Memo

12 September 2024

To Peter Withey - Chair Professionalism Committee (PC)

From Andrew Chamberlain - Chair Actuarial Standards Committee (ASC)

The IAA Council adopted the current (revised) ISAP 1 on 1 December 2018 with a minor correction on 16 April 2019. According to the Due Process for International Standards of Actuarial Practice, all standards are reviewed every five years.

Since that last revision of ISAP 1 in 2018 the work of actuaries has continued to evolve; data science has developed, the use of Artificial Intelligence has increased, climate related risks are assessed more extensively with related disclosures. Furthermore, risk awareness and consideration has become more important for actuaries.

The ASC has appointed a taskforce to review ISAP 1 and made an inventory of possible adjustments to adapt ISAP 1 for the most recent developments mentioned above. The inventory is included in the appendix. The items in the appendix are intended as indicative of potential improvements and should not be regarded as a final proposal – the items are yet to be substantively, formally debated by the ASC.

In our opinion the possible adjustments adhere to the current scope and objectives of ISAP 1 and do not involve a significant change in its structure.

- The potential revisions all fit within the current scope of ISAP 1 as set out in its SOI, including coming under the list of headings and subjects set out in the SOI;
- There is no proposal to change ISAP 1's overall structure nor change any key areas such as the definition or scope of "actuarial services"; and
- The changes are inherently of the nature of clarifications or expansions of text to address new areas of practice, and are not intended to change existing standards of practice.

In the view of the ASC, the possible changes are therefore not fundamental as described in section 10 of the Due Process for ISAPs. We believe that the updates described in the appendix will not require a new SOI, so that we should start the IAA Due Process for ISAPs at step 5 with the publication of an Exposure Draft.

We are asking the Professionalism Committee to approve this approach (as required by paragraph 9.1 of the Due Process for ISAPs). The glossary will also be reviewed in connection with any changes to ISAP 1 in the usual manner.

Appendix

Proposed Improvements to ISAP 1

Paragraph	Discussion
Glossary	
New definitions	
Information	Consider a definition of "information" to clarify that "data" is to be interpreted widely.
"Assumption(s)" and "Method(s)/Methodology(ies)"	Consider adding definitions of "Assumption(s)" and "Method(s)/Methodology(ies)" to the glossary.
Changes	
Data	Revisit the definition.
Model	Revisit the definition.
ISAP	
Preface	Update disclaimer to new version approved by Council (April 2019).
1.5.2	Add to the proportionality principle consideration of the nature, scale and complexity of the underlying risks.
2.2	Add that the actuary should have or obtain sufficient understanding of the nature of risk and uncertainty in relation to the assignment and the likely effect of such risk and uncertainty on either the intended user's decision-making or the intended user's reasonable expectations.
2.3	Improve the paragraph together with a proper definition of "information" in the glossary.
2.3.2.c	Reverse the statement, the actuary should disclose the source of the information.
2.4.1	Include consideration on inherent uncertainty in the output of the actuarial services for materiality.
2.5.1	Update the paragraph capturing requirements resulting from data science and AI.

2.5.4	Add consideration on disclosure of modifications and work that relates to using synthetic datasets (in the context of AI, this is data artificially generated by a computer algorithm, with the goal of achieving real-world data samples).
2.5.5	Add consideration that when a large amount of data is being used, especially in the context of AI, the completeness of data parametrization and data structure stability needs to be checked accordingly. A deficiency on both parametrization and an undefined data structure van lead to potential algorithm hallucination.
2.7.1	Improve the paragraph after adding a definition of "Assumption(s)" and "Method(s)/Methodology(ies)" to the glossary.
2.7.2	Check whether this paragraph is still complete and assess how assumptions based on information prepared by another party should be incorporated.
2.7.4.b	Add natural environments.
2.10	General remark for 2.10: Potentially adjust this section to clarify application to "actuarial" models or third party/other models as inputs to actuarial models, versus the output of other models (e.g. CC) that may be regarded as "Information" within the scope of ISAP1.
2.10.1	Potentially explicitly address model testing.
2.10.2	Add consideration for probability distributions in models, if any. Add text for complex algorithms safeguarding that the actuary will assess the appropriateness of the IT infrastructure supporting the models, and validate the completeness and the sources of data.
2.10.4	Not only address changes, but also life cycles.
2.10.6	Address stress and scenario testing. Add consideration on appropriateness of model testing.
2.10.x	Add paragraph for models outside the actuary's control.
2.10.x	Add paragraph for assessing consistency among models.

3.2	Check whether this section needs to be updated.