



AMERICAN ACADEMY of ACTUARIES

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April 27, 2015

Mr. Michael McRaith
Director, Federal Insurance Office
U.S. Department of Treasury
1500 Pennsylvania Avenue Northwest
Washington, DC 20220

RE: Request to Compare the Valuation for U.S. GAAP Loss Recognition Testing for Long Duration Contracts to the Requirements of ICP 14

Dear Director McRaith,

On behalf of the American Academy of Actuaries'¹ Risk Management and Financial Reporting Council and its Financial Reporting Committee, we are pleased to respond to your request for our views on the similarities between certain long duration contract valuation methodologies in use today in the United States for insurance liabilities.

Attached is a table (Appendix A) that compares the key features of long duration contract liability valuation under:

- Loss recognition for U.S. generally accepted accounting principles (GAAP);
- Asset adequacy testing under U.S. statutory requirements;
- The proposed requirements under the new International Financial Reporting Standards (IFRS) for insurance contracts being developed by the International Accounting Standards Board (IASB); and
- The requirements of the International Association of Insurance Supervisors' (IAIS) Insurance Core Principle (ICP) 14.

While the original request was to compare the valuation under U.S. GAAP loss recognition testing and ICP 14 current estimates, we have also included a comparison of the U.S. statutory and IFRS requirements in the interest of completeness. Furthermore, we have included footnotes linking each standard to the relevant accounting literature.

¹ The American Academy of Actuaries is an 18,500+ member professional association whose mission is to serve the public and the U.S. actuarial profession. The Academy assists public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

In reviewing this table, we recommend keeping in mind the following:

- The requirements of ICP 14 are stated in principle-based form. Reliance is on the supervisor to apply these principles. The entries in this table are based on our understanding of their likely interpretation;
- ICP 14 explicitly recognizes that actuarial judgment will be needed when setting long-term assumptions; and
- ICP 14 allows both a current value based and book value based valuation. Therefore, it is up to the supervisor to determine which is required.

Based on our review of these methods, the requirements of U.S. GAAP loss recognition testing for long duration contracts are substantially in compliance with ICP 14, with the exception of three items:

- ICP 14 generally requires a margin over current estimate (MOCE), while loss recognition testing excludes any margin;
- The time value of options and guarantees is not included in the U.S. GAAP loss recognition testing; and
- ICP 14 includes contract boundary language that excludes “additional voluntary contributions premiums, except where provided for as a unilateral option under the contract.”

However, we believe these discrepancies can be mitigated:

- Since the MOCE is, in most cases, an explicit addition to current estimates under the ICP, a comparison of values under the two bases should be readily possible.
- To address the fact that the U.S. GAAP’s loss recognition testing has no time value of options and guarantees, the best estimate concept can be extended to products with guarantees. For material options and guarantees, stochastic valuation techniques should be used. For consistency with the best estimate principles of loss recognition testing, non-best estimate elements such as explicit risk margins and the company’s own non-performance risk should be excluded from the stochastic valuation.
- The additional voluntary contributions premiums, except where provided for as a unilateral option under the contract, could be excluded from U.S. GAAP’s loss recognition testing (e.g., assume a zero premium persistency factor).

In addition to this comparison, we reviewed the International Actuarial Association’s (IAA) 2009 paper on “[Measurement of Liabilities for Insurance Contracts: Current Estimates and Risk Margins](#)” to identify any additional considerations that might be relevant to this discussion. After reviewing the materials and discussing the paper with actuaries who helped to write it, we conclude that the educational material presented in the paper is consistent with the findings above.

Thank you for inviting us to provide a comparison between the U.S. GAAP loss recognition testing and ICP 14 current estimates. If you have any questions or would like to discuss these

issues in more detail, please contact Lauren Sarper, the Academy's senior policy analyst for risk management and financial reporting, at 202.223.8196 or sarper@actuary.org.

Sincerely,

William Hines, MAAA, FSA
Vice President
Risk Management and Financial Reporting
Council
American Academy of Actuaries

Leonard Reback, MAAA, FSA
Chairperson, Financial Reporting Committee
Risk Management and Financial Reporting
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cc: Jeff Schlinsog, Chairperson, Financial Regulatory Task Force Risk Management and
Financial Reporting Council, American Academy of Actuaries

Appendix A
Table 1: Comparison of U.S. GAAP, U.S. Statutory, IFRS, and ICP 14
For Long Duration Contracts

Item	U.S. GAAP Loss Recognition Testing (LRT) ¹	U.S. Statutory Asset Adequacy Testing (AAT) ²	IFRS 2013 Exposure Draft (ED) Building Blocks ³	ICP 14 ⁴
Future Benefits Including Dividends	Best Estimate LRT requires a gross premium valuation (GPV) for purposes of evaluating reserve adequacy. The GPV requires use of the company's current best estimate assumptions, i.e., unbiased assumptions that do not reflect conservatism.	Provides for moderately adverse experience through moderately adverse AAT scenarios and conservatism in assumptions.	Mean (expected value)	Current estimate—all relevant future cash flows that arise in fulfilling the insurance obligations, using unbiased, current assumptions. From ICP 14.7.4: "Actuarial and statistical techniques may be used in determining the current estimate, including deterministic, analytical and simulation techniques."
Maintenance Expenses	Directly related expenses only.	Directly related and allocated overheads.	Direct including certain allocated overheads.	Direct and possibly allocated overheads. ICP 36's silent on precise definition.
Premiums	Gross premiums	Gross premiums	Gross premiums	Gross premiums
Guarantees	Expected scenario is typically used and thus the time value of guarantees might not be captured. LRT would not apply to all GAAP liabilities. For instance, variable annuity (VA) living benefits accounted for as embedded derivatives would not undergo the deterministic GPV under LRT. These would continue to be valued stochastically, with non-best estimate elements excluded (explicit risk margins and the company's own non-performance risk (NPR) in the case of liabilities required to be measured at fair value).	Consistent with each scenario from the range of scenarios used.	Fair value, stochastic, or expected scenario depending on guarantee type; reflects time value and intrinsic value.	Fair value or book value. From ICP 14.11.1: "The method used to value embedded options and guarantees should be appropriate to the nature, scale and complexity of risk and may include stochastic simulation or simplified methods as appropriate."
Discount Rate	Expected future returns on assets. The discount rate under LRT is the earned book rate on the supporting asset portfolio, adjusted for expected defaults and investment expenses; assumptions for reinvestment are included as applicable for the valuation.	May be regulator defined scenarios or scenarios chosen from a stated range.	Current market returns on assets—yield curves, adjusted for tenors where market isn't robust and extended for tenors that do not exist in the market.	Current market returns on assets—yield curves, adjusted for tenors where market isn't robust and extended for tenors that do not exist in the market, or book returns on assets. These rates should be adjusted for defaults and investment expenses.
Margin	None in the best estimate liability (BEL) used for LRT. The margin in the actual GAAP reserve varies by type of contract.	Assumptions include provision for moderately adverse experience.	Separate risk adjustment and contractual service margin.	Separate, explicit margin over current estimate (MOCE) generally required in principle. ⁵
Asset Value	Current value	Book value	Mixed market & book value	Assets and liabilities measured consistently
Contract Boundaries	Includes additional voluntary contributions premiums on an expected basis.	Includes additional voluntary contributions premiums on an expected basis.	Includes additional voluntary contributions premiums on an expected basis.	ICP 14.8.4: The contract boundary language excludes "additional voluntary contributions premiums, except where provided for as a unilateral option under the contract."

¹ "Topic 944—Financial Services-Insurance," Accounting Standards Codification, FASB, October 2010.

² "Actuarial Opinion and Memorandum Regulation 822-Asset Adequacy Analysis Requirements," NAIC, April 2010, <http://www.naic.org/store/free/MDL-822.pdf>.

³ "Insurance Contracts," ED/2013/7, IFRS, June 2013, <http://www.ifrs.org/Current-Projects/IASB-Projects/Insurance-Contracts/Exposure-Draft-June-2013/Documents/ED-Insurance-Contracts-June-2013.pdf>.

⁴ "ICP 14 Valuation," IAIS, October 2011, <http://iaisweb.org/index.cfm?event=showPage&nodeId=25227>.

⁵ ICP 14 allows for an implicit margin in some cases, and does allow for disclosure of uncertainty rather than estimating a margin in certain cases, such as some litigation liabilities.