Educational Note

Insurance and Annuity Illustrations

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EDUCATIONAL NOTE

Educational notes do not constitute standards of practice. They are intended to assist actuaries in applying standards of practice in specific matters. Responsibility for the manner of application of standards in specific circumstances remains that of the practitioner.

INSURANCE AND ANNUITY ILLUSTRATIONS

COMMITTEE ON LIFE INSURANCE PRACTICE

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INSURANCE AND ANNUITY ILLUSTRATIONS

I. Preamble

This educational note was produced to provide guidance to actuaries involved in the development of illustration scenarios in compliance with the Canadian Life and Health Insurance Association (CLHIA) Guideline for Life Insurance Illustrations (approved by the CLHIA Board of Directors in December 1996, and any subsequent amendments or additions thereto).

The CIA Council, although it supports the CLHIA Guideline for Life Insurance Illustrations and encourages its use in practice, views illustration and related matters as an industry issue that is best monitored by other organizations such as LUAC and CLHIA. Given that actuaries are not necessarily involved in the development, implementation, and presentation of illustrations, the CIA believes that its disciplinary process would not be an effective tool of ensuring compliance with the guideline.

II. Scope and Purpose

This educational note addresses the considerations for actuaries to follow when work is performed in the preparation of insurance and annuity illustrations. Specifically, the educational note was not only designed to help the member in the application of the CLHIA guidelines, but also to include considerations for in-force illustrations and other products.

Where other regulations, industry guidelines or standards exist, the member involved in the development of illustrations should ensure that the illustrations meet those regulations, guidelines or standards. In this regard, this educational note does not supersede other guidelines, but rather, complements them.

For products or situations (e.g., in-force illustrations) where industry standards do not exist, the spirit of the considerations contained in this note should apply, but the specific application must take into account practical issues and current industry practice.

III. Definitions

"Illustrations" include, but are not limited to, numeric or graphic presentations of future values or product features. Materials which give a verbal description of these future values or features are also considered illustrations (for further examples, see Explanatory Notes to Guidelines).

"Values and Features" include, but are not limited to, premiums, cash values, policy benefits, offset points, dividends.

The CLHIA guideline refers to the CLHIA Guideline No. 6, "Guideline for Life Insurance Illustration," dated December 10, 1996, and future amendments and additions thereto, including explanatory notes.

Primary scenario, *as defined in the CLHIA guideline, refers to one scenario falling within the range of scenarios deemed suitable by the insurer*. The alternate scenario is a scenario that is less favourable than the primary scenario.

IV. Considerations

1. Professional Responsibility of Member to the Public

Rule 1 of the CIA's Rules of Professional Conduct states that a member shall fulfill the profession's responsibility to the public. Rule 7 states that a member shall not perform professional services when the member has reason to believe that they may be used to mislead.

The actuary involved in the determination of rates, values, or the format of illustrations should ensure that they are clear and fair, and should avoid presentation that might be misleading to the public.

The actuary should be cognizant that illustrations will create "policyholder reasonable expectations" as referenced in the consolidated standards of practice.

2. Familiarity with Users and Uses of Sales of Illustrations

The actuary involved in the determination of rates, values, or the format of illustrations should take into account the potential users of the illustrations and the purpose that the illustrations will serve.

3. Determination of Range of Primary Scenarios

An actuary involved in the determination of a range of suitable scenarios for illustrations should ensure that the range of scenarios is reasonable based on the policies, practices, and experience of the company, as well as the economic environment.

4. Demonstrate Reasonable Sensitivity

An actuary involved in the determination of an alternate scenario must choose the scenario so as to demonstrate the sensitivity of the policy to changes in experience which may materially impact the policy's values or features.

5. Documentation

The member should document the rationale and analysis behind selecting the range of suitable primary and alternate scenarios for illustrations.

V. Guidance

The actuary should exercise caution in the development of the primary range of scenarios. Current experience by itself may not be an appropriate basis for determining the range of scenarios. Generally, the range for the primary scenario should be developed by analyzing historical results for appropriate periods. In designing the range for the primary scenario, the historical results should be adjusted for current factors. For example, historical results should be adjusted to appropriately reflect factors such as:

- the Investment Income Tax
- current tax law
- current expense levels and margins for profitability, compensation, etc.

In addition, the historical result should be adjusted for factors that may be unique or one-sided in the historical results. Examples are:

- the impact of the declining Canadian dollar on international investment yields
- temporary enhancements to policyholder dividends

The member should take into account the company's intended management of the product in disclosing a range of scenarios.

In the development of a range of scenarios, the member should select a range that is narrow enough so that any scenario chosen in the range is reasonably representative. For example, an interest rate range of 5% to 10%, while including your long-term experience of 7%, might produce such wide variations in illustrations that it could give rise to abuses in the marketplace. Conversely, the range should also be wide enough to limit the number of revisions that might be required as future experience changes. The actuary should be careful not to leave the user of the illustration with the impression that any chosen primary scenario is a prediction or estimate of the results.

The scenarios should encompass all experience factors which might materially impact the results. For practical reasons, however, the member might chose to combine the variation in a number of assumptions into one scenario. For example, an alternate scenario might be based on a deterioration in mortality of 20%, an increase in expenses of 20%, and a reduction in interest rate of 1%. For simplicity, the member could approximate the effect of all these assumption changes by a reduction in interest rate of 2%, provided the two approaches produce comparable results. The member should, however, present the alternate scenario as a combination of a deterioration in mortality, expenses, and interest, not a change in interest rate only.

In developing an alternate scenario, the member should consider the variability of the experience factors. The change in each factor should be in the same order of possibility. For instance, it would not make sense to combine an interest change of 1% with a mortality change of 5%. The former is not only possible, but probable, within the next year, whereas the chance of such a change in mortality in the short term is very small.

The member should be careful not to leave the user of the illustration with the impression that the alternate scenario is a worst-case scenario, but is only one in a range of possible outcomes. For this purpose, the member is reminded that the goal of the alternate scenario is to provide an indication of the sensitivity of the results to changes in experience.

In the material that communicates the range for the primary scenarios to the users of the illustration, information should be provided on the variability of the results. For example, universal life investment equity index options can expect more year-to-year fluctuation in return than guaranteed interest options.

Other elements to consider when determining a range of scenarios include, but are not limited to:

- policy provisions
- company practice (e.g., in crediting interest rates, dividend policy, etc.)
- potential impact of the illustrations on reasonable policyholders expectations (e.g., current market conditions vs. illustration assumptions, in-force illustrations)
- ease of implementation of the new scenarios – in particular, if emphasis is on current market conditions
- whether the product is lapse-supported

It is also important to ensure consistency between the assumptions used in a scenario.

Many indexes used in index-linked investment options have not been around for a long enough period of time to produce a representative return. One solution is to extend the period of time sufficiently to develop a reasonable range by modifying the returns on other known indexes that correlate well with the index being studied.

In addition, some considerations are specific to certain product lines.

Where a product has special features, the cost and source of such features should be recognized consistently in all the assumptions when developing the recommended range. For example, on a policy with a bonus interest feature, the company may be assuming that IIT credits on surrender will be used to pay for the bonus. In this case, if the alternate scenario involves a lower than expected lapse rate, the effect of this on the IIT credit, and, consequently, the secondary effect on the interest bonus will need to be reflected.

For traditional participating insurance, the primary range of scenarios should reflect dividend scales that are reasonable given historical experience, and take into account:

- trends in investment returns
- composition of the portfolio of assets, both the type of assets, and the term to maturity of fixed term assets
- the investment policy and the dividend policy of the company
- recent company experience on factors impacting the dividend scale (e.g., mortality, expenses, taxes, lapses, etc.)

The company's surplus policy and its practice with respect to adjusting the dividend scale could also have an impact on the sustainability of the dividend scale. The member should be aware of the company's dividend policy with respect to illustrated dividends, and the process under which the dividend scale will be changed.

Considering all of this, there may be circumstances where it is not appropriate to include the current dividend scale in the primary range of scenarios.

For universal life, consideration should be given to:

- guaranteed credited rates
- long-term averages of investment returns by major investment options
- the availability and use by the company of hedging instruments for index-linked investment options
- guaranteed mortality or other charges
- interest credited compared to gross investment returns
- recent company experience which might impact its investment spread

For other products, consideration should be given to:

- recent and anticipated experience in the factors affecting results

VI. Sources of Information

The member should consult a variety of information sources to develop the range of scenarios. Examples of sources include:

- the company's valuation report
- the company's long range plan
- economic forecasts
- spot yield curves
- CIA economic statistics
- historical results as reported by organizations such as Standard & Poor's, Morgan Stanley, etc.