

# Head of Actuarial Control

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## Executive summary

Under the Solvency Assessment and Management (SAM) regulatory regime insurers are required to appoint a Head of the Actuarial Control Function (herein referred to as the “HAC”) as part of the broader governance and risk management framework. While life insurers have historically been required to appoint a statutory actuary to fulfil some of the tasks expected of the HAC, this is a new requirement for short-term insurers.

**The HAC and associated actuarial function acts as an oversight function and should be independent of the actuarial team responsible for producing valuation results and pricing products.**

The responsibilities of the HAC can be broken down into three broad categories:

- **Financial soundness:** The HAC needs to advise the board of directors on the financial soundness of the insurer, with detailed work required in terms of the technical provisions and capital requirements (based on the standard formula or an internal model). The HAC will also be required to provide significant input into risk mitigation strategies and contracts. The requirements are more onerous than under the current regulatory regime.
- **Risk management system:** The HAC is required to provide input, in the form of either an opinion or advice, on a number of policies required as part of the broader risk management requirements and risk controls. The evaluation of the actuarial elements of the Own Risk and Solvency Assessment (ORSA) is also required. The HAC must also justify the use of the standard regulatory capital model (where relevant), and evaluate any economic capital model used for internal purposes.

- **Product specific considerations:** The actuarial soundness of new products needs to be evaluated, along with the management of any with-profit business.

Insurers will need to decide whether it is sensible to outsource the actuarial function. This decision will be informed by cost, internal expertise and company specific considerations. For insurance groups owning both life and non-life insurers, or having vastly different insurance entities, it is important to consider whether a single person is suitably qualified to fulfil the HAC role across the group

The HAC must undergo an independent peer review at least every three years.

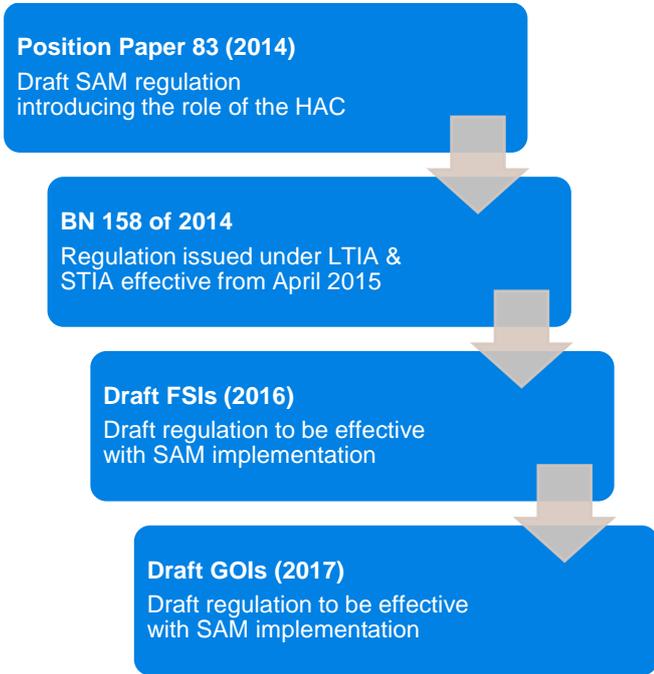
## Background

An actuarial control function (sometimes more simply referred to as the “actuarial function”) is by no means a new concept to the life insurance industry, with the Statutory Actuary providing guidance and sign-off on a range of actuarial items within an insurance company. Some short-term insurers have also been required to engage a suitably qualified actuary with a practising certificate to provide oversight.

The term “Statutory Actuary” will fall away following SAM implementation, with the role replaced by the individual taking responsibility for heading up the actuarial function, which is one of four required control functions. Existing regulation contains a few variations of the name given to this individual including “Head of Actuarial Function” and “Head of Actuarial Control” (herein referred to as the “HAC”). The requirement for a HAC forms part of the mandatory control functions an insurer is required to have in place, in terms of the draft Governance and Operational Standards for Insurers (GOIs) recently released by the Financial Services Board (FSB).

**REGULATORY TIMELINE**

The requirements in terms of the HAC role have been refined in line with the development of the South African risk-based supervision framework.



SAM regulation on the HAC has evolved with a number of documents issued by the FSB. SAM Position Paper 83 presents guidance on the role of the Statutory Actuary post SAM implementation, and presents the recommendation for the Statutory Actuary to be replaced by the HAC. It includes the proposed responsibilities of the HAC, informed by the requirements under Solvency II, Insurance Core Principles and other jurisdictions.

Board Notice 158 of 2014 (BN 158), covering the Governance and Risk Management Framework for Insurers, became effective April 2015 requiring all long-term insurers to have an Actuarial Control Function and HAC.

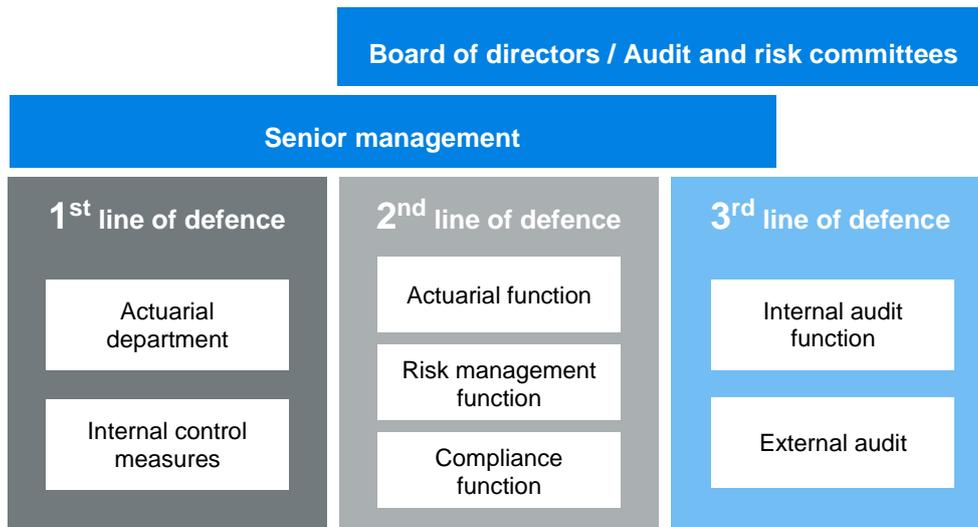
The draft Financial Soundness Standards for Insurers (FSIs) were released at the end of 2016, providing additional guidance on the responsibilities of the HAC in terms of financial soundness, including the valuation of technical provisions and regulatory capital. A revised version of the FSIs was released in August 2017.

The draft GOIs were released near the beginning of 2017, with revised GOIs also published in August 2017.

BN 158 will fall away, being replaced by the FSIs and GOIs when SAM goes live.

**Three lines of defence**

To avoid confusion between an individual who may head up the actuarial department or actuarial division not deemed to be part of the actuarial function defined under the control functions, we can look to the three lines of defence model in risk management. This is a model that could be used to organise the various business areas and control functions of an insurer.



#### FIRST LINE OF DEFENCE

The first line of defence identifies and manages risk directly, and forms part of the day-to-day operations of the insurer. For most insurers, the actuarial department will essentially continue in its current form, performing first line function tasks such as pricing exercises, the actuarial valuation and stress testing as part of the ORSA process.

#### SECOND LINE OF DEFENCE

The second line of defence is occupied by the actuarial, risk management and compliance control functions. They are responsible for providing management assurance to the board.

Some of the responsibilities of the actuarial function include evaluating and providing advice on the insurer's financial soundness position, actuarial elements of the ORSA, product development including premiums, as well as expressing an opinion on technical provisions, capital requirements and reinsurance arrangements. The actuarial function should be independent, avoiding conflicts of interest.

An insurer may, where appropriate in light of the nature, scale and complexity of the insurer's business and risks, appoint a person as the head of more than one control function (other than the head of the internal audit function). This is however only possible with the prior approval of the Prudential Authority.

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The heads of the risk management and actuarial control functions typically work closely together. For instance, both are required to provide input into the ORSA. Depending on size and complexity, it may make sense to appoint the same person as the head of these two control functions.

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#### THIRD LINE OF DEFENCE

The internal and external audit functions act as a third line of defence. They provide independent assurance and report directly to the board or Audit Committee.

## HAC FOR SHORT-TERM INSURERS

With the introduction of SAM, the requirement to have an Actuarial Function and HAC will apply to both short- and long-term insurers.

This means setting up an oversight actuarial function, and appointing a suitably qualified HAC to express an opinion to the board on a range of topics, as for a life insurer.

Relevant reporting structures need to be established within short-term insurers to allow the HAC to fulfil his/her obligations. Increased reporting, and sufficient opportunity to discuss any findings at an executive level, will have to be accounted for.

## Criteria for the HAC role

Currently the FSB doesn't explicitly require the HAC to have a practising certificate (which the Statutory Actuary is currently required to hold). The GOIs list the minimum criteria for the HAC. It states that the HAC must be a natural person who:

- Is permanently resident in the Republic;
- Is a Fellow of the Actuarial Society of South Africa; and
- Has, as an actuary, appropriate practical experience relating to the type of insurance business of the insurer.

GOI 4 states that the Actuarial Society of South Africa's (ASSA) Practising Certificate Framework may inform the appropriate practical experience required to fulfil the HAC role.

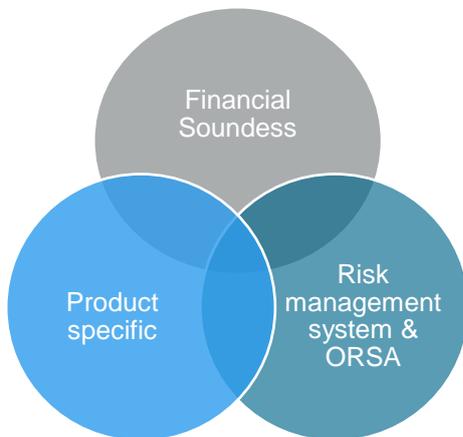
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The Board and Risk Committee should critically assess the competency of an individual in such a position that does not have a Practising Certificate (as is currently required to act as a Statutory Actuary), and consider the implications of the Practising Certificate Framework that will be issued. Companies do not want to run the risk of having to change their HAC once this framework becomes effective.

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## Responsibilities of the HAC

The responsibilities of the HAC are contained in both the FSIs, which focus on elements of solvency, and the GOIs, which focus on the governance of an insurer.



## FINANCIAL SOUNDNESS

The actuarial function is required to evaluate and provide advice to the board, senior management and other control functions on the financial soundness of the insurer, including the impact of any proposed dividend declarations.

### Technical provisions and capital requirements

GOI 3 states that each insurer requires an effective actuarial function, capable of expressing an opinion to the board on the reliability and adequacy of the technical provisions, the Solvency Capital Requirements (SCR) and the Minimum Capital Requirements (MCR), amongst others. This opinion must include the following:

Methodology	The appropriateness of the methodologies and underlying models used and assumptions made
Data	The sufficiency and quality of the data used in actuarial calculations
Assumptions	Best estimates and associated assumptions against experience when evaluating technical provisions
Results	The accuracy of the calculations
Mitigation	The appropriateness of and impact of assumed future management actions and the effect of risk mitigation instruments
Judgement	The appropriateness of approximations or judgments used in the calculations due to insufficient data of appropriate quality

This responsibility is reiterated in the FSI statements, further stating that the HAC must consider the impact on the overall financial soundness of the insurer. The opinion expressed should be done so in terms of the GOIs, FSIs and professional standards issued by ASSA.

The opinion expressed on the capital requirements must cover the following:

- Market risk capital charge
- Life underwriting risk capital charge
- Non-life underwriting capital charge
- Operational risk capital charge
- The overall SCR capital charge (standard model / internal model)
- The MCR capital charge
- The Liquidity Shortfall indicator

In terms of the Non-life Underwriting Risk Capital Requirement, the calculation of the adjustment factor for insurance policies with risk sharing features must be accompanied by a dedicated report issued by the HAC.

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**The HAC's review of the technical provisions will inform his/her opinion on capital requirements. Due consideration must also be given to the insurer's investment strategy and asset composition, to the extent that it affects capital requirements.**

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#### Reinsurance and risk mitigation

The use of reinsurance and other risk mitigation techniques ties in closely with the calculation of technical provisions and capital requirements.

The HAC must assess and express an opinion on the appropriateness of all reinsurance arrangements in light of the insurance risks retained by the insurer. The HAC must further advise the board on the appropriate treatment of reinsurance arrangements for financial soundness purposes.

The actuarial function must also periodically review the insurer's Reinsurance and Other Risk Transfer Policy and provide an opinion to the board on its appropriateness in light of the insurance risks retained by the insurer.

The HAC must ensure that the effect of all eligible risk mitigation instruments are materially reflective of the risk mitigation reduction one would expect in a stress scenario (99.5% confidence level in line with the SCR).

FSI 4 states: "Particular attention should be paid to risk mitigation instruments that result in a material reduction in the SCR due to weaknesses in the assumptions underlying the SCR calculation. In such circumstances, the HAC should reduce the effect of the risk mitigation instruments accordingly to reflect the capital reduction expected at a 99.5% confidence level in line with the intended purpose of the SCR calculation."

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**This places the onus on the HAC to critically assess whether risk mitigation contracts truly transfer risk, and are not simply a form of regulatory arbitrage.**

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These requirements mean that it is essential for insurers to have documentation on all risk mitigation contracts. This is of particular relevance where insurers have legacy business, use different administration systems and platforms and where pricing and reserving activities are not always aligned. A database with the details of such contracts, along with a framework setting out standardised methodology to assess such contracts would be useful.

The measurement, management and monitoring of risk mitigation contracts are areas that will require more attention than they have in the past. The Prudential Authority has the power to request an opinion from the HAC on any reinsurance arrangement used in financial soundness calculations.

#### RISK MANAGEMENT SYSTEM AND ORSA

The governance and risk management framework sets out requirements in line with the broader objectives of risk based supervision. These are currently described in GOI 3. The over-arching risk management framework must be supported by a range of policies. The responsibilities of the control functions form part of the governance requirements.

#### Risk management policies

The GOIs make a distinction between the need to express an opinion as to the appropriateness of certain items, and evaluating and providing advice in relation to others. It would be helpful if the terms were defined more precisely in the standards – we interpret "opinion" to be more formal where the board should be concerned if there are major findings. "Advice" on the other hand could be considered as one view amongst several and could, with appropriate consideration, be disregarded.

The actuarial function is responsible for expressing an opinion to the board on the appropriateness of the following policies:

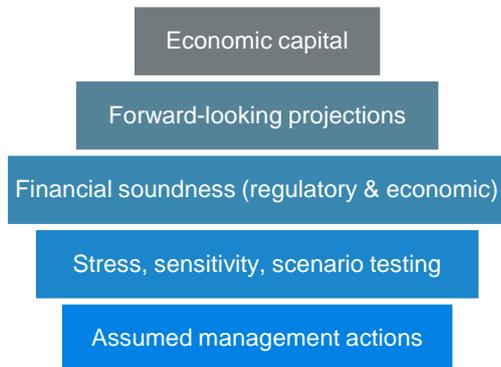
- Asset-liability management policy
- Underwriting policy
- Reinsurance and other forms of risk transfer policy.

Separate from these *opinions*, the actuarial function is responsible for *evaluating and providing advice* to the board of directors, senior management and other control functions on the investment policy.

It is expected that for most insurers there will be interaction between the asset-liability management, investment, credit risk and liquidity management policies. The HAC will thus have to ensure that input provided is sufficiently detailed to cover the requirements set out in the standards.

#### Own Risk and Solvency Assessment

GOI 3.1 states that the heads of both the risk management function and actuarial function are responsible for providing input and assurance to the board about the matters relating to the outcome of an ORSA. For the actuarial function, this includes the actuarial-related matters in the ORSA as per the diagram below.



#### Controls

The heads of the insurer's risk management, compliance and actuarial functions are responsible for providing input and assurance to the board about the operations, efficiency, and effectiveness of the components of the systems for risk management and internal controls *relevant to their respective areas of responsibility*.

For the head of actuarial control this pertains to the controls associated with the requirements set out in this document. The responsibility of providing assurance will require interaction with both internal and external audit.

#### Capital models

The actuarial function is required to evaluate and provide advice on the capital models used in the business as follows:

- The development and use of internal models for internal actuarial or financial projections, or for own solvency projections as in the ORSA. Where an internal model is used for regulatory purposes, the same requirements apply as per the section on financial soundness above.

- Where the insurer uses the regulatory capital model to assess its risks, why that regulatory capital model is an accurate reflection of the insurer's own risk profile, board-approved risk appetite (and related risk limits), and business strategy.

#### PRODUCT SPECIFIC CONSIDERATIONS

The actuarial function is also required to evaluate and provide advice on the development of new products, and the management of with-profits books of business. The GOIs articulate the following responsibilities in this regard:

- Evaluating and providing advice on the actuarial soundness of product development and design, including the terms and conditions of insurance contracts, premiums, insurance obligations and other values and the estimation of the capital required to underwrite the product;
- Evaluating and providing advice on the awarding of a bonus or similar benefit to participating policyholders in accordance with the principles and practises of financial management of the insurer.

This should be considered in conjunction with the draft policyholder protection rules issued by the FSB. Insurers should consider establishing the appropriate governance and approval structures to ensure that the product management process adheres to regulatory requirements, and affords the HAC the opportunity to complete their duties.

#### Formal HAC communication

In order to fulfil their duties, the HAC of a life insurer would have to extend the current reporting that is done to the board and regulator. Existing annual reports, such as the statutory actuary's valuation report and pricing reports, will have to be reconsidered to ensure that they adequately address the requirements of the FSIs and GOIs.

Short-term insurers may have to introduce such reporting for the first time or significantly enhance the current report. Sufficient time must be afforded to the discussion of these reports in the relevant management forums and board committees.

The board and senior management must be appropriately informed of the implications of the new regulations, to allow the critical assessment and appropriate discussion of the reporting done by the HAC.

## Internal or external HAC

The GOIs state that an insurer may, where appropriate in light of the nature, scale and complexity of the business, risks, and legal and regulatory obligations of an insurer, outsource a control function or a head of a control function.

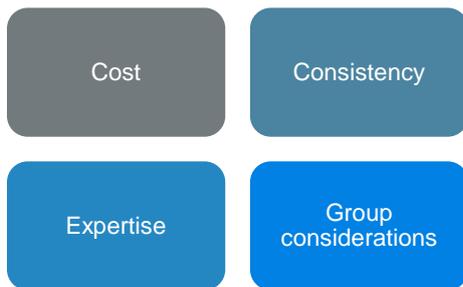
Most insurers will outsource the role of the HAC, and potentially the full actuarial function, to a suitably qualified and experienced individual or team. An external HAC would bring the depth of skills and experience required, and diversity to current internal views.

Due to the significant scope involved in fulfilling the HAC responsibilities for a few of the largest insurers, an internal HAC and supporting staff would typically be appointed allowing them to dedicate the required time and effort, and gain the insight into the business necessary to fulfil their duties.

The HAC needs to demonstrate independence from the business where providing opinions and advice. This will be easily evidenced where an external party is appointed to the role.

## HAC for composite insurers and insurance groups

For most composite insurers and insurance groups that include long-term and short-term insurance, the appointment of a HAC becomes more complicated. The HAC and actuarial function of each licensed insurer within the group must have appropriate experience for the business they are overseeing. Other considerations are listed below.



### COST

Appointing a single HAC is likely to result in some cost reduction. There may be some overlap between the responsibilities of the HAC of a short-term and long-term insurer that are part of the same group. Board meetings where the HAC provides comfort to the board on matters relating to the short-term and long-term insurance businesses may also be combined, saving time and cost.

### CONSISTENCY

The benefit of a single HAC across the group will be consistency in guidance and opinions provided. Efficiencies will be created where actuarial controls applied across the group are standardised and interpreted and measured in the same way. Communication at an executive level will also be more efficient where a single HAC is involved across the group.

### EXPERTISE

Appointing the same person may not be appropriate where such a person does not have the necessary long-term and short-term experience and expertise. It is common for the HAC role to have a practising certificate, posing a challenge to appoint the same person for the long-term and short-term HAC position (although there are individuals with both.)

### GROUP CONSIDERATIONS

Being part of an insurance group introduces group-specific risks such as contagion risk. Having a single HAC for an insurance group will help to identify these group-specific risks and help to get an enterprise-wide view on risk.

## Review of the Actuarial Function

The draft GOIs state that in addition to performance reviews by the board or relevant board committee, the HAC must be independently peer reviewed at least every three years.

An independent external review will ensure that best practice is maintained, in line with local and global industry best practice. The fresh perspective provided by a suitably qualified independent party will also prove beneficial. A critical evaluation of current practices will not only provide peace of mind, but also point out potential areas of refinement.

Each control function must also conduct regular self-assessments of their respective functions and implement or monitor the implementation of any needed improvements

## Conclusion

All insurers should ensure that a suitably qualified individual is ready to take on the HAC role. Consideration should be given to the implications of the Practising Certificate Framework.

The responsibilities of the HAC go further than those of the Statutory Actuary for life insurers. Current processes would need to be evaluated to ensure that all requirements are met. Short-term insurers will need to appoint an individual to fulfil the role of the HAC. To take advantage of cost savings and consistency, insurance groups should consider appointing the same individual to fulfil the HAC role for its long-term and short-term business. It is likely that this individual would need both a long-term and short-term practising certificate, and demonstrate suitable expertise.

Outsourcing the HAC role would bring the necessary level of independence as well as provide an opportunity to bring in knowledge and experience that may not be available within the organisation.

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