ACTUARIAL SOCIETY OF SOUTH AFRICA

APN 406: NON-LIFE REGULATORY RISK MARGIN CALCULATION REQUIREMENTS

Classification

This note is classified as an Advisory Practice Note (**APN**). APNs provide advice to *members* to guide them in their relevant area of practice. Failure to comply with an APN will not in itself constitute grounds for a complaint under the applicable Actuarial Society of South Africa (***ASSA***) disciplinary procedures. However, the Disciplinary Committee investigating an allegation of unacceptable or unprofessional conduct will consider the extent to which a *member* complied with an APN in this category. It is recommended that any departure from an APN be disclosed.

Abstract

The Prudential Standards made in terms of section 63 of the Insurance Act, 2017 and issued by the *Prudential Authority* outline certain requirements for the calculation of the *risk margin* for regulatory reporting. Actuaries are often responsible for calculating and reviewing this *risk margin*. Heads of Actuarial Function are required to express a view on the assumption, methodology, and calculations used in deriving Technical Provisions, which includes the *risk margin*. This APN sets out principles to be considered in calculating the *risk margin* reporting under *the Act* to promote good actuarial practice, consistency across the industry, and compliance with the legislation.

Purpose

This APN provides guidance to *members* of *ASSA* on the calculation of the *risk margin* for non-life insurers for regulatory reporting under the Insurance Act (18 of 2017).

Legislation or Authority

The Actuarial Society of South Africa.

Application

Members calculating or reviewing the technical provisions of a non-life insurer for regulatory reporting under the Insurance Act (18 of 2017).

Disclaimer

Whilst *ASSA* takes all reasonable efforts to ensure that the content of this APN is correct and aligned with legislation and authority applicable as at the date of drafting and publishing under the governing laws of the Republic of South Africa, this APN is given as guidance to *members* of *ASSA* purely to assist with the subject matter covered in the APN. *ASSA* does not warrant that this APN deals with every aspect relating to the subject matter and it does not constitute legal or financial advice. Accordingly, *ASSA* shall have no liability to any *members*, associates and/or any third party for any claim of any nature whatsoever which may arise out of the use of and/or reliance on the contents of this APN. *Members*, associates and/or any third parties hereby waive any rights to any claim of any nature whatsoever which may arise out of the use of and/or reliance on this APN, and further indemnify *ASSA* and hold it harmless against any claim of any nature whatsoever. The responsibility will be on *members* to keep abreast of legislative developments, related guidance issued by regulators and any case law relevant to the subject matter. If there is any conflict between the contents of this APN and the aforementioned legislative developments, related guidance issued by regulators and any relevant case law, the guidance issued by regulators and any relevant case law shall prevail and *members* should obtain independent legal advice on how the legislative developments impact the contents of this APN.

Author

The Actuarial Society Short-term Insurance Committee

Status

Version 1.0 Effective from 1 December 2025

Definitions

The Act	Insurance *Act* (18 of 2017), as amended from time to time, and the *Prudential Standards*.
Best Estimate Liability	The *best estimate liability* as determined in terms of *the Act*, reflecting the present value of expected future cash flows within the contract boundary in respect of an insurance obligation.
FSI	Financial Soundness Standards for Insurers
GN	Guidance Note
GOI	Governance and Operational Standard for Insurers
IFRS	International Financial Reporting Standard
Member or Members	A *member* of the Actuarial Society of South Africa as defined in the Code of Professional Conduct, or a *member* of another recognised actuarial association to whom this Advisory Practice Note applies.
Original Insurer	The *original insurer* is the insurer calculating the *risk margin*.
Prudential Authority	The *Prudential Authority* established in terms of the Financial Sector Regulation Act (9 of 2017).
Prudential Standards	The *Prudential Standards* made in terms of the section 63 of *the Act*, and issued by the *Prudential Authority*.
Reference Insurer	The *reference insurer* is the insurer that is assumed to take over the whole portfolio of insurance obligations of the *original insurer* when calculating the *risk margin*.
Risk Margin	The part of the *technical provisions* that ensures that the value of the *technical provisions* is equivalent to the amount that another insurer would be expected to pay to take over and meet the insurance obligations of the insurer.
SCR	The solvency capital requirement as determined in terms of *the Act and the relevant Prudential Standards*.
Technical Provisions	*Technical Provisions* under *the Act* are the sum of the *best estimate liability* and *risk margin*.

Contents

1. Introduction

1.1 Background

The *risk margin* forms part of the *technical provisions* that are required to be calculated as part of *the Act* for the purpose of demonstrating regulatory solvency. The calculation of these *technical provisions* and subsequently the *risk margin* is defined in *FSI* 2.2 with further guidance provided in the *GN* to *FSI* 2.2.

In Section 14 of *FSI* 2.2, the *risk margin* is defined as:

> *"the part of the technical provisions that ensures that the value of the technical provisions is equivalent to the amount that another insurer would be expected to pay to take over and meet the insurance obligations of the insurer"*

This amount is calculated as the cost of providing an amount of eligible own funds equal to the *SCR* necessary to support the transferred insurance obligations over the remaining contract boundary. The cost of providing these eligible own funds is determined using a "cost-of-capital" approach that is detailed in *FSI* 2.2.

Consequently, the calculation of the *risk margin* is dependent on the following components:

1. Existing insurance obligations as measured by the *technical provisions* defined under *the Act*.
2. Projection of the run-off of the insurance obligations over the remaining lifetime of the insurance contracts.
3. Amount of *SCR* needed to support the run-off of the insurance obligations at each future time-step.
4. The cost of capital rate of providing the required own funds equal to the projected *SCR*.

The definitions and methodology to calculate the above components are described in *FSI* 2.2.

Although *FSI* 2.2 and accompanying *GN* provide detailed information on how to calculate the *risk margin*, they have not resulted in consistent industry practice. This note sets out principles to be considered in calculating the *risk margin* reporting under *the Act* to promote good actuarial practice, consistency across the industry, and compliance with the *FSIs*.

This APN is not endorsed by the *Prudential Authority* and adherence to it should not be assumed to mean that the entity will be aligned to the *FSIs* according to the *Prudential Authority*.

1.2 Scope of this note

The note applies to *members* calculating or reviewing the *technical provisions* of a non-life insurance/reinsurance entity as per the *FSI* and Insurance Act.

1.3 Limitations

This APN considers the *risk margin* based on the *SCR* calculated under the standardised formula. This note does not cover calculating a *risk margin* using an internal or economic capital model.

This APN does not consider *IFRS*17 requirements for a risk adjustment.

This guidance does not preclude the need for the insurer and the Head of Actuarial function to be comfortable that the methods and assumptions applied are reasonable.

1.4 Structure of this note

- Section 2 outlines the general principles behind the calculation of the *risk margin* to lay the foundation for the later sections.
- Section 3 discusses the extent to which new/renewing business should be allowed for in the *risk margin* calculation.
- Section 4 discusses considerations around the *SCR* calculation interval (or time-step).
- Section 5 considers the starting point of the *SCR* projection, whether this should be at t=0 or t=1.
- Section 6 provides guidance on key components of the *SCR* underlying *the risk margin*.
- Section 7 adds further guidance on selection of possible simplifications.

2. General principles

The *risk margin* is defined (and should therefore be calculated) with reference to the *technical provisions* of the insurer. The *technical provisions* are defined and calculated as per the guidance in *FSI* 2.2. These provisions would include claims provision, premium provision, and other *technical provisions*.

The overarching principle of the calculation methodology is described in Section 14.2 of this standard:

> *"The risk margin must be calculated by determining the cost of providing an amount of eligible own funds equal to the SCR necessary to support the insurance obligations over their contract boundary. The rate used in the determination of the cost of providing that amount of eligible own funds is referred to as the "cost-of-capital" rate."*

The *risk margin* is calculated by assuming a "transfer" scenario whereby the insurance obligations of the *original insurer* are transferred to another insurer, called the *reference insurer*.

This transfer scenario is detailed in Section 14.3 of this *FSI*:

> *The calculation of the risk margin must be based on the following transfer scenario:*
>
> a) *The whole portfolio of insurance obligations of the insurer that calculates the risk margin ("original insurer") is taken over by another insurer ("reference insurer");*
>
> b) *The transfer of insurance obligations must include any reinsurance contracts and other risk mitigation instruments relating to these obligations;*
>
> c) *The reference insurer does not have any insurance obligations and any eligible own funds before the transfer takes place;*
>
> d) *After the transfer, the reference insurer raises eligible own funds equal to the SCR necessary to support the transferred insurance obligations over their lifetime;*
>
> e) *After the transfer, the reference insurer has assets to cover its SCR and the* technical provisions*, net of the amounts recoverable from eligible reinsurance contracts and other eligible risk mitigation instruments;*
>
> f) *The assets to cover the SCR are selected in such a way that minimises the SCR for market risk for the reference insurer;*
>
> g) *The SCR of the reference insurer captures underwriting risk with respect to the transferred business, any unavoidable market risk (where material), counterparty default risk with respect to Eligible Reinsurance contracts and other eligible risk mitigation instruments, and operational risk;*
>
> h) *The loss-absorbing capacity of* technical provisions *in the reference insurer corresponds to the loss-absorbing capacity of* technical provisions *in the original insurer;*
>
> i) *There is no loss-absorbing capacity of deferred taxes for the reference insurer; and*
>
> *j) The reference insurer adopts the same future management actions as the original insurer.*

Given the principles underlying the transfer scenario and the position of the *reference insurer,* the *SCR* used in calculating the *risk margin* will usually differ from the *SCR* calculated as part of assessing the overall capital adequacy of the *original insurer*.

3. Allowance for new/renewing business past contract boundary

Section 14.3 of *FSI* 2.2 defines the principles underlying the transfer scenario. However, no explicit statements are made about whether the *reference insurer* continues to renew existing business beyond the contract boundary, and/or write new business.

The *FSI* 2.2 section 14.2 is clear that the *risk margin* is calculated as the cost of providing eligible own funds equal to the *SCR* required to support the *insurance obligations over their contract boundary*.

Therefore, the *risk margin* should reflect the costs of capital required to support the *SCR* of the insurance obligations only over their contract boundary. No allowance for renewals or new business should be included in the calculation of the *risk margin*.

This contrasts with the *SCR* used for capital adequacy which is based on all risks to which the insurer is exposed over a one-year period. The *SCR* held by the insurer (rather than the one used for the *reference insurer* to calculate the *risk margin*) should be based on risks/policies underlying both existing business, renewals of existing business during the year, and new business written during this 1-year time horizon.

The *risk margin* in respect of business outside the contract boundary should be met by margins in the premiums received for this business. Since these premiums are outside the contract boundary, it would be inappropriate to hold a *risk margin* for them before the obligations themselves have been recognised.

Section 6.1 discusses the practical implication of this when calculating the *reference entity SCR* to ensure the *risk margin* only reflects the risk attaching to the *technical provisions* up to their contract boundary.

4. SCR calculation interval

The *SCR* calculation interval or time-step that should be used when calculating the *risk margin* is not explicitly stated in the *FSIs*. Insurers have adopted different approaches.

However, in *FSI* 2.2:

- Section 14.6 defines the formula for calculating the *risk margin*. It references cost-of-capital rate (CoC) as "the cost of capital rate to be applied in each time period".
- Section 14.13 defines the cost of capital rate as "*The cost-of-capital rate is the annual rate to be applied to the capital requirement in each period when determining the risk margin.*"
- Section 14.14 prescribes the cost of capital rate to be 6%: "*The cost-of-capital rate that must be used in the determination of the risk margin is 6%.*"

In the *GN* to *FSI* 2.2, the simplifications for non-life *risk margins* references "year t" in several places.

Considered together, this arguably outlines a reasonable interpretation that the *SCR* calculation interval should be annual.

Article 37 of European Solvency II delegated regulations effectively provides an identical formula for the *risk margin* as *FSI* 2.2. However, it explicitly states that the time interval t is measured in years.

Using an annual interval is usually more conservative than a more frequent interval, as the effective term for the *SCR* run-off period is extended.

When determining the *risk margin*, the *member* should carefully consider the choice of time interval. Where the choice of a time interval impacts the value of the *risk margin* materially, this choice should be carefully justified.

Any methodology change adopted in calculating the *risk margin* should explicitly re-evaluate the *SCR* time interval given the above background.

5. Starting point of SCR projection at t=0 or t=1

The starting point for the projection of the *SCR* must be from t=0, which is the point of transfer to the reference entity and also the valuation date.

This is clear in the *FSI* in that all formulae relating to the *risk margin* sum across $t \geq 0$.

6. Calculation of the *SCR* underlying the *risk margin*

The *risk margin* should be calculated based on the cost of capital required to support the *SCR* of the *technical provisions* up to their contract boundary. For insurers who calculate their *SCR* using the standardised formula, the *SCR* required to support the existing *technical provisions* is defined as follows:

$SCR_{RU}(t) = BSCR_{RU}(t) + SCR_{RU,Op}(t) + SCR_{RU,Part}(t)$

Where:

$BSCR_{RU}(t)$ = The Basic *SCR* for period t as calculated for the *reference insurer*

$SCR_{RU,Op}(t)$ = The *SCR* regarding operational risk for period t as calculated for the *reference insurer*

$SCR_{RU,Part}(t)$ = The *SCR* regarding participation risk for period t as calculated for the *reference insurer*, which must equal the *SCR* regarding participation risk calculated for the *original insurer* for participations operating in the same sector as the insurer

The calculation of the risk sub-modules must relate only to risk exposures arising from the unexpired risk within the insurer's *technical provisions*. Therefore, the following considerations are required to be made when calculating the above components of $SCR_{RU}(t)$:

6.1 Premium & reserve risk within $BSCR_{RU}(t)$

For premium & reserve risk, the respective volume measures defined in *FSI* 4.3 should be consistent with the volume underlying the technical provisions of the *original insurer*.

When calculating premium volumes for the *reference insurer's SCR*, the definition of premium volumes from *FSI* 4.3 section 5.10 (below) must be modified.

$V_{prem,slb\text{ORIGINAL}} = max(P_{slb}, P_{last,slb}) + FP_{existing,slb} + FP_{future,slb}$

Since the *risk margin* relates only to existing obligations, FP_{Future} should be assumed to be zero for the *reference entity* when calculating the *SCR* for purposes of calculating the *risk margin*.

The transfer scenario specified in paragraph 14.3 of *FSI* 2.2 states that "*The reference insurer does not have any insurance obligations and any eligible own funds before the transfer takes place*". Therefore, the premium volume measure for business earned in the previous 12 months should be assumed to be zero. $P_{last,slb}$ must therefore be zero.

P_{slb} must be modified to reflect only the earned premiums within the next 12 *months arising from existing obligations*. This must not allow for renewals of existing business or new business. We can define this as $P_{slb\text{REFERENCE}}$.

The formula for the premium volume measure for the reference entity therefore becomes:

$V_{prem,slb\text{REFERENCE}} = max(P_{slb\text{REFERENCE}}, 0) + FP_{existing,slb} + 0$

Reserve volume measures should be based on the projected claims provisions expected (as specified in Section 5.17 of *FSI* 4.3), arising out of past claims incurred and new claims incurred within the projection period arising from premiums earned from unexpired business within the contract boundary.

For clarity, under this approach, reserve volumes will run down more slowly than merely running down the t=0 claims reserves based on claims incurred only up to the valuation date.

New claims reserves will be created as unexpired business is earned and these future claims reserves will also contribute to projected reserve volumes and *SCR*.

6.2 Catastrophe risk within $BSCR_{RU}(t)$

The allowance for Catastrophe Risk within $BSCR_{RU}(t)$ as considered in *FSI* 4.3 is less clear, which is due to the following key reasons:

- Under Method 1, the preferred method to calculate the Catastrophe risk capital requirement, the *SCR* is a function of the Sum Insured and risk factors for the different events. While the amount is assumed to relate to risk over a 1-year time horizon, the method does not present an obvious indication of how the catastrophe risk is split between new, renewing, and existing risks.
- *FSI* 4.3 allows for multiple methods (Methods 1 or 2 or a combination of both) to calculate the Catastrophe Risk capital requirement. This presents further discordance between the underlying assumption around the split of Catastrophe Risk between new, renewing, and existing risks.
- Gross catastrophe risk is inherently a low-frequency, high severity event. This therefore leads to further difficulty to determine the point in the one-year time horizon where the risk is assumed to materialise.

As such, *members* should consider the insurer's internal interpretation and Catastrophe risk exposure when incorporating this into the *SCR* required to support the transfer of the insurance obligations.

However, the following should be considered:

- Gross loss exposures should only relate to the exposure attaching to the risks underlying the *technical provisions* of the solo insurer at each point in time.
    - Where the insurer uses Method 1, this consideration would be made in determining the total sum insured underlying each catastrophe event.
    - Where the insurer uses Method 2, this consideration would be made in calculating the earned premium over the next 12 months underlying the Method 2 calculations. However, *members* should consider the extent to which reducing the exposure in this way truly reflects the catastrophe risk exposure.
- The *GN* on *FSI* 2.2 allows for a simplification where Catastrophe Risk for the purpose of calculating the *SCR* underlying the *risk margin*, only relates to the exposure arising from policies in force at time 0.
- The run-off of the in-force policies and the subsequent reduction in the gross catastrophe exposure.
- Outstanding term on reinsurance contracts and the amount of risk mitigation that can be considered.
    - E.g., The extent to which the existing reinsurance contracts would apply to new or renewing risks on transferring of a book of business is limited.

The above should not preclude the insurer from allowing for a substantial portion of catastrophe risk. This is due to the mathematical intractability of splitting the catastrophe risk to new, renewing, and existing risks as well as the non-uniform nature of catastrophe events resulting in even a relatively small amount of exposure manifesting in a large catastrophe event.

The *SCR* calculation interval may also affect some of the considerations when projecting catastrophe risk components. See section 4 for specific considerations on the *SCR* calculation interval.

Therefore, *members* should take a prudent approach to allowing for catastrophe risk in the calculation of the *risk margin*.

6.3 Operational risk within $SCR_{RU,Op}(t)$

The Operational Risk capital charge should be calculated in line with paragraph 4.5 of *FSI* 4.4. However, the following should be considered:

$$SCR_{RU,Op}(t) = min(30\% \cdot BSCR_{RU}(t), Op) + Op_{Investment}$$

Where:

$$Op = max(Op_{premiums}, Op_{provisions})$$

For the calculation of $Op_{premiums}$ within the *risk margin* calculation:

- Earned premiums for the *reference insurer* in the past 12 months ($Earn_{NL}$ as defined in *FSI* 4.4) and earned premiums in the 12 months prior (p_{EarnNL} as defined in *FSI* 4.4) are zero at the point of transfer.
- This is supported by the transfer scenario described in paragraph 14.3 of *FSI* 2.2 stating that "The *reference insurer* does not have any insurance obligations and any eligible own funds before the transfer takes place".

Members should ensure they allow for $Op_{provisions}$. Given that $Op_{premiums}$ will be zero initially and then grow with only newly earned premiums within the projection, for the purposes of the *risk margin* it is likely that $Op_{provisions}$ will drive the calculation of operational risk for at least some periods.

6.4 Counterparty default risk for ceded reinsurance

FSI 2.2 states that for non-life insurance obligations, unavoidable market risk may be considered to be nil.

However, paragraph 14.11 of *FSI* clarifies that counterparty default risk with respect to Eligible Reinsurance contracts and other eligible risk mitigation instruments must be included for the *reference insurer*.

6.5 Participation risk within $SCR_{RU,\mathrm{part}}(t)$

The treatment of participation risk within the risk margin calculation depends on the specific nature of the participation. The following three principles should be applied.

1. Participation risk arising from participations operating in the same sector as the insurer must be included in the SCR used to determine the risk margin.
2. Participation risk arising from participations not operating in the same sector as the insurer may be assumed to be nil. This is an explicit simplification permitted by FSI 2.2 paragraph 14.10. However, where this risk is significant and unavoidable, the FSI does not prohibit including this in the risk margin calculation.
3. The projection pattern of the value of participation (e.g. level, changing in line with projected volumes), whether in the same sector as the insurer or not, may depend on the nature of the participation and its link to the operations of the insurer.

The following paragraphs demonstrate how these principles comply with FSI 2.2.

Paragraph 14.3(f) of *FSI* 2.2 specify that any unavoidable market risk must be included in the *risk margin* calculation. The paragraph includes footnote 15 which clarifies that participation risk is considered a type of market risk, and as such unavoidable participation risk must be included in the calculation.

Paragraph 14.9 of *FSI* 2.2 states:

> *"The SCR regarding participation risk for period t as calculated for the reference insurer, which must equal the SCR regarding participation risk* calculated for the original insurer *for participations operating in the same sector as the insurer."*

The *FSI* makes it clear that participations operating in the same sector as the insurer must be included in the *risk margin* calculation *as* calculated for the original insurer. Thus, participation risk operating in the same sector as the insurer must be included irrespective of whether it is avoidable or unavoidable, which is different from other market risk.

Paragraph 14.10 of FSI 2 outlines scenarios where practical approaches can be adopted to determine unavoidable market risk, and only where it is significant. This includes the sentence clarifying that "For non-life insurance obligations, unavoidable market risk may be considered to be nil." However, the classification of market risk as avoidable or unavoidable does not affect the SCR calculated for the original insurer. As such, the instruction from paragraph 14.9, to include participation risk equal to the value calculated for the original insurer for participations operating in the same sector, remains binding.

For participation risk not operating in the same sector as the insurer, paragraph 14.10 provides the option for non-life insurers to assume participation risk (as a form of market risk) is nil.

7. Possible simplifications for calculating the *risk margin*

As per paragraph 14.18 in *FSI* 2.2, insurers are permitted to apply a simplified method for calculating the *risk margin*, subject to the approach being proportionate to the nature, scale, and complexity of the risks of the insurer's business.

7.1 Requirement for simplification to be not less prudent than full calculation

Section 17 of *FSI* 2.2 provides guidance regarding the use of simplifications in valuing *technical provisions* and applying the principle of proportionality.

Paragraph 17.2 of *FSI* 2.2 states that the actuarial and statistical techniques used to value *technical provisions* should be proportionate to the nature, scale, and complexity of the underlying risks.

However, paragraph 17.1 in *FSI* 2.2 states that a simplification may only be used if the result of the simplification is not less prudent than what would otherwise have been calculated using the full calculation.

Given sections 17.1 and 17.2, *members* have scope to apply a simplified approach but should consider proportionality of the calculation and the level of prudence introduced when using simplifications to calculate the non-life *risk margin*.

7.2 Possible methods to establish whether simplification is adequate

It is not always trivial to establish that a simplification adheres to paragraph 17.1 in *FSI* 2.2 without performing the full calculation.

One practical solution to this problem is for *members* to perform an "out-of-cycle" calculation to establish that the simplification is appropriate for the insurer, outside of the time pressures of a valuation. This also need not be performed annually, provided the *member* can gain comfort that changes in the profile of the business and/or external conditions do not indicate a change is required.

This approach will reduce the time pressure in determining whether the simplification is appropriate during an insurer's valuation period.

Other approaches could also be used to demonstrate that the simplification is appropriate.

The level of prudence needs to be considered with the underlying principle that regulatory reporting is intended to be based on a best estimate view and therefore excessive prudence is also not desirable.

7.3 Selecting the appropriate *risk margin* simplification from the hierarchy

It is possible that some simplifications will not be appropriate in all circumstances. That is, it is possible that a *risk margin* simplification might result in a lower value of the *risk margin* calculated compared to that derived using the full calculation in some circumstances. Therefore, *members* should consider the risk that some simplifications of the non-life *risk margin* may lead to the understatement of the *risk margin* when choosing a simplification method.

Paragraph A.2 in Chapter 3 of *FSI GN* 2.2 states that the hierarchy of simplifications involves a higher degree of simplification at each level. The paragraph goes on to state that insurers should adopt the approach that most appropriately captures the material characteristics of their risk profiles, while satisfying the principle of proportionality.

Selecting the simplification should be a pragmatic process working through the hierarchy of simplifications and considering materiality, the insurer's underlying risk exposure and proportionality. In general, the more complex and material the risk exposures are, the higher the typical hierarchy of simplification that will be chosen.

7.4 Disclosure of simplifications used in calculating the *risk margin*

Members are reminded that where they make use of a simplification to calculate an insurer's *technical provisions*, paragraph 17.6 of *FSI* 2.2 requires that the insurer's regulatory returns submitted to the *Prudential Authority* should include disclosure of the simplifications used and the reasons for using them.

Heads of Actuarial Functions should include *risk margins* in their review of models as required by APN403 (Head of Actuarial Function For South African Insurers). Shortcomings, simplifications, and approximations should be highlighted where relevant and material.

7.5 Independent review of simplifications used in calculating the *risk margin*

As per *GOI* 3 Section 14.2(f), an insurer's Head of Actuarial Function is also required to express an opinion on the appropriateness of approximations or judgments. Independent reviews of Heads of Actuarial Functions and external audits of valuation results should also consider the justification for simplifications adopted.