Banc Ceannais na hÉireann
Central Bank of Ireland
Eurosystem

Guidance for (Re)Insurance Undertakings on the Head of Actuarial Function Role and Peer Review

Contents

1. Introduction

1.1 Background

1.1.1 Regulation 50 of S.I. 485/2015 the 2015 Regulations requires (re)insurance undertakings to establish and maintain an effective actuarial function as part of the overall system of governance and also sets out the main tasks of the actuarial function.

1.1.2 The tasks of the actuarial function are further expanded in Article 272 of Commission Delegated Regulation 2015/35 ("Delegated Regulation") and guidelines and opinions published by the European Insurance and Occupational Pensions Authority.

1.1.3 The Central Bank of Ireland (the "Central Bank") has issued requirements in relation to the actuarial function under Solvency II, (i.e. the Domestic Actuarial Regime and Related Governance Requirements, "DAR" which set out governance related requirements and require undertakings to ensure that a Head of Actuarial function ("HoAF") is appointed to be responsible for the actuarial function and for the tasks carried out by that function.

1.2 Objective of the Guidance

1.2.1 This Guidance is intended to assist (re)insurance undertakings by providing an overview of the issues that the Central Bank expects to be considered when completing certain tasks outlined in Regulation 50 of S.I. 485/2015 and DAR (i.e. the tasks in respect of expressing opinions on the underwriting policy and the reinsurance arrangements and the contribution to the effective implementation of the risk management system). The Guidance does not purport to address every aspect of these tasks, and the Central Bank may update elements of this Guidance over time.

1.3 Applicability

1.3.1 Certain aspects of this Guidance may not be relevant or material to every undertaking, due to the nature, scale and complexity of the undertaking. In addition, an undertaking may decide to adopt different practices to those covered in this Guidance in ensuring compliance with S.I. 485/2015 and DAR. However, where they do so, the undertaking is expected to be in a position to explain the reason for proceeding as they have to the Central Bank, upon request.

2. General Expectations of the Head of Actuarial Function Role

2.1 General Expectations

2.1.1 The HoAF is expected to make appropriate enquiries in order to provide informed opinions to the Board.

2.1.2 HoAF is not expected to duplicate the work of others or assume responsibilities that rest with other functions. Where work has been performed by others which, in the opinion of the HoAF, might assist them in meeting their responsibilities, they may decide to consider this work for the purposes of meeting their responsibilities.

2.1.3 Each undertaking is expected to ensure that the HoAF has the necessary access to such information and resources, including appropriate authority and reporting lines, as they may require for the purpose of providing the opinions and performing the tasks allocated to them, in particular those specified under S.I. 485/2015 and DAR.

2.1.4 Where the operational structure of an undertaking provides that the HoAF has responsibility for some of the tasks upon which they are expected to provide an opinion (e.g. some risk management responsibilities), the undertaking is expected to appropriately manage any potential conflict of interest that arises.

2.1.5 The HoAF is expected to identify any significant deficiencies or areas for improvement in the information made available to them by the undertaking, for the purposes of assisting them in the task of expressing opinions on the underwriting policy and the reinsurance arrangements and the contribution to the effective implementation of the risk management system.

2.1.6 Where the HoAF has a material concern regarding any issue covered by their work, they are expected to draw the Board's attention to that issue.

2.1.7 The HoAF is also expected to indicate any material limitations and the extent and basis of any material reliance on work performed by others in meeting the responsibilities addressed by this Guidance paper.

3. Guidance on Certain Tasks of the Head of Actuarial Function Role

3.1 Opinion on the Overall Underwriting Policy

3.1.1 Regulation 50(1)(g) of S.I. 485/2015 requires the actuarial function to express an opinion on the overall underwriting policy and the DAR allocate responsibility for this opinion to the HoAF. Article 272(6) of the Delegated Regulation outlines the conclusions that should, at a minimum, be included as part of that opinion.

3.1.2 The Central Bank considers that, in expressing an opinion on the overall underwriting policy, it is appropriate for the HoAF to consider all material underwriting and pricing policies and processes.

3.1.3 The Central Bank expects the opinion to cover all material lines of business written in all territories in which the undertaking operates.

3.1.4 The opinion is expected to highlight when market pressures or the current position in the underwriting cycle mean that profitability targets are not being achieved in some lines or territories.

3.1.5 The HoAF is expected to clearly set out the scope of their opinion in the context of the undertakings specific circumstances and operations.

3.1.6 It is not expected that the HoAF will perform reviews of controls and processes regarding underwriting that the Risk Management Function or the Internal Audit function would be expected to carry out.

3.1.7 Depending on the nature, scale and complexity of the undertaking, the HoAF is expected to consider the following issues in expressing their opinion on the overall underwriting policy, making enquiries of other functions as appropriate:

a. Based on the experience analysis carried out by the actuarial function and the review of key assumptions as actual experience emerges, how the actual profitability compares to that the expected profitability;

b. The interrelationships between the underwriting policy, the reinsurance arrangements and the technical provisions (TPs). Changes in underwriting policy and practice, for example, may not only affect the calculation of TPs, but also the adequacy of reinsurance arrangements. Consequently, the HoAF is expected to identify any important interrelationships between underwriting policy, reinsurance and TPs and highlight any known inconsistencies in approach or underlying assumptions;

c. Whether the product pricing, the underwriting policy for acceptance of risks and the risk appetite statement are all consistent with each other;

d. The principal risk factors influencing the profitability of business to be written during the next year, including the potential impact on future profitability of external factors such as inflation, legal risk, changes in business volumes and changes in the market environment;

e. The degree of variability surrounding the estimate of expected profitability;

f. The consistency of this degree of variability with the risk appetite of the undertaking;

g. Whether appropriate allowance is made in the pricing and underwriting for any options and guarantees;

h. The appropriateness of the undertaking's approach to identifying and managing excessive concentrations of risk;

i. The frequency with which the undertaking re-prices its products, re-evaluates the assumptions used in its pricing and considers market trends. Where the undertaking uses external data, whether this data is adjusted for the undertaking's own business;

j. The likely financial impact of any planned material change to business plans, reinsurance arrangements, terms and conditions of contracts, underwriting standards and/or distribution channels;

k. Whether the potential for anti-selection across underwriting has been considered and how this risk is being managed;

l. Any known issues in relation to the appropriateness, completeness and accuracy of the data (both internal and external) used to underpin the underwriting process and any adjustments made to it;

m. At a high level, the appropriateness of the methods and models used in the underwriting process, for example at a line of business level;

n. Any known areas of inconsistency between the underwriting policy and the assumptions underlying the business plan for example in relation to profitability and volumes of sales assumed;

o. The controls and processes around any deviations from the technical price, non-standard terms, special deals and/or price match, in particular where this may lead to inconsistencies with the Risk Appetite Statement. The materiality of such instances is also expected to be considered;

p. The undertaking's exposure to cross subsidies within its pricing assumptions together with a quantification of the exposure; and,

q. How the profitability of the products is monitored and reported.

3.2 Opinion on the Adequacy of the Reinsurance Arrangements

3.2.1 Regulation 50(1)(h) of S.I. 485/2015 requires the actuarial function to express an opinion on the adequacy of reinsurance arrangements and DAR allocates responsibility for this opinion to the HoAF. Article 272 (7) of the Delegated Regulation outlines, at a minimum, the analysis that should be included as part of that opinion.

3.2.2 It is not expected that the HoAF will perform reviews of controls and processes regarding reinsurance arrangements that the Risk Management or Internal Audit Function would be expected to carry out.

3.2.3 The analysis is expected to include, but not be limited to, the consideration of any known issues relating to reinsurance arrangements and it should identify the relevant issues for consideration by the Board. Where the HoAF has a material concern regarding the reinsurance arrangements they are expected to highlight this and provide clear recommendations thereon to the Board.

3.2.4 This Guidance applies to all forms of reinsurance contracts and is also expected to be applied to alternative risk transfer arrangements (e.g. catastrophe bonds, special purpose vehicles ("SPVs"), industry loss warranties).

3.2.5 In expressing their opinion on the adequacy of the reinsurance arrangements, the HoAF is expected to take into account the important elements of all items that are relevant to the treatment of reinsurance. This is expected to include not only the terms of the original reinsurance contracts, but also any material agreements; contracts; letters; and understandings.

3.2.6 The undertaking is expected to provide all material and relevant documentation to the HoAF. This may include summaries of the key elements of original reinsurance contracts and known agreements. The HoAF may rely on such summaries where they consider this to be appropriate.

3.2.7 Depending[1] on the nature, scale and complexity of the undertaking and the reinsurance arrangements in place, the HoAF is expected to take account of the following issues in providing their opinion on the adequacy of those reinsurance arrangements, making enquiries of other functions as appropriate:

a. The effectiveness of the undertaking's reinsurance arrangements in mitigating the volatility of its own funds;

b. Material interrelationships between the underwriting policy, reinsurance and TPs. Changes in underwriting policy and practice, for example, may not only affect the calculation of TPs, but also the adequacy of reinsurance arrangements.

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[1] For example, by referencing the EIOPA Opinion on the use of risk mitigation techniques and the paragraph 12 blue box indicating when a reinsurance arrangement should be considered to be material. https://www.eiopa.europa.eu/publications/opinion-use-risk-mitigation-techniques-insurance-undertakings_en

Consequently, the HoAF is expected to identify any important interrelationships between underwriting policy, reinsurance and TPs and highlight any known inconsistencies in approach or underlying assumptions;

c. Implications of the reinsurance strategy for underwriting. The opinion is also expected to consider how any currently planned significant changes in underwriting may impact on the undertaking's reinsurance needs in future;

d. The nature and impact of reinsurance arrangements, including:

  i. The economic effect of the reinsurance in place on the estimation of TPs net of reinsurance recoverable and the level of risk mitigation achieved and in particular whether risk mitigation is achieved in extreme scenarios;

  ii. Whether the capital relief achieved through the use of reinsurance is commensurate with the level of insurance risk transfer implied by the reinsurance;

  iii. The consistency of the reinsurance programme with the Risk Appetite Statement, the availability of additional capital and in particular whether the reinsurance cover provided is consistent with the likely availability of additional capital.

e. The effect of reinsurance on net to gross results over time, in particular on the volatility of net results or reserves compared to gross results or reserves;

f. Any known material liquidity issues in the current reinsurance arrangements including any historic issues with receiving recoveries;

g. The level of credit risk introduced through the use of reinsurance. Credit risk is expected to be considered both in terms of a default event and credit downgrading. This is expected to take into account the capital strength of material reinsurance providers, including intra-group providers, and any collateral which has been provided;

h. The level of concentration risk entailed by the current reinsurance structure. Concentration risk is expected to be considered in terms of concentration to individual companies and groups. Where concentration risk is significant, has the undertaking considered whether alternative cover would be available if a reinsurer were to withdraw from the market or increase prices, or if a particular type of reinsurance were to become too expensive;

i. Any review or work done by the Risk Management Function (or other party with appropriate expertise) on the effectiveness of using intra-group reinsurance services, including, inter alia, comparison to market prices, concentration of risk to group, availability of required types and levels of reinsurance from group, suitability of standard group practice for the undertaking;

j. Whether the cover provided by the reinsurance matches the risks of the underlying policies, including duration, exclusions, policyholder options and whether the reinsurer has the right to cancel cover or change prices or terms not matched in the underlying policy;

k. Whether the reinsurance contracts cover latent or unknown risks which may emerge later and which may trigger benefit payments to policyholders;

l. Whether the undertaking intends entering a material new line of business for which it does not have existing reinsurance, or in respect of which it will heavily rely on a reinsurer for data, system development or other areas;

m. Where secondary services (e.g. provision of data, modelling expertise, facilities or administrative work) are a significant factor in setting the reinsurance strategy, then the opinion should consider the adequacy of those secondary services provided;

n. Whether the reinsurance strategy implicitly assumes that it will be possible to renew reinsurance in a number of years' time on the same basis as that used for current purchasing;

o. How the reinsurance strategy takes basis risk[2] into account;

p. Where the reinsurance cover makes references to indices, industry losses or any other form of proxy for the actual insurance loss suffered, the HoAF is expected to consider the appropriateness of this proxy. They are also expected to consider the level of mismatch risk implied by any such arrangements;

q. Material implications of the reinsurance strategy for the TPs, for example in relation to the calculation of reinsurance recoverables or risk margin and how aggregate features such as aggregate deductibles or catastrophe cover are taken into account in reserving; and,

r. Where an internal model is used, the HoAF is expected to consider any material issues which may affect the treatment of reinsurance within the internal model. There is no expectation that the HoAF provides full assurance as to the treatment of reinsurance within the internal model; instead the opinion is expected to highlight any material known issues related to the treatment of reinsurance within the internal model.

3.2.8 Where, in the opinion of the HoAF, the undertaking's reinsurance arrangements deviate materially from the reinsurance arrangements typically associated with the risks of the undertaking, they are expected to highlight the need for the firm to consider alternative structures.

3.2.9 The opinion is expected to include an assessment of how the reinsurance coverage could respond under a number of stressed scenarios. Where these scenarios are covered in the Own Risk and Solvency Assessment ("ORSA"), the HoAF may limit their considerations to a review of these scenarios:

a. A description and discussion of reverse stress testing carried out. Such stress testing could focus, for example, on the level of shock required to use up all reinstatements or to cause default of a significant reinsurer;

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[2] "Basis risk" is defined in Article 1(25) of the Commission Delegated Regulation.

b. A discussion of any material insurance risks not covered by reinsurance. Examples could include multiple smaller catastrophe events not covered by reinsurance; poor attritional experience across multiple lines; or poor experience not covered due to exclusions;

c. Applicable market events are expected to be taken into account in deciding the range of stress tests covered. The stress tests are expected to include, but not be limited to, significant stress events the undertaking has experienced historically;

d. The HoAF is also expected to consider whether the following items may be material for the reinsurance programme in question, and if so, these are expected to be stress tested:

i. Stress tests which target contract wording disputes e.g. in relation to pay-outs for PPOs, disputes over the extent of coverage provided, disputes over liability;

ii. The ability of a significant reinsurer to make payments in a stressed scenario;

iii. The feasibility and effectiveness of any proposed management actions or other risk mitigation techniques taken into account in stress testing; and

iv. Any interconnection between the counterparty risk and value of collateral assets.

3.3 Contribution to the Effective Implementation of the Risk Management System

3.3.1 Regulation 50(1)(i) of S.I. 485/2015 requires the actuarial function to express an contribute to the effective implementation of the risk management system, in particular with respect to the risk modelling underlying the calculation of capital requirements, and with respect to the ORSA process. DAR allocates responsibility for this to the HoAF. The following sections set out some of the issues that the HoAF could consider in carrying out their responsibilities in this respect. These contributions can be captured in the annual Actuarial Function Report.

3.3.2 The calculation of capital requirements

3.3.2.1 The HoAF is expected to contribute to the Risk Management Function with their perspective on the elements of the SCR calculation that are within his or her area of expertise. Examples of such areas include, TPs, pricing, known data issues, results from actual vs. expected analyses. The provision of this information to the Risk Management Function is expected to be documented.

3.3.2.2 The HoAF is expected to contribute to the Risk Management Function's assessment of the appropriateness of the internal model or standard formula for the undertaking, within their areas of expertise. In that regard the HoAF may comment on any material limitations or omissions that they identify in that assessment, based on their knowledge of TPs, reinsurance, pricing, etc. They may consider the Risk Management Function's assessment of the materiality of deviations from the assumptions underlying the internal model or standard formula. Finally, the HoAF may identify and comment on any material improvements that, in their opinion, are required to be made to the assessment.

3.3.2.3 In terms of the SCR calculations, the HoAF is expected to consider whether they are consistent with:

a. the underwriting policy;

b. the assumptions and methodologies underlying the TPs; and

c. the undertaking's reinsurance programme.

3.3.3 The ORSA process

3.3.3.1 The HoAF is expected to contribute to the Risk Management Function with their perspective on the elements of the ORSA process that are within their area of expertise. In that regard, the HoAF may consider:

a. The range of risks and the adequacy of stress scenarios considered as part of the ORSA process;

b. The appropriateness of the financial projections included within the ORSA process; and

c. Whether the undertaking is continuously complying with the requirements regarding the calculation of TPs and potential risks arising from the uncertainties connected to this calculation.

3.3.3.2 The HoAF may comment on any material limitations or omissions of the ORSA process that they identify. The HoAF may also identify and comment on any material improvements that, in their perspective, are required to the ORSA process.

3.3.3.3 In providing their perspective on the ORSA process, the HoAF may consider:

a. The range of risks considered included in the ORSA, including both risks which are quantified and those which are discussed qualitatively only and whether there are any material risks which in their opinion are not covered in the ORSA;

b. The range of stress and scenario tests included in the ORSA and whether the range and nature of stress tests reflects the risks to which the undertaking is exposed over the planning horizon;

c. Any material limitations of stress and scenario testing carried out. In particular, whether the range of stress and scenario tests, and the design of individual tests, is severe enough to provide a reasonable understanding of the risks to which the undertaking is exposed;

d. The timeline covered within the ORSA and whether it enables the undertaking to identify and assess long and short term risks;

e. The adequacy of the method used to project the SCR over the time horizon of the ORSA;

f. The suitability of the risk measure and confidence level used for the determination of the undertaking’s overall solvency needs in the ORSA, its consistency with the risk appetite and the difference between the one-year view taken under the SCR and the ultimate run off of the business; and

g. In cases where the ORSA's base case is based on a business plan:

i. the appropriateness of the business plan for the purposes of conducting an ORSA assessment and determining the undertaking's overall solvency needs;

ii. the impact of stretch targets in the plan and whether the stresses to the business plan are sufficiently strong to highlight downside risks to which the undertaking is exposed;

iii. whether any management actions assumed in the business plan are feasible and likely to have the desired effect.

3.4 Actuarial Reports on Technical Provisions

3.4.1 Actuarial Reports on Technical Provisions ("ARTPs") are expected to focus on material items. Where there are no significant changes, for example in the information provided to give context to the TPs, it would be reasonable to give less focus to that element.

3.4.2 ARTPs can be made available to the Board in summary form. Where the ARTPs are made available to the Board in summary form, the Central Bank expects the level of detail to be proportionate to the nature, scale and complexity of the undertaking.

3.4.3 ARTPs are expected to include the materiality of recommendations and the status of recommendations from previous years.

3.4.4 In drafting the ARTPs, the HoAF is expected to include:

a. An overview of the review undertaken of the data used to perform the calculation of the TPs. The Central Bank expects the HoAF to comment on whether the checks conducted are accurate and appropriate and to include reference to both the breadth and robustness of tests carried out;

b. A description of any material data issues encountered by the HoAF which could not be resolved by the undertaking and any consequent uncertainties, limitations or effect on TPs, including consequences of data simplifications, approximations and case-by-case approaches;

c. A description of those areas where actual experience has demonstrated that the undertaking's risk profile has materially deviated from the assumptions underlying the TPs and an explanation and quantification of these deviations, including the provision of information on any revisions made to the assumptions underlying the TPs. In this regard, the ARTPs should distinguish between deviations which are judged to arise from volatility of the underlying experience and those which are viewed as impacting on the appropriateness of the data, methodologies or assumptions used;

d. A commentary on the appropriateness of the calculation of the risk margin, including a description of how the SCR, as calculated by the undertaking, has been adjusted and projected in order to calculate the risk margin, with justification of any approximation methods used in the projection;

e. A commentary, where relevant, on the use and effect of a matching or volatility adjustment by the undertaking in calculating the best estimate liabilities, along with commentary on any deviation between the risk profile of the undertaking and the assumptions underlying those adjustments;

f. A commentary, where relevant, on the use and effect of transitional measures with respect to TPs and risk free rates ("RFRs") or the phasing-in mechanism for interest rates, and the compliance of these with the relevant supervisory approval received.

g. A commentary on the appropriateness of;

   i. the segmentation used by the undertaking to group its insurance and reinsurance obligations into homogeneous risk groups,

   ii. key assumptions, including those relating to future management actions and Contract Boundaries, used by the undertaking in relation to the calculations of best estimate liabilities and recoveries from reinsurance contracts and SPVs,

iii. how binary events, extreme events, and events that are not present in historical data have been dealt with in the best estimate liabilities,

iv. any material use of approximations and simplifications, along with estimates of their impacts and uncertainties,

v. any material uses of expert judgement in the calculation of TPs, along with estimates of their impacts and uncertainties

h. A description of the main risks and uncertainties associated with the TPs, and their potential impact, by reference, in particular, to the undertaking's reserving policy, its stated risk appetite, the external environment, and the Solvency II rules on the establishment of TPs;

i. Consideration as to how any perceived prudence within the TPs might impact the SCR or the ORSA.

3.4.5 The HoAF is expected to differentiate between changes in amounts and changes in timing when considering the impact of any changes to the quantum of TPs that might arise as a result of changes to business processes, claims handling practices, or target market profile.

3.5 Actuarial Opinions on Technical Provisions

3.5.1 In the Actuarial Opinion on Technical Provisions ("AOTP"), the HoAF is expected to highlight to the Board and Central Bank, any issues relevant to the TPs that they deem material or noteworthy, including reliances, limitations and recommendations, and where appropriate other information such as post balance sheet events, material expert judgements and material uncertainties.

3.5.2 The HoAF is expected to use the AOTP template included as an appendix to the DAR. Should any changes be needed to the format or wording of the template, the HoAF should engage with the Central Bank.

3.5.3 The HoAF should avoid using generic or boilerplate language within the AOTP. Rather, the commentary should reflect the specific issues relevant to the firm. Additionally, whilst there may be references to further detail included in the ARTP, the commentary in the AOTP should be sufficient to provide an adequate description of the issue for the Board.

3.5.4 In terms of reliances, the HoAF should include a high level description of how they gained comfort with the reliances in providing the opinion. This is particularly relevant where there are large reliances on data provided by other functions, or similarly, where key activities, such as reserving, are performed by others. Further details can be captured in the ARTP.

3.5.5 In terms of limitations, the HoAF should include a high-level description of what the limitation is, the impact that it has and any steps taken to mitigate this impact. Where a limitation, such as a lack of internal data, results in heightened uncertainty or the use of material expert judgement, this should be clearly highlighted within the AOTP. Further details can be captured in the ARTP.

3.5.6 In terms of recommendations, the HoAF should clearly indicate the materiality of each recommendation and the rationale for this. Where recommendations have been carried forward from previous years, the HoAF should clearly highlight this and the impact of not implementing the recommendation. Further details can be captured in the ARTP.

4. General Expectations of the Peer Review process

4.1 General Expectations of the Peer Review process

4.1.1 Where the Reviewing Actuary (RA) is from the same firm as the External Auditor the undertaking is expected to be fully satisfied that there is appropriate segregation of duties and reporting lines between these positions within the External Auditor.

4.1.2 The RA is expected to form an independent view of all lines of business of the undertaking, in order to be able to provide a credible opinion on the AOTPs and ARTPs.

4.1.3 The RA is expected to use an appropriate level of granularity, including but not limited to a separate consideration of:

a. Material lines of business,

b. Lines of business with a high level of volatility,

c. New or growing lines of business,

d. Lines of business with significantly worse experience than expected.

4.1.4 The Peer Review Report is expected to document the reasons for the choice of the level of granularity of the review.

4.1.5 The RA is expected, in particular for material non-life lines of business, to perform an independent recalculation of the technical provisions for those lines of business.

4.1.6 The RA is expected to assess material sensitivities of the TPs to key assumptions and address same in the Peer Review Report.

4.1.7 The RA's assessment is expected to address whether the sensitivity analysis carried out by the HoAF is materially complete and robust.

4.1.8 The RA is expected to assess material uncertainties and key sources of potential deteriorations in TPs at the level of segmentation used by the undertaking in calculating the TPs and address same in the Peer Review Report.

4.1.9 The RA's assessment is expected to address whether the uncertainty analysis carried out by the HoAF is materially complete and robust.

4.1.10 The RA is expected to assess the appropriateness of the use of expert judgement in calculating TPs and address same in the Peer Review Report.

4.1.11 At the discretion of the RA, after consulting with the Board, the scope of any consecutively subsequent peer review by the same RA might be targeted towards specific aspects of the TPs, where this scope would be expected to include at least the following:

a. Any lines of business that have launched or for which the volumes have materially increased since the previous peer review

b. Any lines of business that are expected to materially grow during the business planning period

c. Any lines of business with respect to which the risk exposures of the entity have materially changed since the previous peer review (e.g. due to market developments

d. Any lines of business for which experience since the prior peer review has been significantly better or worse than expected

e. Any lines of business that have closed to new business since the previous peer review

f. Any processes, methodologies or approaches to setting assumptions that have changed materially since the previous peer review

g. Any updates arising from any recommendations made in the previous peer review

h. Any material changes to reinsurance

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