seriously. Nevertheless, I accept that the Appointed Actuary needs, at the very least, to know that his advice relating to the control of the life business or the determination or distribution of its surplus will go through to the senior relevant decision-making level in his group above that of his own board. The paper refers in § 4.3.8 to the increasingly common practice in large groups of companies of having a 'chief actuarial officer' who is the senior professional actuary in the group, but is not necessarily himself an Appointed Actuary. Where such a position exists it is clearly important that it does not cut across the responsibilities of Appointed Actuaries, but there is a wide range of actuarial issues which go across a large group, embracing, in the case of a composite group, general insurance (both direct and reinsurance), and a need for a group actuarial input to corporate and financial planning and strategy.

It goes without saying that Appointed Actuaries need to have access to data, information systems and planning processes in order to fulfil their statutory rôle, in particular that need referred to in § 1.6 to be continuously informed of the state of the company to which they are appointed. The paper appears to me to be arguing that because he is 'appointed' the Actuary should also be involved in investment decision-making, product-pricing, etc. The Guidance Notes, of course, strictly require the Appointed Actuary to satisfy himself as to the appropriateness of the company's situation in such matters. He should be involved in these and similar areas of management decision-making because he is a senior member of his company's executive team whose training, experience and knowledge enable him to make an indispensable input to them.

Mr K. M. R. Price: The paper sets out the present concept of the rôle of the Appointed Actuary within the supervisory structure, but what it lacks is a concise statement of the position suitable both for actuaries and for their non-actuarial colleagues and directors. It is worth observing that we are talking about a message from the Actuary to the management and the board of the company concerned. We have given a lot of thought and guidance to the Appointed Actuary who is the transmitter, but none at all to the receiver. We are approaching a position where there should be a legal requirement that the Chief Executive of any company which transacts life assurance business should be an actuary or someone who can demonstrate an ability to receive actuarial messages. However receptive the Chief Executive might be the message must also go to others and the statement will have to be in such a form that it is both intelligible and meaningful to the layman. Whether or not the Institute publishes a statement, this paper (and the final version of EXD 5 when it arrives) provides all Appointed Actuaries with an opportunity and an obligation to issue their own versions of such a statement to their own boards.

The statement should include the following: The present supervisory legislation is deficient. We do not know how to remove all the deficiencies and, if we did, we should probably not find the necessary political will or the parliamentary time to achieve the required alterations. The profession already uses its monopoly powers to try to remedy some of the deficiencies. The Appointed Actuary is required to be satisfied as to the financial position of his funds on an on-going basis and the company is required to provide him with the necessary information and direct access to the board. That is a workable system because it is on-going and the Actuary can take action if problems arise. It does, however, raise questions as to the necessary status of the Appointed Actuary within his company and to his ability to interpret situations appropriately and to act accordingly at times of difficulty. The actuary's position should be established in good times in such a way that he can do his job adequately in bad times. The profession is moving towards further remedies under its monopoly powers. That raises the twin questions of how valid such a course is and how far we should seek to go. It is precisely that company where undertakings are necessary that will be least amenable to making them. On the other hand, is it worthwhile asking the company merely to consider a report? Should we seek to impose a tighter regime? But there is a problem beyond that. The suggested requirement in EXD 5 that the board should undertake not to declare or announce a bonus without the benefit of an actuarial report is not on-going in the sense that the existing requirements are. What sanction is available if the board simply breaks its understanding? These are important matters for the GAD, the profession, Appointed Actuaries and the companies themselves. A written statement would be very helpful.

Mr D. E. Purchase: The position of the Appointed Actuary of a subsidiary of a life office is referred to in § 4.3.10. I have been in this position for a number of years now, and it presents its own particular problems, especially when the office is proprietary. The relatively less senior position in relation to the top management level has made it difficult to follow GN1 in every respect. In particular, access to the main board, which is the one that really matters, is inevitably somewhat formal. In practice I have never encountered any real problems, for I have been well supported by the Chief Actuary to the main office and his senior colleagues. My reason for mentioning this is that when an appointment of this type is made, it is not practicable to meet all the criteria seen as desirable by the author, or to abide by GN1 in every detail. Nevertheless I think it would be regrettable if such appointments were discouraged, because they must help to improve the experience of middle-ranking actuaries without significantly weakening the regulatory protection.

Concerning the experience requirement, referred to in §§9.3–9.5, I do not think the author uses the phrase 'practising certificate', but that seems to be what he is seeking. For other reasons the Education Working Party of the Futures Committee considered this concept very carefully two years ago, primarily to see if it would help with our aim of reducing still further the content of the compulsory part of the examinations. Reference was included to practising certificates in a questionnaire sent to a number of members; there was a wide range of views from enthusiastic endorsement to outright rejection. Our respondents were evenly balanced numerically between those supporting the concept and those opposing it—although it was a biased sample! Partly because of this split we did not pursue the idea in our later considerations. Although I do not think that the development of practising certificates is to be encouraged in the short term, I believe that we will see their introduction, not only for Appointed Actuaries but for other actuarial functions too, in the next decade or so. I hope we can plan for this in a controlled manner.

Mr W. Rugland F.S.A.: The paper includes a good summary of the situation in the U.S.A. However, some recent developments have included:

(a) There has been much discussion as to the meaning of 'reasonable' and 'plausible'. There is no ready answer. Current thinking is that established reserves should cover reasonable deviations. Surplus levels should be such as to cover plausible deviations.
(b) The industry's management has let it be known it does not wish to see regulators or valuation actuaries telling it what to do with its surplus. So, developments with respect to valuation are concerned only with established reserves.
(c) Established reserves on recently issued business are seldom more than the minimum statutory level—unless there is pressure from a regulator to provide a higher level. The minimum formula level for a block of business is established at its date of issue.
(d) Recognizing that the opinion of the valuation actuary is needed more now than earlier, the NAIC has appointed a Special Advisory Committee on the Valuation Law to address ways in which the actuary's rôle is more vital to the valuation process. A preliminary report from the Committee has been released and was discussed at the Society's Annual Meeting in October.
(e) In the U.S.A. three parties have an interest in this issue: regulators, management and actuaries. Valuation has a statutory base; the results are used to determine solvency; that is of concern to management and regulators. Established reserves should assure reasonable expectations of delivery of promised benefits; that is of concern to actuaries and regulators. Established reserves affect surplus; federal income tax rules use minimum statutory reserves for defining taxable income (excess amounts are not deducted from income); these concern management. A change in valuation approach will only occur when the impetus is strong enough from these three parties (or two of them) to force a change. The change must be carried through the legislative process in each of the States.

Mr I. L. Salmon: I would like to make some observations about the Australian situation mentioned by the author in Appendix 6.

The Australian Life Insurance Act of 1945 resulted from the need for legislation protection and control following the collapse of two insurance offices. The South African legislation of the time was taken as the principal model. Since then successive life insurance regulators, all of them actuaries, have fought to keep the legislation up-to-date and appropriate to the rapidly changing conditions. The actuarial profession has been especially supportive. The Institute, by means of a code of professional conduct and guidance notes, has provided valuable support to regulators whose resources are thin and who experience great difficulty in obtaining legislative changes of an anticipatory or preventative nature. No less, the life offices and their representative body have been especially co-operative and supportive and have helped ease the regulator's burden. Throughout this time the actuary's influence has been growing. Pricing, financial condition reporting to the board and regulator, issues of equity and solvency requirements all fall within the increasing span of the actuary's influence. Recently the regulator has taken action which may well formally extend the actuary's influence by taking action to introduce the rôle of Appointed Actuary into an office. The legislation is on its way through Parliament. Until now regulation has been at the expense of the Government. A new era is also planned in the same legislation which will require life offices to pay a levy intended to meet the cost of the regulation. We may be seeing the start of a Government body with an element of self-regulation—it may not be in the interests of the life offices to make the regulator's job too difficult as they will end up meeting the cost. Aside from legislation and its actuarial control, an equally important influence at work is the marketing practices operating in Australia and their effect upon pricing policy. Marketing and selling practices in Australia, and for that matter New Zealand, have developed in their own way. Initially drawing on the best practices seen in the U.S.A. and the U.K., and able to avoid some of the more obvious pitfalls, the sales methods for the most significant offices have developed along the lines of a tied, or sole, agency force. A small group of large offices, mainly mutuals, effectively control around 80% of the market using these methods. Consequently, the competitive environment is totally different from that applying in the U.K. and the U.S.A. Product pricing and performance do not dominate market attitudes. Rather, good performance is the aim, but the emphasis is heavily on the extent and quality of distribution. Such effective control of the distributors has consequences for the life offices and the actuaries which are very significant.

The actuaries of the major offices can price products without the undue pressure which independent distributors place on marketing and which is found in the U.K. and the U.S.A. Pricing has accordingly been more closely fitted to the long-term strategy for growth and survival of the individual office. The smaller offices also have room to manoeuvre, although, since many are dependent upon multi-office distributors and independents, this pricing has to be more competitive. The large offices have built big capital bases and have been able, more or less, to ignore the issues of solvency and concentrate on equity and increasing capital for growth and survival. The smaller offices have much more need to be concerned about solvency, but the practices of the larger offices leave reasonable scope for manoeuvre.

Life for the actuary, the office and the regulator has been reasonably easy. Recently there have been some moves in the marketing area which may in time alter the current balance as to cause regulatory and actuarial concern.

There have been recent moves to improve substantially compensation terms to attract and retain good agents. Although such improvements have been reflected in pricing, already some of the smaller offices have decided that they cannot or will not compete and their agents have left or are leaving them and recruiting has become very difficult. Some small offices have been sold, others will be or will merge. There is a move to extend distribution through networks in addition to agents. Accountants, for example, represent a very large distribution network. These moves signal a strong thrust to retain and gain distribution in front of the growing competition from non-life office competitors such as the major banks. In the process there is a risk that in order to retain control of distribution, offices will be required to give concessions on compensation terms without full reflection in pricing being possible. Non-life office competitors are distributing products in direct competition with the agents to the same client base. Costs are expected to be lower and products consequently priced more cheaply. If it is necessary to compete aggressively to protect market share, offices may need to do so at the expense of this general strategy.

The Appointed Actuary in all offices, large and small, may be on the threshold of a change in the Australian environment which will challenge his ingenuity if long-term strategies are to be realized, perhaps, even, if his office is to survive. As yet the actuarial profession and the regulators have nothing tangible to be concerned about, but they would be wise to be vigilant. The Appointed Actuary will need to be objective to avoid letting competitive instincts override professional judgement and to ensure that he is both heard and respected for his opinions. The status of Appointed

Actuary may help in this respect, but cannot be a substitute for personal influence and involvement as a full member of the management team. The Australian industry is very healthy and good controls are in place. Recognition of the important rôle the Appointed Actuary can play in guiding an office towards a healthy future will be essential. A suitable balance between aggressive business expansion programmes and actuarial caution will need to be struck.

Mr R. S. Skerman: The paper is a testimony to the contribution which Appointed Actuaries, in co-operation with insurers and the supervisory authorities, have made to the supervision of life insurance companies in the U.K. It does not, however, justify complacency. Some problems remain in the application of the concept in the U.K. and greater problems are likely to arise in persuading other member countries of the E.C. of its suitability in harmonized supervisory arrangements.

Problems can arise between an Appointed Actuary and an insurer. GN1 applies to Appointed Actuaries, not to companies and, if a company is not willing to allow the Appointed Actuary to operate in accordance with GN1 conflict will arise. The supervision of Appointed Actuaries is achieved by a combination of statute and guidance notes and there is much to be said for a similar system for companies. At present an Appointed Actuary in performing his duties under GN1 may be placed in the position of thrusting his advice on an insurer on matters on which the insurer is under no obligation in law to consider. The risk of conflict would be reduced if insurers adopted a code of conduct of their own listing matters covered by GN1 but not by statute on which they recognize that the advice of the Appointed Actuary should be obtained.

Such an arrangement would help with the problems arising from groups of companies and should also assist in discussions with E.C. partners. To make the Appointed Actuary system work it must be accepted by insurers and, unless this acceptance is formalized, it is difficult to envisage how the Actuary, who would not always be in a very senior position in the company, would be able, on his own, to persuade an insurer that he should act in accordance with guidance on the lines of GN1.

Mr P. J. Turvey: Does the Appointed Actuary need to approve the terms upon which a product is offered? It is important to distinguish between assumptions as to future experience which are the responsibility of the Appointed Actuary, and those which are the responsibility of management. In his rôle as the guardian of the solvency of a life insurance company, the Actuary must take personal responsibility for the assumptions that he makes as to future experience. Conversely, in his rôle as adviser on commercial questions, he may expect the management of the company to accept responsibility for some of the assumptions regarding future experience. Thus, where the Actuary is asked to comment on the terms at which new business is being written, it is appropriate for him to approve rates which are based on management's assumptions on the cost of writing future new business. He must draw to management's attention any difference between past experience and future assumptions, and to the financial consequences if any improvement which they forecast does not occur. He will need to satisfy himself that even if management's judgement is wrong, at the very worst the company can still achieve a 'soft landing', for example being closed to new business, with the statutory solvency margin still remaining covered.

It is difficult to persuade investment managers of the need to liaise properly with the Appointed Actuary. Investment managers are capable of purchasing investments without realizing that they are inappropriate, even if they have been provided with carefully worded guidelines. Where this is a risk the Appointed Actuary must take the initiative. In §4.3.4, the author discusses the situation in which the investment function is dealt with by a fellow subsidiary company answering to a separate board of directors. Whilst recognizing the practical difficulties in such circumstances, we must not lose sight of the legal position. The appointment of the investment manager is within the gift of the board of the life insurance company. A responsible board would have to resign rather than agree to the appointment of an investment manager on unacceptable terms. It has to be recognized that some members of a company's board or management may fail to recognize the value of the Appointed Actuary. The top decision-makers may work in a different city or country and may be so remote from the Appointed Actuary that they rarely meet, and still less have an opportunity for an educational discussion. Equally, they may be so remote that in practice they will never make a decision that has a material impact on the life company concerned. I believe this lack of contact is acceptable provided the Actuary does have contact with the people who really matter.

We must ensure that our current system is not lost in some compromise on the life insurance freedom of services directive. We must be active in promoting the merits of our system in Europe. I was pleased to see that the author was instrumental in getting the subject added to the agenda of the recent International Congress of Actuaries. I hope that he, and the professional bodies, will keep up the pressure.

Turning to the particular situation where the Appointed Actuary is an external consultant, there are a number of practical problems. When events are moving fast, management may simply overlook the importance of keeping the Appointed Actuary fully in the picture. A similar problem is the situation where management, through incompetence, and not through intention to conceal, fails to provide the Appointed Actuary with the information he needs. This can occur even if the Actuary has made his needs very clear. Some of the most valuable advice given by a consulting actuary to his client can be verbal advice delivered in the course of a meeting. The absence of records does not matter when all is going well, but could be critical if there were ever a dispute between actuary and client, or worse a reference to the Institute's professional conduct procedures. To keep full notes of every meeting is costly, arguably not in the client's best interest, and may well be physically impossible during a crisis. My own view is that the Appointed Actuary must put his advice in writing if he feels that there is any danger that the company may ignore it, wilfully or inadvertently.

There should be better communication between the GAD and the actuarial profession. I would ask the GAD to publish the key questions which they use in examining the returns of a life insurance company. Such disclosure would have several advantages. It would concentrate the mind of the Appointed Actuary at a significantly earlier stage if he realized that the returns would raise questions. It would enable corrective action to be taken sooner, or encourage the Actuary to provide in advance the supplementary information which the GAD would otherwise have called for. It would also save time at the GAD, and permit them to concentrate on more important issues. In the same vein, it would also be helpful if the GAD were to publish a description of the problems which they most often encounter in DTI returns. Any communication from the GAD on a matter such as reserving standards should be sent to every member of the profession, and not, like a recent note on AIDS reserves, sent only to Appointed Actuaries or even worse sent only to insurance companies which are members of a particular trade association. It might be helpful if the GAD were to state publicly that the Insurance Division does not talk to the Inland Revenue about the affairs of individual companies, so that companies and Actuaries can feel free to discuss any features of their accounts which are due to tax avoidance planning.

My second suggestion for action would be for the DTI, the GAD and the professional bodies to agree the text of a guidance note on the rôle of the Appointed Actuary which could be issued by the DTI to support the rôle of the Appointed Actuary. Company directors who believe that they are not bound by a guidance note issued by the Institute of Actuaries would, I feel sure, pay careful attention to a guidance note issued by the DTI, even if it were without statutory backing.

We need further change in our disciplinary code. The only sanction which we have at the moment to prevent a particular actuary from serving as an Appointed Actuary is to deprive him of his Fellowship. This is too draconian a punishment. The profession must find a way in which it can examine the performance of an Appointed Actuary, and conclude that he is no longer suitable to hold such a position, without depriving him of his livelihood. If we cannot do this there must be a real risk that the authorities will seek legislation to enable them to apply a 'fit and proper' test to Appointed Actuaries. This would mean that the DTI, advised by the GAD, were taking over part of the professional responsibilities of the Institute. We must act before this happens.

The author subsequently wrote: Both Mr Brimblecombe and Mr Abbott referred to the position of Chief Actuary in a group and its relationship to the Appointed Actuary. While an actuary may be needed at group level, we must be careful not to put the Appointed Actuary too low even if there is a more senior actuary who would support him. It may be that Section 8.4 of GN1 needs extending; when first written it related to actuaries who happened to be managers or directors rather than those in professional posts. Allocating the statutory function for a wholly integrated subsidiary to a middle manager is another matter—I wholly accept this as enlightened management. Mr Corby's description of the arrangements in his group is valuable. The virtue of our system is that it can accommodate a very large number of different organizational structures. In the paper I tried to work out axioms, but they can be satisfied in many different ways. The main worry is with groups which are not the continuation of old established life offices, but have emerged from other financial services or perhaps from abroad. There is a risk that their group management may not realize what actuarial needs are. This supports the need for some general guidance or educational material aimed at management rather than at actuaries.

I cordially agree with the view that the Actuary should be involved in management decision making *because* he is a senior executive with an indispensable input to make. The heart of the system is to combine this rôle with statutory responsibilities. Problems arise if a company does not see the Actuary as a source of such input, yet without this the statutory rôle cannot function properly. I accept that best practice ought to reflect the situation of essentially healthy organizations. It is difficult to bring companies with less enlightened managements into line with best practice unless that practice is understood and defined.

I can assure Mr Russell that our first reaction to an approach by an Actuary disclosing a serious situation would be to establish in what capacity the approach was made, whether on behalf of the company or under § 3.2 of GN1. Mr Russell also proposes a scenario in which management has approached the DTI on their Actuary's advice. The Actuary could talk informally to the GAD before giving such advice to sound out the likely reaction to a management approach. Although this puts the GAD on notice of the problem, we endeavour to support Appointed Actuaries and will not take the sounding as being a report under § 3.2 unless there is no alternative.

Mr Goford seems to me to assign too limited a rôle to the Appointed Actuary. Much of what he assigns to the financial controller, and some things assigned to the Product Development Actuary, need to rest with the Appointed Actuary if the statutory system is to be fully supported. I did not suggest that the Appointed Actuary should approve premium rates, but that his final approval of the product as a whole should be required before launch can be authorized. This does not mean that he should use a veto irresponsibly; he has executive responsibilities to the company. However, I believe that a contract should not be launched if the Appointed Actuary has serious objections, and that the procedures should recognize this.

In reply to Mr Law, the £6,000 is a standard fee charged to life and non-life companies alike. The product covers costs arising in the DTI and the GAD. A flat-rate basis is probably as fair as any; although the returns of larger companies may contain more diverse business and so require longer scrutiny, it is the smaller companies which take up most of our time. The statistics of meeting with Appointed Actuaries show only the tip of the iceberg, from which one has to infer the size of the part beneath the surface. There is much correspondence with companies on matters large and small, and in many cases a meeting is not necessary. I endeavour to meet all newly Appointed Actuaries as a matter of routine.

Several speakers suggested that the supervisors should have routine discussions with companies, including the large stable companies, by analogy with banking supervision. This is an excellent idea, but would require some new resources.

I can reassure Mr Turvey that the GAD has not been involved in the tax affairs of individual companies. We do advise the Inland Revenue on general matters concerning taxation—for example on the actuarial practicability of proposals in the recent consultative document. Were we to be consulted on individual company assessments, the advice would be given by a separate section of the GAD and a Chinese wall would have to be erected. This is essential as Appointed Actuaries must be able to talk to us freely.