**Note: This version of ASOP No. 1 is no longer effective.**
**It was superseded in 1990 by ASOP No. 1, Doc. No. 020.**

# ACTUARIAL STANDARD
# OF PRACTICE
# NO. 1

## RECOMMENDATIONS CONCERNING THE REDETERMINATION (OR DETERMINATION) OF NON-GUARANTEED CHARGES AND/OR BENEFITS FOR LIFE INSURANCE AND ANNUITY CONTRACTS

**Adopted by the**
**Interim Actuarial Standards Board (IASB)**
**October 1986**

**Developed by the**
**Subcommittee on Dividends**
**and Other Non-Guaranteed Elements**
**of the**
**Life Committee of the IASB**

**Reprinted 1990**

**(Doc. No. 003)**

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January 1987

**TO:** Members of the American Academy of Actuaries and Other Interested Persons

**FROM:** Subcommittee on Dividends and Other Non-Guaranteed Elements of the Life Committee of the Interim Actuarial Standards Board

**SUBJ:** Recommendations Concerning the Redetermination (or Determination) of Non-Guaranteed Charges and/or Benefits for Life Insurance and Annuity Contracts

Background

In mid-1985, the Society of Actuaries (SOA) Committee on Theory of Dividends and Other Non-Guaranteed Elements in Life Insurance and Annuities submitted a report to the SOA Board of Governors entitled, "Recommendations Concerning the Determination of Non-Guaranteed Charges and/or Benefits for Individual Life Insurance Policies and Annuity Contracts." The American Academy of Actuaries (AAA) Subcommittee on Dividends and Other Non-Guaranteed Elements used the SOA report as a foundation in preparing an Exposure Draft of Recommendations Concerning the Redetermination (or Determination) of Non-Guaranteed Charges and/or Benefits for Life Insurance and Annuity Contracts. These Recommendations are new and do not revise or replace any existing Recommendations.

The Academy's Interim Actuarial Standards Board (IASB) was recently formed for the purpose of promulgating actuarial standards of practice. As a result, the Exposure Draft of the Recommendations was released in March 1986 with the approval of the IASB.

These Recommendations relate to the advice the actuary gives to a client company* in connection with redetermination (or initial determination) of non-guaranteed charges and/or benefits for life insurance and annuity contracts. The Recommendations apply to in-force business as well as new business. They do not apply to policyholder dividends; however, if a participating policy has non-guaranteed elements in addition to policyholder dividends, these Recommendations apply to the non-guaranteed elements.

The subcommittee recognizes that the use of non-guaranteed elements has grown dramatically in recent years and is still evolving. There has been little standardization in such areas as benefit design, pricing structure, marketing practices, and investment philosophies. Therefore, the subcommittee has not attempted to define and categorize certain practices or approaches as "good" or "bad" or "acceptable" or "unacceptable." Rather, the emphasis in these Recommendations is (a) to set forth the areas of inquiry and analysis the actuary should cover in developing advice, and (b) to outline the areas where the actuary should describe the main elements of that advice and the reasons therefor.

* The term "client company" in this context includes the employing company of an employee actuary.

In developing advice on non-guaranteed charges and benefits, the actuary requires a redetermination (or determination) policy for the block of business involved. This policy, and the selection of the marketing and financial objectives associated with it, are a company management decision that provides the framework within which the actuary giving advice as to redetermination (or determination) of non-guaranteed elements operates.

The subcommittee believes that sound actuarial principles require that as part of this actuarial advice, the actuary submit to the client an actuarial report that provides recommended information to enable management to make an informed decision. The report should include a description of the framework within which the actuary's advice has been developed (including a description of the company's redetermination or determination policy for the contract classes involved) and a description of the facts, methods, procedures, and assumptions upon which the advice was based. The report should also describe any special operating practices that affect or could affect pricing and repricing actions. These Recommendations also specify other items and information that the subcommittee believes should be included in the actuarial report.

<u>Responses to Comments on Exposure Draft</u>

As previously mentioned, in March 1986 the IASB released an Exposure Draft of the Recommendations. Members were requested to submit written comments by June 1, 1986. In addition, the Subcommittee had an Open Forum at the SOA meeting in Boston on May 23, 1986.

The subcommittee received 20 responses to the Exposure Draft. Three of the respondents felt that it was inappropriate for the profession to issue Recommendations in this area. In three other written responses, the writers felt that the Recommendations should go further than simply requiring the actuary to give advice to management. There was no opposition raised to the Recommendations at the Boston Open Forum. Those who commented there stated that the Recommendations were too lenient.

The subcommittee examined both points of view and concluded that the proposed approach was the most satisfactory at the present time.

The subcommittee received responses from five members questioning the need for an actuary's report every time there is a change. A company that is changing the interest rate on its single-premium deferred annuities each month was cited as an example. The subcommittee revised Subsections 2.1 and 2.2 to state that there may be circumstances when an actuarial report is not necessary, and also to permit the actuary to refer to prior reports in the preparation of a current report.

Three members had comments about the sensitivity testing in Subsection 5.5. There was concern that 5.5 would require sensitivity testing of all factors. The subcommittee changed this subsection to require sensitivity testing only of those factors that had a material effect, but also to require the actuary to justify not conducting other sensitivity tests.

Three members commented on Interpretation 1. The feeling was that if recouping past losses was an acceptable practice, it should be included in Subsection 3.2. The subcommittee felt that the issue of recovering past losses was of such significance that it should be handled as a separate Interpretation rather than being combined with several other examples of policies in the Recommendations themselves.

Two members felt that some examples of company policy in Subsection 3.2 were improper from the buying public's point of view. Several members of the subcommittee did not disagree with these opinions; however, the subcommittee feels that the current Recommendations are designed not to judge which policies are appropriate or inappropriate. Consequently, the subcommittee feels that to reflect this viewpoint properly, less acceptable, as well as more acceptable, policies must be illustrated.

One member drew the subcommittee's attention to the impact reinsurance treaties might have on experience factors. As a result, the subcommittee modified Subsection 4.7 to include, as an example of anticipated experience factors, reinsurance results.

One member recommended that the subcommittee prepare a model actuarial report as part of these Recommendations. Because the needs of actuaries can vary so significantly by product, circumstances, and clients, the subcommittee feels that a model report might be misleading.

One member stated that the phrase, "redetermination (or determination)" was very distracting. As a result, the subcommittee modified Subsection 3.1 to define redetermination to include initial determination and use only the word redetermination thereafter.

The subcommittee received editorial changes from several members. Many of these were incorporated to improve the clarity of the Recommendations.

Conclusion

The subcommittee appreciates the fact that many members took the time to respond, and the quality of the responses. The subcommittee asked for comments from the membership about the role of the actuary and sales illustrations. We received many excellent replies. The subcommittee plans to work within the American Academy of Actuaries in its public interface role, in responding to these suggestions.

Following the revisions made in connection with the exposure process, the revised Recommendations were submitted to the IASB and approved on October 10, 1986. The AAA Board of Directors ratified this decision on December 12, 1986, and these Recommendations are now in effect.

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## ACTUARIAL STANDARD OF PRACTICE NO. 1

## RECOMMENDATIONS CONCERNING THE REDETERMINATION (OR DETERMINATION) OF NON-GUARANTEED CHARGES AND/OR BENEFITS FOR LIFE INSURANCE AND ANNUITY CONTRACTS

### SECTION 1. GENERAL

1.1 These Recommendations set out the considerations that bear on the actuary's professional work in the area of the determination of non-guaranteed charges and benefits for new individual life insurance contracts and annuity contracts. They also address the closely related process of the periodic redetermination of non-guaranteed charges and benefits for business in force. They elaborate on the requirements expressed in the Guides and Interpretative Opinions as to Professional Conduct of the American Academy of Actuaries. The word "individual" applies both to individual contracts and to individual-type contracts which are issued under a "group" umbrella of any trust which does not have the discretion to select the insurer(s) on behalf of all the individual policy-holders.

1.2 These Recommendations apply to contracts on which charges or benefits may vary at the discretion of the company, such as: (i) universal life contracts, (ii) indeterminate premium policies, and (iii) so-called "excess interest" policies. They do not apply to policyholder dividends, which are covered by the Recommendations on Participating Business, nor to any charges or benefits that contractually follow a separate account result or a defined index. To the extent that a contract involves both non-guaranteed charges and benefits and policyholder dividends, it is subject to both these Recommendations and the Recommendations on Participating Business.

1.3 "Sound actuarial principles" are defined by paragraph (b) of the Academy's Interpretative Opinion 4 as follows:

Generally Accepted Actuarial Principles and Practices emerge from the utilization and adaptation of concepts described in actuarial literature. Such literature includes, but is not limited to, the Recommendations and Interpretations published under the auspices of the American Academy of Actuaries; the professional journals of recognized professional actuarial organizations; recognized actuarial textbooks and study materials; and applicable provisions of law and regulations; and may include standard textbooks or other professional publications in related fields such as mathematics, statistics, accounting, economics and law.

### SECTION 2. THE ACTUARY'S REPORT

2.1 Contracts with non-guaranteed elements have grown dramatically recently and are still evolving. There has been little standardization in such areas as benefit design, pricing structure, marketing practices, and investment philosophies. The obligations of the actuary to the client take on an added dimension during a period of rapid growth and increased diversity such as that which characterizes this business. The actuary's essential obligations with respect to this business are: (1) to assure the completion of all of the activities required to advise the client professionally and (2) to prepare an actuarial report for the client presenting this advice. The word "client" in this context includes the employing company of an employee actuary.

For some interest-sensitive products, interest rate guarantees might be subject to review and redetermination as frequently as weekly, and unless the company's relevant policy (as discussed in section 3.1) is changed, an actuary would normally not be asked to formally advise on the redetermination process. In such circumstances, an actuarial report would therefore not normally be made. However, whenever the company's redetermination policy is changed, it is expected that as a matter of general practice, actuarial advice would be sought and an actuarial report made. (Similarly, when the company's policy is initially determined.)

It may be that many aspects of a company's redetermination policy will have been described in an earlier actuarial report. In such a case, the current actuarial report can be shortened by noting those aspects of company policy which remain unchanged from the description given in the earlier report (which would be referenced).

2.2 RECOMMENDATION 1: Whenever an actuary advises an insurance company on non-guaranteed charges or benefits, whether on determinations for new business or on redeterminations for in-force business, a written report should be prepared which documents the advice. Such a report should include a description of the framework within which the actuary's advice has been developed, a description of the facts, methods, procedures and assumptions upon which the advice was based and the other information called for by these Recommendations. The actuary may refer to prior reports with respect to any of these features which have remained unchanged since the most recent report.

## SECTION 3. REDETERMINATION (OR DETERMINATION) POLICY

3.1 Whenever the word "redetermination" is used in these Recommendations, it includes the concept of initial determination when appropriate.

In developing advice on non-guaranteed charges and benefits, the actuary requires a redetermination policy for the business. This is the policy which the client seeks to employ in the redetermination of non-guaranteed charges and benefits. Such policy includes the client's solvency, marketing, and profit objectives. In order to implement the policy, the client will seek to follow a set of operating practices (such as investment, underwriting, claims, sales, service, and administrative) which affect initial pricing and subsequent repricing actions.

If the client company has an incomplete policy for the business, the actuary should describe what additional assumptions the actuary found to be necessary to develop his or her advice.

3.2 The redetermination policy and the selection of the solvency margin, marketing and potential profit objectives associated with that policy are company management decisions. Examples of some possible policies are presented in the following paragraphs.

One possible policy is to seek at each redetermination to adjust the original non-guaranteed charges or benefits for differences between the experience anticipated at the time of redetermination and that underlying the original non-guaranteed charges or benefits. Under this policy, anticipated experience plays the key role and explicit profit margins would usually not be changed after issue.

A second possible policy is similar to the first except that adjustments are made only when the redetermined charges or benefits would be less favorable to the insured.

A third possible policy is for the company to set non-guaranteed charges and benefits (at issue or at redetermination) to obtain a particular competitive position in the marketplace. Under this policy, the actuary's work is to advise the client of the likely effect of such market-based pricing on the company's operating results and solvency based on the experience the actuary anticipates will emerge from the prices that have been established.

Of course, many other policies are possible.

Solvency and profit margins could be overall objectives or could be specific to the several types of business conducted. They could be expressed in terms of percentage of reserves, return on equity, percentage of premiums, or in some combination of these, or in other forms.

One example of a marketing objective would be the achievement of defined comparative market position in terms of share of sales or share of inforce business. This could be looked at on an overall basis or separately for different geographical areas, different socio-economic groupings or other market segments. Another example would be the maintenance of a defined (relative) market position in the levels of non-guaranteed charges and benefits. This also could be an overall objective or it could be defined separately for different market segments. Other types of marketing objectives are possible.

In any event, the company's policy with respect to the redetermination of non-guaranteed charges and benefits should be an integral element taken into account by the actuary in developing advice.

3.3 RECOMMENDATION 2: Whenever the actuary advises an insurance company on non-guaranteed charges and benefits, the report presenting such advice should include a description of the company's redetermination policy for the contract classes involved. The actuary should disclose to the company any areas in which the policy is judged to be incomplete and should describe the additional assumptions which were made. Also, if there has been any material change in the policy or in the assumptions the actuary has made about the policy since the previous report, the actuary should describe the impact of such changes, if any, on the actuary's advice.

3.4 An essential adjunct to the redetermination policy is a description of the company's special handling of its normal business practices, such as underwriting, claims, investment, sales, services and administrative, which must be considered in the pricing and repricing of the classes of business for which non-guaranteed charges or benefits are being developed. In the case of underwriting, for example, these practices would include any special underwriting rules to be applied in first and/or renewal years and an indication of whether the mortality experience on this business should be analyzed separately. In the case of investments, for example, such practices would include any restrictions by type of investment and any asset-liability matching standards to be applied. They would also include whether the investments supporting this business are/should be (1) maintained in a segment in the company's general account separately from the assets supporting other classes of business, (2) combined with other assets but with separate identification by year of investment or (3) commingled with other assets and with the investment results measured on a portfolio basis. The actuary's report should also include the risks involved in deviations from these special factors.

3.5 RECOMMENDATION 3: The actuary's report should include a description of special operating practices that affect or could affect pricing and repricing actions. The report should identify the operating practices that have been designed to try to ensure the kind of experience required by the company's policy with respect to the redetermination of non-guaranteed charges and benefits.

## SECTION 4. THE PROCESS OF DETERMINING NON-GUARANTEED CHARGES AND BENEFITS

4.1 The process of redetermination of non-guaranteed charges and benefits will usually be carried out for a single contract class or for several related contract classes. A contract class consists of all contracts that the company groups together for purposes of determining non-guaranteed charges or benefits. Ordinarily, a contract class, once closed, will remain intact until all contracts included therein have matured. No assignment of a particular contract to a class should be based on the occurrence or non-occurrence of a claim on that contract.

4.2 In general, a contract class will consist of all contracts that: (1) are of a similar type (e.g., universal life, indeterminate premium), (2) have the same structure of guaranteed and non-guaranteed charges or benefits, (3) are based on the same anticipated experience factors or the same sets of anticipated experience factors (e.g., a mortality table, a set of durational expense factors), (4) are issued over a continuous time period and (5) have similar marketing objectives.

4.3 RECOMMENDATION 4: The actuary's report advising on non-guaranteed charges or benefits should describe the contract classes involved. If there have been any changes in the assignment of contracts to these contract classes, the actuary's report should identify how the assignment has been changed and the reason for the changes.

4.4 The redetermination of non-guaranteed charges or benefits for any class of contracts usually requires the use of two basic types of factors: contract factors and anticipated experience factors.

4.5 Contract factors are values defined in the contract or values emerging from the operation of its terms. Contract factors include the face amount of insurance, the cash surrender value, the account value, the maximum guaranteed mortality charge rate, the minimum interest credit rate, the loan interest rate, etc.

4.6 RECOMMENDATION 5: The actuary's report should identify any contract factors used in the redetermination of non-guaranteed charges and benefits. If approximate or projected measures of particular contract factors are used, the actuary should describe the basis of the measures used.

4.7 Anticipated experience factors are those elements in the redetermination of non-guaranteed charges and benefits that reflect expected future experience. Examples of anticipated experience factors are: incidence and level of premium payments, mortality rates, investment income rates, termination rates, reinsurance results, tax rates and expense rates. The anticipated experience factor for a given contract class may have several different numerical values. For example, the anticipated expense factor for a contract class may have several components (e.g., percentage of premium, percentage of commission, constant per contract, constant per $1,000), each of which may vary by contract year. And, the anticipated mortality factor may be represented by tables of mortality rates.

4.8 As used in these Recommendations, the anticipated, or projected, experience of a factor class means experience expected in the future as determined by the actuary through the application of sound professional judgement. Where applicable, anticipated experience should be based on recent experience and expected trends in experience for that factor class or other similar classes of business either in the same company or other companies or from other sources, generally in that order of preference. Of course, discontinuities may exist between current experience and anticipated experience for valid reasons such as tax law changes or other changes in the operating environment, and in these cases projections of past trends may be of limited value.

4.9 RECOMMENDATION 6: The actuary's report should describe the anticipated experience factors used in the redetermination of non-guaranteed charges and benefits. The report should also include an identification of all changes in the values of anticipated experience factors from the last redetermination of charges and benefits for the contract classes with respect to which the report is being prepared.

4.10 The process of redetermination of non-guaranteed charges or benefits leads to a formulation which produces the specific amounts or rates. Under many of the contract designs covered by these Recommendations, it is possible that significantly different levels and incidences of premium payments will emerge among the contracts of a given class. These should be reflected in redetermining charges or benefits—by modelling or by appropriate averaging or classification of contracts. This process always requires the use of contract factors and anticipated experience factors. However, those factors may or may not appear in the formulation actually used.

4.11 RECOMMENDATION 7: The actuary's report should include a description of the processes and methods, including any significant modelling or averaging used in the redetermination of non-guaranteed charges and benefits as well as the manner in which the contract factors and anticipated experience factors are used in these processes and methods.

## SECTION 5. ACTUARY'S ADVICE

5.1 The actuary's report should present the actuary's specific advice on non-guaranteed charges and benefits for the contract classes covered by the report, including any changes from those for the most recent period. The report should indicate the degree to which the advised non-guaranteed charges and benefits are expected to meet the company's objectives. These objectives include the company's policy with respect to the redetermination of non-guaranteed charges and benefits and the company's solvency, profits, and marketing objectives.

5.2 RECOMMENDATION 8: The actuary's report should present the specific non-guaranteed charges or benefits advised for the forthcoming period, if these charges or benefits differ from the charges or benefits for the most recent period, the report should identify such changes, indicate the amount of the difference(s) and describe the reasons therefore.

5.3 RECOMMENDATION 9: The actuary's report should state the degree to which the advised charges or benefits follow the company's policy for redetermining such charges or benefits and the degree to which the actuary expects them to meet the company's solvency, profits, and marketing objectives.

5.4 The actuary's advice is based on estimates of future experience. It is possible that the actual experience, as it emerges, could be significantly different from that anticipated and, if it is, the non-guaranteed charges or benefits may produce significantly different operating results. To assist the client company in reaching a decision with respect to non-guaranteed charges and benefits, the actuary should furnish information as to the impact of likely deviations in experience from that anticipated. This information should cover the degree of variation that might reasonably occur and the effect that these variations would have on the likely attainment of the company's several goals. If there are any likely variations which would have a potentially sizeable impact on the company's operating results, the actuary should consider whether there are any changes in operating practices or product design which might alleviate or obviate these potential effects. Any such changes which the actuary believes to be practicable should be stated in the report.

5.5 RECOMMENDATION 10: In the development of non-guaranteed charges or benefits, the actuary should conduct sensitivity tests of the potential impact of likely deviations in experience from that on which the actuary's advice is based, that may have a material effect. The actuary's report should contain a description of any sensitivity tests, a summary of the results and any advice the actuary may have as to practicable changes in operating practices or product design which would avoid or minimize the impact of any likely experience variations that would have materially adverse consequences. The actuary's report should explain the reasons for not conducting any sensitivity test.

## SECTION 6. REGULATORY AND OTHER MATTERS

6.1 Several jurisdictions have regulations which apply to the redetermination of non-guaranteed charges and benefits for life insurance and annuity contracts. These regulations must, of course, be taken into account by the actuary when developing his or her advice.

6.2 RECOMMENDATION 11: The actuary's report should describe any applicable regulatory requirements including any explicit approvals which must be given by the regulatory authorities before the redetermined charges or benefits can be used. Where there are any significant interpretative questions, the report should describe these and the actuary's interpretation and conclusions.

## INTERPRETATION 1: RECOUPING PAST LOSSES/ DISTRIBUTING PAST GAINS

This Interpretation deals with Subsection 3.2 that describes various redetermination policies.

One important element in a company’s policy for redetermining non-guaranteed charges or benefits is the extent to which accumulated losses or gains will be allowed to affect the redetermination.

There is no question that future non-guaranteed charges and benefits should reflect the experience anticipated in the future, even though it is worse than originally expected. A specific provision for recovery of past losses or distribution of past gains in the redetermination of non-guaranteed charges or benefits is also a possible element of a company’s policy. If there is such an intent, the actuary’s report should specifically describe the policy.

In this context, the recovery of acquisition expense through annual amortization is not considered recovery of past losses.

The actuary should also be aware of any regulatory restrictions on this type of policy and should take those restrictions into account in developing his or her advice.