



ACTUARIAL STANDARDS BOARD

● EXPOSURE DRAFT ●

**Proposed Revision of
Actuarial Standard of
Practice No. 10**

**Methods and Assumptions for Use in Life Insurance Company
Financial Statements Prepared in Accordance with US GAAP**

**Comment Deadline:
September 30, 2010**

**Developed by the
Task Force to Revise ASOP No. 10 of the
Life Committee of the
Actuarial Standards Board**

**Approved for Exposure by the
Actuarial Standards Board
June 2010**

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TO: Members of Actuarial Organizations Governed by the Standards of Practice of the Actuarial Standards Board and Other Persons Interested in Methods and Assumptions for Use in Life Insurance Company Financial Statements Prepared in Accordance with GAAP

FROM: Actuarial Standards Board (ASB)

SUBJ: Revision of Actuarial Standard of Practice (ASOP) No. 10

This document is an exposure draft of the proposed revision of Actuarial Standard of Practice No. 10, now titled *Methods and Assumptions for Use in Life Insurance Company Financial Statements Prepared in Accordance with GAAP*.

Please review this exposure draft and give the ASB the benefit of your comments and suggestions. Each written response and each response sent by e-mail to the address below will be acknowledged, and all responses will receive appropriate consideration by the drafting committee in preparing the final document for approval by the ASB.

The ASB accepts comments by either electronic or conventional mail. The preferred form is e-mail, as it eases the task of grouping comments by section. However, please feel free to use either form. If you wish to use e-mail, please send a message to **comments@actuary.org**. You may include your comments either in the body of the message or as an attachment prepared in any commonly used word processing format. **Please do not password protect any attachments.** Include the phrase “ASB COMMENTS” in the subject line of your message. Please note: Any message not containing this exact phrase in the subject line will be deleted by our system’s spam filter.

If you wish to use conventional mail, please send comments to the following address:

ASOP No. 10 Revision
Actuarial Standards Board
1850 M Street, NW, Suite 300
Washington, DC 20036

The ASB posts all signed comments received to its website to encourage transparency and dialogue. Unsigned or anonymous comments will not be considered by the ASB nor posted to the website. The comments will not be edited, amended, or truncated in any way. Comments will be posted in the order that they are received. Comments will be removed when final action on a proposed standard is taken. The ASB website is a public website and all comments will be available to the general public. The ASB disclaims any responsibility for the content of the comments, which are solely the responsibility of those who submit them.

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Deadline for receipt of responses in the ASB office: **September 30, 2010**

Background

ASOP No. 10 was originally adopted by the ASB in 1989. The 1989 standard was developed by the American Academy of Actuaries (Academy) Committee on Life Insurance Financial Reporting for the Life Committee of the ASB.

In 1992, ASOP No. 10 was expanded. The purpose of the expansion was to incorporate portions of the Academy's Financial Reporting Recommendation (FRR) 1, *Actuarial Methods and Assumptions for Use in Financial Statements of Stock Life Insurance Companies Prepared in Accordance with Generally Accepted Accounting Principles*; FRR 5, *Recognition of Premiums*; FRR 6, *Participating Policies Sold by Stock Life Insurance Companies*; and The Academy's Interpretation 1-I, *Nonparticipating Guaranteed Renewable Life and Accident and Health Insurance Policies*. The standard was also reformatted. On adoption of the revised ASOP No. 10 in 1992, Recommendations 1, 5, and 6 and their accompanying interpretations were eliminated.

ASOP No. 10 was revised in 2000 to reflect further GAAP developments.

Since 2000, several AICPA Statements of Position pertinent to insurance contract accounting have been issued. In addition, certain features of insurance contracts are now considered under GAAP to be embedded derivatives. These features are accounted for at fair value, which has been more specifically defined by SFAS 157, *Fair Value Measurements*. As a result of these developments, the ASB authorized another update to ASOP No. 10. In this update, the task force recommending the changes has removed interpretations of various SFAS, SOP and other forms of GAAP literature and focused the standard on those activities for which actuaries are most directly responsible. This resulted in the deletion of the "Special Situations" section in the existing version of ASOP No. 10. The ASB believes these sections included interpretations of authoritative GAAP guidance, which is beyond the scope of the actuary's role. Actuaries seeking information on how such "special situations" are handled in practice can refer to other relevant literature.

Request for Comments

The task force would appreciate comments on all areas of this proposed revision and would like to draw the readers' attention to the following areas in particular:

1. Does the proposed revision appropriately eliminate interpretations of GAAP that are the responsibility of the accounting profession and its governing bodies?
2. The proposed revision incorporates a new category of assumptions referred to as "market-estimate assumptions" to address the determination of liabilities measured at fair

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value and for which market-observable prices do not exist. Is this additional guidance appropriate and useful?

3. Section 3.5.3, Effect of Provision, offers guidance for situations when the directional impact of the provision for adverse deviation is unclear. Is this guidance appropriate and useful?

The ASB reviewed this draft at its June 2010 meeting and approved its exposure.

Task Force on Revision of ASOP No. 10

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The ASB establishes and improves standards of actuarial practice. These ASOPs identify what the actuary should consider, document, and disclose when performing an actuarial assignment. The ASB's goal is to set standards for appropriate practice for the U.S.

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PROPOSED REVISION OF ACTUARIAL STANDARD OF PRACTICE NO. 10

**METHODS AND ASSUMPTIONS FOR USE IN
LIFE INSURANCE COMPANY
FINANCIAL STATEMENTS
PREPARED IN ACCORDANCE WITH US GAAP**

STANDARD OF PRACTICE

Section 1. Purpose, Scope, Cross References, and Effective Date

- 1.1 Purpose—This actuarial standard of practice (ASOP) provides guidance to actuaries when performing professional services related to the preparation of life insurance companies' financial statements prepared in accordance with US generally accepted accounting principles (GAAP).
- 1.2 Scope—This standard applies to actuaries when performing professional services related to selecting or reviewing methods or assumptions used in the preparation of life insurance company GAAP financial statements.

The actuary should comply with this standard except to the extent it may conflict with applicable law (statutes, regulations, and other legally binding authority) or authoritative GAAP guidance (such as Financial Accounting Standards and Technical Practice Aids issued by the Financial Accounting Standards Board, Statements of Position issued by the American Institute of Certified Public Accountants, Staff Accounting Bulletins issued by the US Securities and Exchange Commission and other guidance issued by authoritative bodies). If compliance with applicable law or authoritative GAAP guidance requires the actuary to depart from the guidance set forth in this standard, the actuary should refer to section 4.2, Deviation from Standard.

- 1.3 Cross References—When this standard refers to the provisions of other documents, the reference includes the referenced documents as they may be amended or restated in the future, and any successor to them, by whatever name called. If any amended or restated document differs materially from the originally referenced document, the actuary should consider the guidance in this standard to the extent it is applicable and appropriate.
- 1.4 Effective Date—This standard will be effective for any actuarial work product covered by this standard's scope produced on or after four months after adoption by the Actuarial Standards Board (ASB).

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Section 2. Definitions

The terms below are defined for use in this actuarial standard of practice, and are intended to conform with authoritative GAAP guidance, where applicable.

- 2.1 **Best-Estimate Assumption**—An assumption that reflects anticipated experience with no provision for risk of adverse deviation.
- 2.2 **Costs**—All benefit payments and expenses associated with issuing and maintaining a company’s insurance policies and contracts, with no provision for profit.
- 2.3 **Deferred Policy Acquisition Cost (DPAC)**—An asset representing the unamortized portion of policy acquisition expenses.
- 2.4 **Deferred Sales Inducements (DSI)**—An asset representing the unamortized portion of sales inducements to policyholders.
- 2.5 **GAAP Net Premium**—The portion of gross premium that provides for costs.
- 2.6 **Gross Premium**—Amounts contractually required to be paid or anticipated to be contributed by the policyholder.
- 2.7 **Lock-In**—A requirement to continue using original basis assumptions (as set at issue, acquisition, or prior redetermination due to a premium deficiency).
- 2.8 **Market-Estimate Assumption**—An assumption, obtained from market data, that represents what a typical market participant would use in assessing the amount the participant would pay to acquire a given asset, or the amount the participant would require to assume a given liability (a so-called “exit market” price).
- 2.9 **Net GAAP Liability**—The GAAP policy benefit liability less any associated DPAC and DSI.
- 2.10 **Policy Benefit Liability**—An accrued obligation to policyholders that relates to the payment of future costs and amounts accrued for unearned revenue. The amount accrued for unearned revenue may or may not be shown separately in the company’s financial statements, but is, in any case, included in the policy benefit liability for purposes of this standard.
- 2.11 **Premium Deficiency**—A condition that exists when the net GAAP liability plus the present value of future gross premiums is less than the present value of future benefits and expenses using current best estimate assumptions.

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- 2.12 Risk of Adverse Deviation—The risk that actual experience may differ from best-estimate assumptions in a manner that produces costs higher than assumed or revenues less than assumed.

Section 3. Analysis of Issues and Recommended Practices

- 3.1 The Role of the Actuary—The GAAP financial statements of life insurance companies are the responsibility of management. The methodologies used in determining financial statement amounts are, for any specific element, generally prescribed by authoritative GAAP guidance. Actuaries frequently participate in the processes of developing specific techniques for application of GAAP methods and selecting or considering assumptions used in the preparation of life insurance company financial statements. To the extent the actuary participates in these activities, the actuary should be guided by this standard. In addition, the actuary should be familiar with accounting and actuarial literature that is relevant to the activities in which the actuary is participating.
- 3.2 Categories of Assumptions—Two general approaches to establishing actuarial assumptions are used in the preparation of GAAP financial statements: best-estimate assumptions and market-estimate assumptions. The type of assumption used and whether any additional provisions are added to the assumption are dictated by the particular circumstance and applicable accounting guidance. Some assumptions are periodically reviewed and updated to reflect emerging experience, whereas others are locked-in. The actuary should exercise care to ensure that the proper category of assumptions is used.
- 3.3 Best-Estimate Assumptions—In instances where GAAP requires best-estimate assumptions, the actuary should use assumptions that reflect management’s assessment of emerging experience without provisions for risk or uncertainty. Best-estimate assumptions may be established as the “most likely,” “average,” or “central” outcome, corresponding, respectively, to the mode, mean, or median of a probability distribution. Other interpretations are possible. The actuary should use actuarial judgment to determine which interpretation of best-estimate is appropriate for the situation at hand with reference to the applicable authoritative GAAP guidance.

In advising management as to the selection of best-estimate assumptions, the actuary should consider, among other things, the characteristics and magnitude of the company’s business; the maturity of the company and its rate of growth; the prior experience of the company and the trends in that experience; as well as medical, economic, social, and technological developments that might affect future experience. The actuary’s advice should be based on the company’s actual recent experience data, if, in the actuary’s judgment, it is relevant and credible.

The actuary should also consider relevant industry data or data from other similarly situated companies to supplement available company specific data. ASOP No. 23, *Data*

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Quality, gives further guidance to the actuary on issues related to the selection of data, use of imperfect data, and reliance on data supplied by others.

- 3.4 Market-Estimate Assumptions—Certain financial statement items (for example, derivatives and embedded derivatives) are measured at fair value in GAAP financial statements. When the fair value of an item is called for in GAAP financial statements and not readily observable in the marketplace, a value for such items may need to be calculated. Such calculations commonly incorporate market-estimate assumptions.
- 3.4.1 Reliability of Market-Estimate Assumptions—In determining market-estimate assumptions, the actuary should use relevant and reliable market information to the extent reasonably obtainable. Some assumptions (for example, the market’s assessment of future interest rates) may be directly observable in published sources. When relying on directly observable information, the actuary should consider using multiple sources of the same information to validate the reliability of the chosen source of information, with the goal of establishing assumptions consistent with what a market participant would use.
- 3.4.2 Inferring Market-Estimate Assumptions from Related Information—Where directly pertinent, observable information is not available, the actuary should seek to infer market-estimate assumptions from other observable information. Such information may be obtained by observing market transactions that imply the market’s assessment of the assumption. For example, when making a market-estimate assumption for the volatility of one year returns on a stock market index, the actuary may be able to deduce that assumption from observing the price at which options on that index are trading.
- 3.4.3 Use of Relevant Information—Often, the actuary will not be able to observe market transactions that incorporate the assumptions that are needed. In such situations, the actuary should, to the extent reasonably obtainable, use available observable information that may have relevance in determining market participants’ assessment of the assumption that is required.
- 3.4.4 Using Best-Estimate Assumptions—The actuary may choose a market-estimate assumption based on a best-estimate assumption when there is a lack of other observable bases for the assumption. In such circumstances, the actuary should consider observable indications of what market participants believe is an appropriate margin to cover the risk of uncertainty and include it in the market-estimate assumption.
- 3.5 Provision for Risk of Adverse Deviation—In certain instances GAAP requires a provision for the risk of adverse deviation in assumptions.

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- 3.5.1 Degree of Risk—When determining the provision for risk of adverse deviation, the actuary should consider the degree of risk and uncertainty in that assumption in total and at each future duration. The actuary should consider policy features that reduce risk, such as indeterminate premiums or dividends, in determining a provision for adverse deviation in the assumptions. The actuary should consider the magnitude and frequency of fluctuations in relevant historical experience, if available. For assumptions that are relatively insignificant, the actuary may decide to add little or no provision for risk of adverse deviation.
- 3.5.2 Relationship to Best-Estimates—In selecting assumptions that include provision for the risk of adverse deviation, the actuary should consider whether such assumptions bear a reasonable relationship to the best-estimate or market-estimate assumptions, as appropriate. For example, in situations where a premium deficiency does not exist using best-estimate assumptions, the provision for risk of adverse deviation should not be so significant as to increase the resulting GAAP net premium above the gross premium.
- 3.5.3 Effect of Provision—The provision for risk of adverse deviation should be such that the net GAAP liability is increased. If the direction of the effect of including a provision for adverse deviation in an assumption is not clear, the actuary should attempt to determine the nature of a provision for adverse deviation that is appropriate. If the actuary is unable to determine the directional effect, then the actuary need not include a provision for adverse deviation in that assumption. The additive impact of provisions for risk of adverse deviation should be established at a level that provides for an appropriate amount of adverse deviation in aggregate.
- 3.6 Lock-In—Assumptions used in valuing policy benefit liabilities and DPAC associated with traditional long duration insurance contracts may require assumptions that are subject to lock-in. When lock-in applies, the assumptions selected at contract inception are to be used for all future periods unless there has been a loss recognition event or purchase accounting is applied. It is appropriate to adjust policy benefit liabilities and DPAC, even when they are subject to lock-in, for persistency experience different than assumed.
- 3.7 Internal Consistency—In advising management as to the selection of assumptions, the actuary should identify assumptions that, when taken together, reflect all pertinent areas of expected future experience and are specific to the product, line of business, or block of business for which financial statement values are being calculated. These assumptions should be internally consistent. Assumptions that are not dependent on specific product features or company specific considerations (for example, interest rates or equity returns) should be consistent across product lines. Similar concepts of consistency should be applied in establishing provisions for risk of adverse deviation.

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- 3.8 Methods and Techniques—Methods used to determine GAAP financial statement amounts are generally prescribed by authoritative GAAP guidance and will vary according to the specific literature that applies.

When developing detailed techniques for determining financial statement amounts in accordance with the prescribed GAAP methodology, the actuary should consider the following:

- a. the substance of the relationship between the issuer of the policy and the policyholder;
 - b. the classification of the contract (for example, insurance versus investment);
 - c. the duration of the contract;
 - d. materiality of resulting financial statement amounts;
 - e. the cash flow characteristics of the contract, including insurance company cash flows related to the contract, but not directly associated with the contract provisions;
 - f. the sensitivity of the resulting financial statement amounts to changes in assumptions; and
 - g. techniques consistent with those used historically for valuing contracts similar to those issued by the insurance company, if such information is available.
- 3.9 Premium Deficiency Testing—When testing for premium deficiency, GAAP guidance requires the actuary to use best-estimate assumptions, current at the time of testing, without making provision for adverse deviation. If recognition of a premium deficiency is required, the current best-estimate assumptions are used to determine future changes in the net GAAP liability. For types of contracts where lock-in applies, the current best-estimate assumptions are then subject to lock-in.
- 3.10 Recognition of Premiums—The actuary should use appropriate methods to recognize premiums in income. These methods are determined by authoritative GAAP guidance and vary by the type of contract. The recognition of GAAP net premiums in the policy benefit liability, DPAC, and DSI computations should be consistent with the treatment of gross premiums in the income statement.
- 3.11 Simplifications and Approximations—The actuary may, when appropriate, use assumptions and techniques (for example, models) that simplify calculations. Simplification and approximations are acceptable only if the results are not reasonably expected to materially differ from more detailed calculations. The actuary should seek

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guidance from accounting professionals on questions related to financial statement materiality.

- 3.12 Documentation—The actuary should prepare and retain appropriate documentation regarding the methods, assumptions, procedures, and the sources of the data used. The documentation should be in a form such that another actuary qualified in the same practice area could assess the reasonableness of the actuary’s work.

Section 4. Communications and Disclosures

- 4.1 Communications—When issuing an actuarial report under this standard, the actuary should consider the intended purpose of the actuarial report and be guided by ASOP No. 41, *Actuarial Communications*.
- 4.2 Deviation from Standard—If the actuary departs from the guidance set forth in this standard, the actuary should include the following where applicable:
- 4.2.1 the disclosure in ASOP No. 41, section 4.2, if any material assumption or method was prescribed by applicable law (statutes, regulations, and other legally binding authority);
 - 4.2.2 the disclosure in ASOP No. 41, section 4.3, if the actuary disclaims responsibility for any material assumption or method in any situation not covered under section 4.2.1 above; and
 - 4.2.3 the disclosure in ASOP No. 41, section 4.4, if the actuary otherwise deviated from the guidance of this ASOP.

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Appendix

Background and Current Practices

Note: This appendix is provided for informational purposes, but is not part of the standard of practice.

Background

The American Institute of Certified Public Accountants (AICPA) developed *Audits of Stock Life Insurance Companies (Audit Guide)* in 1972 with the cooperation of life insurance company accountants and actuaries. The *Audit Guide* represented the first effort by the accounting profession to establish GAAP for the life insurance industry. The Financial Accounting Standards Board (FASB) is now responsible for the determination of GAAP for companies whose financial statements are audited. It does so through the promulgation of Statements of Financial Accounting Standards (SFAS).

GAAP standards for stock life insurance companies are primarily established by SFAS No. 60, *Accounting and Reporting by Insurance Enterprises*, and SFAS No. 97, *Accounting and Reporting by Insurance Enterprises for Certain Long-Duration Contracts and for Realized Gains and Losses from the Sale of Investments*. The FASB issued SFAS No. 60, which generally codified the concepts in the *Audit Guide*, in 1972. In 1987, the FASB issued SFAS No. 97, which (1) established GAAP for certain forms of insurance contracts not specifically addressed by SFAS No. 60, primarily UL-type contracts; (2) established GAAP for investment contracts not involving a significant insurance component; and (3) revised GAAP for limited-payment contracts. In November 1990, the AICPA issued *Practice Bulletin 8*, providing guidance for certain questions related to SFAS No. 97. In 1995, the FASB issued SFAS No. 120, *Accounting and Reporting by Mutual Life Insurance Enterprises and by Insurance Enterprises for Certain Long-Duration Participating Contracts*, which extended the requirements of SFAS No. 60 and SFAS No. 97 to mutual life insurers; and established accounting for certain participating life insurance contracts of mutual life insurance enterprises (and stock life insurance subsidiaries of mutual life insurance enterprises) in its Statement of Position (SOP) No. 95-1, *Accounting for Certain Insurance Activities of Mutual Life Insurance Enterprises*. This statement permits other stock life insurers to apply its provisions to participating life insurance contracts that meet the SOP's conditions. Other standards are also relevant, as is prevailing accounting practice in areas not specifically addressed by an SFAS. Prior to the issuance of SFAS No. 120, mutual life insurers' statutory financial statements were, in practice, described as being in accordance with GAAP.

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Current Practices

The Academy had promulgated *Financial Reporting Recommendations and Interpretations* applicable to GAAP for insurance companies, thus establishing guidance to actuaries in this area before the formal appearance of ASOP No. 10 in 1989. Because of changes in GAAP resulting from SFAS No. 97, SFAS No. 120, and evolution in actuarial practice, ASOP No. 10 was revised in 2000. Since 2000, GAAP has continued to evolve and it is appropriate once again to replace certain existing guidance and to promulgate a more generally applicable standard of actuarial practice with respect to life insurance company GAAP financial statements.