LIFE FINANCIAL REPORTING SUB COMMITTEE

Information Note: Target Surplus

1. INFORMATION NOTE STATUS

1.1 This Information Note was prepared by the Life Financial Reporting Subcommittee (LFRSC) of the Life Insurance Wealth Management Practice Committee (LIWMPC) of the Institute of Actuaries of Australia ("IAAust"). This Information Note does not represent a Professional Standard or a Practice Guideline of IAAust. It has been prepared for the purposes of providing information and generating discussion on aspects of target surplus that may lead to divergent practices within the IAAust's membership.

Feedback from IAAust members is encouraged and should be forwarded to the sub-committee (care of Richard Weatherhead).

This Information Note was issued in February 2007 and will be reviewed annually.

2. BACKGROUND

- 2.1 Target surplus is an amount of capital additional to a capital benchmark that a life insurance company chooses to hold, given its risk tolerance levels, to allow for adverse future experience.
- 2.2 A company may choose to manage its capital against a number of different capital benchmarks in its target surplus policy and may have different risk tolerance levels for each benchmark.
- 2.3 The Australian Prudential Regulation Authority (APRA) in its role as regulator of Australian life insurance companies has raised the profile of target surplus in recent years. The current draft of Prudential Standard LPS 220 requires a life company to have a Risk Management Strategy (RMS) that identifies its approach to capital management. The Prudential Practice Guide (LPG 200) suggests that a life company will ordinarily have a capital management plan that will include a target surplus policy.
- 2.4 This note aims to provide additional guidance by addressing a range of issues that should be considered by actuaries where they are involved in target surplus policy development and calculation for life insurance companies.
- 2.5 The Board is responsible for defining the risk tolerance of the company and how this interacts with the desired level of shareholder returns. As such, the Board is ultimately responsible for setting the capital management policy of the company. The target surplus policy forms an important part of the capital management policy.

- 2.6 It is recognised that there are also other key stakeholders including senior management, the regulator, customers and shareholders who have interests in the appropriate approach to adopt. The actuary needs to actively consider their interests in any advice on formulating and communicating any recommended approach as well as during the ongoing management of the target surplus policy.
- 2.7 Target surplus can, in some circumstances, be similar to economic capital and then the principles set out in this paper apply to the determination and management of economic capital. However there are many definitions and uses of economic capital and where these are not consistent with the definition of target surplus then these principles may not be relevant.

3. DEFINITION OF TARGET SURPLUS

3.1 Target Surplus can be defined as:

"the target amount (or range) of assets that a life insurer chooses to hold in excess of its selected capital benchmark(s)"

There are a number of capital benchmarks that a company may choose to measure its assets against: -

- a) regulatory Solvency requirement,
- b) regulatory Capital Adequacy requirement,
- c) an internal model of capital required,
- d) the capital required to maintain a particular rating from a ratings agency,
- e) working capital requirements and need to finance new business strain and any capitalised expenses, or
- f) any other measure as determined by the Board of the company.
- 3.2 Target Surplus Policy can be defined as:

"the basis on which a life insurer determines its Target Surplus(es) and the process it uses for determining whether and how to adjust the level of additional capital held to meet its target(s)"

4. ISSUES TO CONSIDER WHEN DETERMINING A LEVEL OF TARGET SURPLUS

4.1 Determining a level of target surplus for a particular capital benchmark may be approached by specifying an acceptable risk of breaching the benchmark capital requirements. The items requiring specification are interdependent, and include:

- (a) Benchmark against which target surplus is to be measured (see paragraph 3.1).
- (b) Time horizon over which target surplus is to be measured. This requires an evaluation of the elapsed time likely to occur between the occurrence of adverse experience and management becoming aware of the issue, making decisions, obtaining required approvals and, finally, implementing the agreed actions.
- (c) Degree of tolerance for breaches of the selected benchmark with reference to the corporate structure of the entity under consideration and the extent to which this provides access to capital outside of the entity if required. It is likely that the actuary will consider there to be less tolerance for a breach of a regulatory benchmark than a breach of other internally imposed benchmarks. It will be necessary to express the tolerance profile of the organisation to breaches in ways that can be practically utilised.
- (d) Consideration of the various stakeholders and how their requirements are embedded in the definition of the target surplus approach.
- (e) Consideration of impact of target surplus approach with other measures that may be used by the Company, such as cost of capital, return on capital.

Further, consideration of the range of acceptable outcomes around the target level determined will also need to be considered.

- 4.2 Other alternative approaches also exist to determine the level of target surplus, for example, specifying the costs of holding additional capital or de-risking the portfolio and comparing directly with the costs of potential regulatory intervention were the benchmark capital levels breached.
- 4.3 A range of issues should be considered by the actuary in performing modelling to assist in the assessment of the amount of target surplus, including:
 - (a) Assessment of all risks that are currently faced by the entity, including for example strategic and political risks, and the framework currently in place to manage these risks. The capital standards developed by the Life Insurance Actuarial Standards Board (effective 31 December 2005) are intended to consider all material risks for a well diversified life insurer and therefore in most circumstances it would not be expected that additional risks would be identified for this purpose.

- (b) Development of a method for quantification of the risks, taking account of the materiality of their contribution to model development. A key issue in the development of the models is the approach to the development of the underlying distribution of each risk to be incorporated in the target surplus assessment. It is noted that there are a variety of means of performing this modelling and the appropriate approach will depend on the entity's specific risk situation and materiality of each risk. Examples of the possible approaches include deterministic modelling supported by stress testing, use of scenario testing based on management estimates of loss events or stochastic modelling of each distribution.
- (c) Particular care should be taken in modelling the tail probabilities and asymmetric outcomes that are relevant to the capital calculations.
- (d) A further factor for consideration is the quantification of risks, including the extent to which correlation between risks is reflected and if so, how the approach adopted can be supported. In considering the appropriate allowance to make for diversification between risks it is important to consider whether this may break down in extreme scenarios.
- (e) Assessment of the plans in place for dealing with adverse scenarios and how these should be incorporated in the derivation of the target surplus amount, together with consideration of the discretions available to management and the Board.
- 4.4 The actuary may also potentially need to assist in the reconciliation of results on different bases for the understanding of stakeholders, in particular between the accounting position, regulatory position and economic position where these differ.
- 4.5 It is also necessary to consider how the target surplus position will be monitored, managed and communicated over time, including:
 - (a) Frequency of assessment of actual position, including criteria for determining events which may require reassessment of the actual position to occur more or less frequently.
 - (b) Frequency of assessment of target position, including criteria for determining events which may require reassessment of the target position to occur more or less frequently.
 - (c) Determination of what range of outcomes are acceptable and what points are to be reached before different degrees of remedial action are required.

- (d) Review of policy on a regular basis, including reconsideration of risk tolerance and risks considered, and criteria for assessing events which may require reassessment of policy outside of the regular review.
- (e) Assessment of extent to which management actions are consistent over time with the decisions embedded in target surplus quantification.

5. TARGET SURPLUS AND REGULATORY REQUIREMENTS

- 5.1 There are currently no regulatory requirements in relation to target surplus.
 - However APRA, in its role as regulator of Australian life insurance companies, has raised the profile of target surplus in recent years through its focus on companies having a target surplus policy.
- 5.2 APRA has noted that while the level of target surplus of a life insurer is a decision for the company themselves, they will take into account a number of factors when assessing the level of regulatory supervision to apply to an entity, including the actual surplus position and the target surplus policy.
- 5.3 Therefore, when determining a target surplus policy against a regulatory capital benchmark the costs of potentially increased regulatory focus or intervention need to be assessed against the risk and return targets for the entity, the costs of holding additional capital, and the probability and costs of raising additional capital.
- 5.4 The regulatory capital benchmark could be either the Solvency requirement or the Capital Adequacy requirement in respect of the statutory funds and the management capital requirement in respect of the shareholders fund.