

As of September 30, 2004, this ASOP is no longer in effect. It has been superseded by a revised version of ASOP No. 1, *Nonguaranteed Charges or Benefits for Life Insurance Policies and Annuity Contracts* (Doc. No. 092).



ACTUARIAL STANDARDS BOARD

Actuarial Standard of Practice No. 1

The Redetermination (or Determination) of Non-Guaranteed Charges and/or Benefits for Life Insurance and Annuity Contracts

Developed by the
Subcommittee on Dividends and Other Non-Guaranteed Elements
of the Life Committee
of the Interim Actuarial Standards Board

Adopted by the
Interim Actuarial Standards Board
October 1986

Reformatted and Readopted by the
Actuarial Standards Board
1990

(Doc. No. 020)

TABLE OF CONTENTS

Transmittal Memorandum

iv

PREAMBLE

Section 1. Purpose, Scope, and Effective Date	1
1.1 Purpose	1
1.2 Scope	1
1.3 Effective Date	1
Section 2. Definitions	1
2.1 Client	1
2.2 Individual	1
2.3 Redetermination	1
Section 3. Background and Historical Issues	2
Section 4. Current Practices and Alternatives	2
4.1 An Evolving Type of Business	2
4.2 Client's Policy	3
4.3 Examples of Client Policies	3
Section 5. Analysis of Issues and Recommended Practices	5
5.1 Company's Policy Taken into Account	5
5.2 Accumulated Losses or Gains	5
5.3 Special Operating Practices	5
5.4 Contract Classes	6
5.5 Contract Factors and Anticipated Experience Factors	6
5.5.1 Contract Factors	6
5.5.2 Anticipated Experience Factors	6
5.6 Modeling and Averaging	7
5.7 Impact of Likely Deviations from Anticipated Experience	7
5.8 Sensitivity Testing	7
5.9 Application of Regulations	7
Section 6. Communications and Disclosures	8
6.1 Actuarial Report	8
6.1.1 Description of Client's Policy	8
6.1.2 Description of Special Operating Practices	8
6.1.3 Description of Contract Classes	8
6.1.4 Identification of Contract Factors	8
6.1.5 Description of Experience Factors	8
6.1.6 Description of Processes and Methods	9
6.1.7 Reporting on Specific Charges or Benefits for the Period	9
6.1.8 Stating Degree of Conformity with Company's Policy	9

6.1.9	Disclosures on Sensitivity Testing	9
6.1.10	Description of Regulatory Requirements and Interpretations	9
6.2	Deviation from Standard	9

July 1990

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

FROM: Actuarial Standards Board (ASB)

SUBJ: Actuarial Standard of Practice No. 1

This booklet contains the final version of Actuarial Standard of Practice (ASOP) No. 1, *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*. (The title has been changed in this reformatted edition to ASOP No. 1: *The Redetermination (or Determination) of Non-Guaranteed Charges and/or Benefits for Life Insurance and Annuity Contracts*.) These Recommendations were new and did not revise or replace any existing Recommendations.

The exposure draft of the Recommendations was released in March 1986 with the approval of the Interim Actuarial Standards Board (IASB). The final version was adopted by the IASB in October 1986. The Recommendations have now been reformatted as ASOP No. 1.

This standard relates to the advice the actuary gives to a client company (the term *client company* in this context includes the employing company of an employee actuary) in connection with redetermination (or initial determination) of non-guaranteed charges and/or benefits for life insurance and annuity contracts. The standard applies to in-force business as well as new business. It does not apply to policyholder dividends; however, if a participating policy has non-guaranteed elements in addition to policyholder dividends, this standard applies to the non-guaranteed elements.

The subcommittee recognized 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 did not attempt to define and categorize certain practices or approaches as "good" or "bad" or "acceptable" or "unacceptable." Rather, the emphasis in this standard is (1) to set forth the areas of inquiry and analysis the actuary should cover in developing advice, and (2) to

outline the areas where the actuary should describe the main elements of that advice and the reasons therefor.

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 believed 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. This standard also specifies other items and information that the subcommittee believed should be included in the actuarial report.

Responses to Comments on Exposure Draft

As previously mentioned, in March 1986 the IASB released an exposure draft. 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 twenty responses to the exposure draft. Three of the respondents believed that it was inappropriate for the profession to issue a standard in this area. In three other written responses, the writers suggested that the standard should go further than simply requiring the actuary to give advice to management. There was no opposition raised to the standard at the Boston open forum. Those who commented there stated that the standard was too lenient.

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

The subcommittee received five responses 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 the section on the actuary's report 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 respondents had comments about the sensitivity testing recommended in section 5.8 (of the reformatted standard). There was concern that the standard would require sensitivity testing of all factors. The subcommittee changed this section 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.

Two respondents expressed the opinion that some examples of company policy were improper from the buying public's point of view. Several members of the subcommittee did not disagree with these opinions; however, the subcommittee concluded that this standard is not designed to judge which policies are appropriate or inappropriate. Consequently, the subcommittee believed that to reflect this viewpoint properly, less acceptable, as well as more acceptable, policies must be illustrated.

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

One respondent recommended that the subcommittee prepare a model actuarial report as part of this standard. Because the needs of actuaries can vary so significantly by product, circumstances, and clients, the subcommittee decided that a model report might be misleading.

One respondent stated that the phrase, *redetermination (or determination)* was very distracting. As a result, the subcommittee modified the definition of *redetermination* to include initial determination and used only the word *redetermination* thereafter.

The subcommittee received other suggestions for editorial changes, many of which were incorporated to improve clarity.

The standard was approved by the IASB on October 10, 1986. The AAA Board of Directors ratified this decision on December 12, 1986.

The document was reformatted in 1990 to conform with the uniform format for standards of practice adopted by the Actuarial Standards Board in 1989. Because it was the first actuarial standard of practice adopted by the IASB, it was numbered Actuarial Standard of Practice No. 1.

The reformatting work was accomplished by an ad hoc task force of the Life Committee of the ASB. The Life Committee approved the document for submission to the ASB for readoption without re-exposure. The ASB so voted on July 13, 1990.

Subcommittee on Dividends and Other Non-Guaranteed Elements

William T. Tozer, Chairperson

C. Lawrence Edris
Harry D. Garber
James W. Kemble
Leo Lebos Jr.
William A. Phillips

Owen A. Reed
Robert E. Schneider
Richard M. Stenson
John B. Yanko

Interim Actuarial Standards Board

John A. Fibiger, Chairperson

E. Paul Barnhart	Barbara J. Lautzenheiser
Ronald L. Bornhuetter	Thomas E. Murrin
Edwin F. Boynton	George B. Swick
James C. Hickman	Jack M. Turnquist

Reformatting Task Force

William T. Tozer	Paul F. Kolkman
------------------	-----------------

Life Committee of the ASB

Harold G. Ingraham Jr., Chairperson

Timothy F. Harris	James B. Milholland
Burton D. Jay	Edward S. Silins
Paul F. Kolkman	Donald R. Sondergeld
Robert W. Maull	William T. Tozer

Actuarial Standards Board

Walter N. Miller, Chairperson

E. Paul Barnhart	Frederick W. Kilbourne
Gary Corbett	George B. Swick
Willard A. Hartman	Jack M. Turnquist
James C. Hickman	P. Adger Williams

ACTUARIAL STANDARD OF PRACTICE NO. 1

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

PREAMBLE

Section 1. Purpose, Scope, and Effective Date

- 1.1 Purpose—This standard sets 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. It also addresses the closely related process of the periodic redetermination of non-guaranteed charges and benefits for business in force. It elaborates on the requirements expressed in the *Guides and Interpretative Opinions as to Professional Conduct* of the American Academy of Actuaries.
- 1.2 Scope—This standard applies to contracts on which charges or benefits may vary at the discretion of the company, such as: (1) universal life contracts, (2) indeterminate premium policies, and (3) so-called “excess interest” policies. It does not apply to policyholder dividends, which are covered by Actuarial Standard of Practice (ASOP) No. 15, *Dividend Determination and Illustration for Participating Individual Life Insurance Policies and Annuity Contracts*. Nor does it apply 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 this standard and ASOP No. 15.
- 1.3 Effective Date—This standard became effective in January 1987.

Section 2. Definitions

- 2.1 Client—In this standard, the word includes the employing company of an employee actuary, as well as the client of a consulting actuary.
- 2.2 Individual—In this standard, the word refers both to individual life insurance and annuity contracts and to individual-type contracts issued under a “group” umbrella of any trust which does not have discretion to select the insurer(s) on behalf of all individual policyholders.
- 2.3 Redetermination—Where appropriate, the term includes initial determination.

Section 3. Background and Historical Issues

In the background of this standard were the following considerations:

1. The economy of North America has become more volatile, requiring individuals to accept more risks.
2. As a result, life insurance companies began offering insurance products at reduced premiums, with the proviso that they could increase those premiums if necessary, up to a predetermined maximum. Annuities were offered as investment alternatives, with significantly increased interest rates that could be reduced.
3. Universal life insurance became a significant product in the marketplace. This product “unbundled” the traditional life insurance product into its subparts. Many of the subparts were not guaranteed—for example, interest rates and mortality charges.
4. Competition increased not only among insurance companies, but also between insurance companies and other financial providers. Because of this increased competition and the reduced guarantees in the insurance companies’ products, insurance companies became very aggressive in their proposals.
5. Because of the sizeable share of the market represented by these products and their financial significance, it was deemed necessary to develop an actuarial standard in this area.

Section 4. Current Practices and Alternatives

- 4.1 An Evolving Type of Business—The use of contracts with non-guaranteed elements has grown dramatically recently, and such contracts 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 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.

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 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 (as would also be the case 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 that remain unchanged from the description given in the earlier report (which would be referenced).

- 4.2 Client's Policy—In developing advice on non-guaranteed charges and benefits, the actuary requires a redetermination policy for the business. This is the policy that 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.

The redetermination policy and the selection of the solvency margin, marketing, and potential profit objectives associated with that policy are company management decisions.

- 4.3 Examples of Client Policies—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 in-force business. This could be looked at on an overall basis or separately for different geographical areas, different socioeconomic 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.

STANDARD OF PRACTICE

Section 5. Analysis of Issues and Recommended Practices

- 5.1 Company's Policy Taken into Account—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.

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.

- 5.2 Accumulated Losses or Gains—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.

- 5.3 Special Operating Practices—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.

- 5.4 Contract Classes—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.

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.

- 5.5 Contract Factors and Anticipated Experience Factors—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.

5.5.1 Contract Factors—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.

5.5.2 Anticipated Experience Factors—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.

As used in this standard, 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 judgment. 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.

- 5.6 Modeling and Averaging—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 this standard, 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 modeling 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.
- 5.7 Impact of Likely Deviations from Anticipated Experience—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.
- 5.8 Sensitivity Testing—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.
- 5.9 Application of Regulations—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.

Section 6. Communications and Disclosures

- 6.1 Actuarial Report—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 that 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 this standard. The actuary may refer to prior reports with respect to any of these features which have remained unchanged since the most recent report.
- 6.1.1 Description of Client’s Policy—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 that 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.
- 6.1.2 Description of Special Operating Practices—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.
- 6.1.3 Description of Contract Classes—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.
- 6.1.4 Identification of Contract Factors—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.
- 6.1.5 Description of Experience Factors—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.

- 6.1.6 Description of Processes and Methods—The actuary’s report should include a description of the processes and methods, including any significant modeling 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.
- 6.1.7 Reporting on Specific Charges or Benefits for the Period—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.
- 6.1.8 Stating Degree of Conformity with Company’s Policy—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.
- 6.1.9 Disclosures on Sensitivity Testing—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 that 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.
- 6.1.10 Description of Regulatory Requirements and Interpretations—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.
- 6.2 Deviation from Standard—An actuary who uses a procedure which differs from this standard should include, in the actuarial communication disclosing the result of the procedure, an appropriate and explicit statement with respect to the nature, rationale, and effect of such use.