



# **A NOTE ON REPORTING ACTUARIAL INFORMATION**

A guide to the reporting requirements of TASs

Part 6: Insurance Transformations

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# REPORTING ACTUARIAL INFORMATION

TAS R, *Reporting Actuarial Information*, sets out the framework for regulating the way in which actuarial information is reported. The current version of the TAS was published in November 2009. It contains 25 specific requirements (the passages highlighted in boxes in the published standard), along with amplifying and explanatory text. (The other TASs contain additional reporting requirements within the general TAS R framework.)

In my view, it was unfortunate that the drafters of the TAS chose to adopt the format for TAS R that they did, merely setting out requirements (ie what actuaries should do and what they may not do). I have always considered TAS R to be different from the other TASs. The other TASs address matters which actuaries are undoubtedly expert in (data, modelling, insurance, pensions and so on), whereas TAS R addresses matters which many consider that actuaries needed guidance on how to improve. Certainly, that was the opinion of the Morris Review of the Actuarial Profession.

Viewed from a teaching perspective, it is particularly unfortunate that TAS R is structured under the headings *relevance, completeness, comprehensibility* and *transparency*. It is not possible to plan or write a report by addressing those four goals in separate steps. A report writer starts with a set of inputs to the report (data, calculations, results, recommendations etc) and develops the report based on those inputs.

As a teaching aide, I have set out on the following pages a summary of the reporting requirements, re-ordered and re-worded in a manner which I hope writers of actuarial reports will find helpful when setting out to write a report which they intend to be TAS-compliant.

Additional copies of this note are available as a free download from my website ([www.simoncarne.com/reporting-tas](http://www.simoncarne.com/reporting-tas)). The note is believed to be accurate. Anyone who identifies errors – or suspects any errors – is invited to let me know.

**The purpose of this note is to help with the drafting of actuarial information. It is not a substitute for reading the relevant TASs for their full terms and effect.**

Simon Carne

This note addresses the reporting requirements from the **Transformations** TAS, the **Insurance** TAS and the three generic TASs **R (Reporting)**, **M (Modelling)** and **D (Data)**\*. To assist with identifying the source of each requirement, I use colour-coding and superscripts as follows:

**TAS R** in this colour – paragraph numbers without any superscript, eg C.1.1

**TAS M** in this colour – paragraph numbers with superscript <sup>M</sup>, eg C.1.1<sup>M</sup>

**Insurance TAS** in this colour – paragraph numbers with superscript <sup>I</sup>, eg C.1.1<sup>I</sup>

**Transformations TAS** in this colour – paragraph numbers with superscript <sup>T</sup>, eg C.1.1<sup>T</sup>

\* TAS D has *no* reporting requirements. I mention it only so that readers of this note know that it is covered.

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## **The reporting requirements for insurance transformations ... in 100 words**

### **Main principles**

- Include sufficient information for users to make the decisions for which the report was written
  - include any uncertainty inherent in the information
- Style and content should be suited to the knowledge of the users
- Immaterial information should not obscure information that *is* material
- Important information communicated orally must be confirmed in writing

### **Additional requirements**

- Explain the report's aims
- Include descriptions/explanations of:
  - data
  - assumptions
  - cash flows
  - uncertainties
  - events since the data was collected
  - exercise of discretion
  - impact on beneficiaries
  - comparison\* with neutral estimates, last time and projection to next time
- Be careful with technical terms
- ... plus miscellaneous compliance items

\* Some (or all) of the comparisons will not be applicable to a transformations report

## SUMMARY OF THE REPORTING REQUIREMENTS FOR INSURANCE REPORTS (INCLUDING TRANSFORMATIONS)

The following is a summary of the reporting requirements of the TASs. Pages 7-11 contain the actual wording. Paragraph numbers refer to the numbering in the TASs.

### Main principles

Reports should include sufficient information (including any uncertainty inherent in the information) to enable users to make the decisions for which the report was written. The style and content should be suited to the knowledge of the users. Immaterial information should not obscure information that *is* material. Anything communicated in a non-permanent form must be confirmed in writing (C.3.1, C.5.1, C5.2, C.6.1, C.6.6 & C.2.6).

### Explain the aim of the report

Reports should:

- a) state the purpose of the report, the (intended) users and who commissioned the work; which, if any, beneficiary groups have been excluded from the transformation assessment; and whether the assessment for any group has been restricted to adverse impacts only (C.3.3 & D.4.1<sup>T</sup>);
- b) explain the nature and objective of any material calculations, what the results of the calculations represent and whether the results of monetary calculations are the outcome of a planning exercise, a valuation exercise or something else (C.6.10, C.3.7 & C.5.8);
- c) explain any specific measures and methods used to achieve the calculation objective; describe the rationale for those measures and methods and for the related assumptions; and explain any change in the measures, methods or assumptions between similar and related exercises, together with a quantification of the effect on the results; indicate the rationale of any party proposing that the transformation should proceed (C.4.6, D.3.1<sup>I</sup>, D.4.13<sup>T</sup>); and
- d) explain how the users' needs are addressed by the models that have been used, along with any limitations of the models and the implications of those limitations (C5.8<sup>M</sup>).

### Content

Reports should include a statement, description or explanation of:

- a) **data** or information used in the underlying work, including: (i) its source; (ii) any uncertainty over its accuracy and how the uncertainty was dealt with it in the calculations; (iii) the rationale for any grouping (unless the grouping demonstrably has no material effect); and (iv) any (non-erroneous) data points removed from the realisation of a model, along with the implications of their removal (C.4.1, C4.3, C4.9<sup>M</sup> & C4.13<sup>M</sup>);
- b) the material **assumptions** on which any calculations or judgements are based; any differences between the assumptions applied in different parts of the work (see also (c) under "Aim of the report" above regarding assumption changes between exercises); the impact of adopting alternative plausible assumptions; and, for work that includes stressed scenarios and uses assumptions about the co-dependencies of risks, the changes between assumptions about the co-dependencies in the stressed scenarios and those in other scenarios (or an explanation why there are no such changes) (C.4.4, D.4.7<sup>T</sup> & D.2.18<sup>I</sup>);
- c) for any **discount rates** used, or proposed, the derivation of the discount rate, the implications of adopting the rate and the derivation of (and rationale for) any illiquidity premium included in the rate (D.2.9<sup>I</sup>);

- d) the nature and timing of any future **cash flows** being quantified (including specifically any cash flows that are being discounted) and, when projecting cash flows under alternative scenarios, a description of how changes in the assumptions relating to the exercise of discretion are consistent with the fair treatment of the policyholders affected (**C.5.10 & E.2.1<sup>l</sup>**);
- e) the relationship between any non-neutral **estimates** and the associated neutral estimates (**C5.4<sup>M</sup>**);
- f) how the transformation might lead to changes in the (material) risks to the benefits of the different classes of any beneficiaries who are included in the scope of the report and affected by the transformation; and for each relevant (and material) other **risk or uncertainty** faced by the entity, the nature and significance of the risk and an explanation of the approach taken to that risk (**D.4.2<sup>T</sup> & C5.5**);
- g) for any technical provisions included in a report, the relationship between the technical provisions and a **neutral estimate** of the liabilities; and any change to that relationship from the previous exercise of the same type (**D.4.1<sup>l</sup>**);
- h) any material **changes or events** that have occurred since the effective date of the information on which the report is based (**C.3.13**);
- i) the effects on policyholders, and on any with-profits estate, of the exercise of **discretion** proposed or taken (**E.2.3<sup>l</sup>**);
- j) the rationale for any material change in the level of future **running costs** from the current level and the implications for the results (**D.2.16<sup>l</sup>**);

and, for reports relating to work of a recurring nature (which is probably not applicable in the case of a transformation exercise):

- k) a **comparison with the previous report**, explaining relevant differences, including assumptions, calculation results, recommendations and other material matters, as well as a reconciliation of the two sets of results (**C.5.17**); and
- l) the **projected results** for future calculations (**C.5.20**).

### **Transformations**

To the extent that this has not already been covered by the requirements above, transformation reports should:

- for any reports which include an opinion on whether, from an actuarial perspective, the transformation meets the criteria needed to proceed: (i) indicate the information on which the opinion is based; (ii) describe the rationale for the opinion; and (iii) state which of the principles of this standard have been applied in reaching that opinion (**D.4.14<sup>T</sup>**).
- for any groups of beneficiaries within the scope of the actuarial work and who are affected by the transformation, indicate the impact of the transformation by reference to: (i) any material changes to the cash flows to those beneficiaries; (ii) the extent of any potential reduction in the amount of their benefits; (iii) the potential for any change in the likelihood that they will receive their payments; (iv) the circumstances in which the benefits would be adversely affected; and (v) the quantifiable advantages which might be gained by any groups of beneficiaries (**D.4.10<sup>T</sup>**).

### **Be careful with technical terms**

Reports should state the intended meaning of any description which is not uniquely defined and, if it includes probabilities, the report should explain the intended meaning of the probability and the nature of any statistics on which the probability is based (**C.6.8 & C.5.13**).

### **Compliance**

- All reports relating to work within the scope of TAS R should comply with the TAS. Judgements concerning the application of the TAS should be exercised in a reasoned and justifiable manner **(C.2.1 & C.2.8)**.
- Reports should state which TASs apply to the work being reported on and any other TASs with which it is intended that the report should comply. The report should also state whether those TASs have been complied with and/or the nature of any material departures **(C.3.11)**.
- If the writer(s) of a report become aware that the report is not understood by a user, the writer(s) should provide clarification or correct the misunderstanding **(C.6.4)**.

## THE FRC'S WORDING OF THE REPORTING REQUIREMENTS FOR INSURANCE TRANSFORMATIONS

The following pages contain the requirements of the TASs re-ordered to follow the sequence of the summary set out on pages 4-6 of this note.

### MAIN PRINCIPLES

- C.3.1 An **aggregate report** shall include sufficient information to enable its **users** to judge its relevance to the decisions for which they use it.
- C.5.1 An **aggregate report** shall include all **material** matters relating to the work being reported on.
- C.5.2 An **aggregate report** shall indicate the nature and extent of any **material** uncertainty in the information it contains.
- C.6.1 The style, structure and content of **reports** shall be suited to the skills, understanding and levels of relevant technical knowledge of their **users**.
- C.6.6 A **report** shall not include information that is not **material** if it obscures **material** information.
- C.2.6 Any **material** information relating to work within the scope of this standard that is conveyed in a non-permanent form shall be confirmed in a **report**.

### EXPLAIN THE AIM OF THE REPORT

#### Purpose of reports

- C.3.3 An **aggregate report** shall state its purpose, its **users** and who commissioned the work. A **component report** shall state its purpose and to whom it is addressed.

#### D.4.1<sup>T</sup> **Aggregate reports for transformations** shall include:

- a) descriptions of any groups of **beneficiaries** for whom the impact of the **transformation** has not been considered; and
- b) a statement of whether any assessment of change in the amount, value or security of the benefits of any group has been restricted to adverse impacts only.

#### Calculations

- C.6.10 An **aggregate report** shall explain what the results of any **material** calculations are intended to represent.
- C.3.7 An **aggregate report** that includes the results of calculations of monetary amounts shall explain for each result whether it is the outcome of a planning exercise, a valuation exercise or some other exercise.
- C.5.8 For any **material** calculations that have been performed an **aggregate report** shall explain:
  - a) the nature and objective of the calculations;
  - b) any specific **measure(s)** adopted; and
  - c) the **methods** used to achieve the calculation objective.

## Rationales

C.4.6 An **aggregate report** shall describe the rationales for:

- a) any **material** assumptions used or recommended;
- b) any differences between the assumptions used or recommended in different parts of the work; and
- c) the **measures** and **methods** used in any **material** calculations.

D.3.1<sup>I</sup> **Aggregate reports** shall explain any changes in the **measures, methods** or **assumptions** between two similar and related exercises and quantify the overall effect on results.

D.4.13<sup>T</sup> **Aggregate reports** shall indicate the rationale of any party proposing that the transformation should proceed.

## Needs

C.5.8<sup>M</sup> If an **aggregate report** includes information derived from **models**, it shall include explanations of:

- a) any **material** limitations of the **models** that have been used and the implications of those limitations; and
- b) how the **users'** needs are addressed by the **models** that have been used.

## CONTENT

### Data

C.4.1 An aggregate report shall:

- a) describe any **data** or any other information used; and
- b) state the source of the **data** or other information.

C.4.3 If there is any **material** uncertainty over the accuracy of the **data**, an **aggregate report** shall:

- a) describe the uncertainty; and
- b) explain any approach taken to the uncertainty in the calculations or in the results.

C.4.9<sup>M</sup> Grouped **data** shall be clearly identified and:

- a) the reasons for the grouping and the criteria used to determine the groups shall be documented; and
- b) the **aggregate report** shall include an explanation of the rationale underlying the grouping if it is not possible to demonstrate that the grouping has no **material** effect.

C.4.13<sup>M</sup> If any **data** points are removed from the **data** used for a **realisation** other than because they are erroneous:

- a) the **data** points that have been removed shall be **documented** and the aggregate report shall describe them;
- b) the rationale for their removal shall be **documented**; and
- c) the **aggregate report** shall explain the implications of their removal.

## Assumptions

C.4.4 An **aggregate report** shall state:

- a) the **material** assumptions on which any calculations or judgements are based; and
- b) any differences between the assumptions used or recommended in different parts of the work.

D.4.7<sup>T</sup> **Aggregate reports** shall indicate the impact on the actuarial information of adopting alternative plausible assumptions.

D.2.18<sup>I</sup> **Aggregate reports** for work that includes stressed scenarios and uses assumptions about the co-dependencies of risks shall:

- a) describe the changes between assumptions about the co-dependencies used in the stressed scenarios and those used in other scenarios; and
- b) if there are no changes between assumptions about the co-dependencies used in the stressed scenarios and those used in other scenarios explain why there are no changes.

## Discount rates

D.2.9<sup>I</sup> For work which includes the determination of present values of cash flows, **aggregate reports** shall explain:

- a) the derivation of the discount rates;
- b) the rationale for the inclusion of and the derivation of any illiquidity premium included in the discount rates;
- c) the implications of adopting the discount rates; and
- d) the cash flows that are being discounted.

## Cash flows

C.5.10 An **aggregate report** shall indicate the nature of any future cash flows being quantified, including their timing.

E.2.1<sup>I</sup> **Aggregate reports** for work which requires projecting cash flows under alternative scenarios shall describe how any changes in the assumption about the way discretion is exercised in the alternative scenarios considered are consistent with the fair treatment of the policyholders affected.

## Estimates

C.5.4<sup>M</sup> An **aggregate report** that includes estimates that are not **neutral** shall indicate their relationship to **neutral** estimates.

## Risks and uncertainties

D.4.2<sup>T</sup> **Aggregate reports** shall indicate how the **transformation** might lead to any changes in the **material** risks to the benefits of the different classes of **beneficiaries**:

- a) who are affected by the **transformation**; and
- b) who are included within the scope of the actuarial work requested.

C.5.5 For each **material** risk or uncertainty faced by the **entity** in relation to the work being reported on, an **aggregate report** shall state the nature and significance of the risk and explain the approach taken to the risk.

### Neutral estimates

D.4.1<sup>I</sup> **Aggregate reports** for work supporting the determination of a prudent estimate of the technical provisions of an **insurer** shall explain:

- a) the relationship between the prudent estimate and a **neutral** estimate of the liabilities; and
- b) any change to the relationship between the prudent and **neutral** estimates from the previous exercise of the same type, if any.

### Subsequent events

C.3.13 An **aggregate report** shall indicate any **material** changes or events that are known by any person responsible for the **aggregate report** to have occurred since the effective date of the **data** and other information on which it is based.

### Exercise of discretion

E.2.3<sup>I</sup> **Aggregate reports** advising or reporting on the exercise of discretion shall indicate the effects of the exercise of discretion proposed or taken on policyholders and on any with-profits estate.

### Running costs

D.2.16<sup>I</sup> **Aggregate reports** for work that includes projections of the cost of running the **insurer** shall explain the rationale for any **material** change in the level of future running costs from the current level and the implications for the results.

### Comparisons

C.5.17 An **aggregate report** shall include a comparison with an **aggregate report** which has previously been provided for a similar purpose (if one exists), with explanations of any differences. The comparison shall cover assumptions, results of calculations, recommendations and other **material** matters. The comparison of the results of calculations shall include a reconciliation of the two sets of results.

### Projections

C.5.20 An **aggregate report** that includes the results of calculations that are performed at regular intervals shall indicate the projected results from future corresponding calculations.

## TRANSFORMATIONS

D.4.14<sup>T</sup> **Aggregate reports** which include an opinion on whether, from an actuarial perspective, the **transformation** meets the criteria needed to proceed, shall:

- a) indicate the information on which the opinion is based;
- b) describe the rationale for the opinion; and
- c) state which of the principles of this standard have been applied in reaching that opinion.

D.4.10<sup>T</sup> **Aggregate reports** shall describe the impact of the **transformation** on any groups of **beneficiaries**, within the scope of the actuarial work requested, who are affected by the **transformation**, by indicating:

- a) any **material** changes to the cash flows to **beneficiaries** resulting from the **transformation**;
- b) the extent of any potential reduction in the amount of the benefits;
- c) the potential for any change in the likelihood of receipt of payments;
- d) the circumstances in which the benefits of the groups would be adversely affected; and
- e) the quantifiable advantages which might be gained by any groups of **beneficiaries**.

### **BE CAREFUL WITH TECHNICAL TERMS**

C.6.8 An **aggregate report** shall state the intended meaning of any **material** description which is not uniquely defined.

C.5.13 If an **aggregate report** includes probabilities it shall also explain:

- a) the intended meaning of the probability;
- b) the nature of any statistics on which the probability is based.

### **COMPLIANCE**

C.2.1 All **aggregate reports** relating to work within the scope of this standard shall comply with this standard.

C.2.8 Judgements concerning the application of this standard shall be exercised in a reasoned and justifiable manner.

C.3.11 An **aggregate report** shall:

- a) state which TASs apply to the work that has been carried out;
- b) state any other TASs with which it is intended that the **report** shall comply;
- c) state whether it complies with those TASs; and
- d) give particulars of any **material** departures from the TASs referred to in a) and b) above.

C.6.4 If a person responsible for a **report** becomes aware of any evidence of that **report** not being understood by any **user** they shall provide clarification or correct the misunderstanding. If a person responsible for part of a **report** becomes aware of any evidence of any other part of that **report** not being understood by any **user**, they shall notify a person responsible for that other part of the **report**.