



Statement of Intent (SOI) for ISAP 1A- Governance of Models

Submitted by: The Actuarial Standards Committee (ASC)

1. Background

Model governance has become increasingly important in several major jurisdictions; e.g., Solvency II in Europe and Mexico, Sarbanes-Oxley in the U.S. The ASC is currently working on ISAPs 4, 5, 6, and 7 and it seems likely that each one will need to address model governance unless it is addressed separately in one place. (We have titled the ISAP “Governance of Models” to make it clear that the ISAP is about governance of models and is not a model standard on corporate governance. The term model governance (which is commonly used in this field) is used to mean governance of models.)

The ASC originally planned to extend ISAP 1 rather than drafting a separate ISAP (and discussed this approach with the Executive Committee). Model governance crosses all actuarial practice areas so it would naturally fit into ISAP 1. However we heard from several member associations (both before and during the IAA Zurich meetings) that modifying ISAP 1 would cause problems with their work on adopting ISAP 1 (which is ongoing). Accordingly we propose to write a new ISAP (ISAP [1A]) that will cover model governance and be referenced by most other ISAPs. We also expect (but do not commit) to look for a graceful way to combine ISAP 1 and ISAP [1A] at some future date. We would propose doing this only if it would not create problems for member associations and other standard-setters.

The proposed ISAP will be a high level, principles-based, model standard that will be quite short. Models range widely in their level of sophistication, and for what they are relied upon. The ISAP will highlight that paragraph 1.5.2 of ISAP 1 (Principle of Proportionality) should be considered in any model governance work.

2. Purpose

The ASC is proposing coverage of model governance in one place rather than scattered over several ISAPs since we expect the topic to arise in several ISAPs under development. This allows the practice specific standards to include model governance related guidance only to the extent it is indeed specific to that area of practice.

3. Scope, roles and content

The proposed standard will apply to actuarial services provided when use is made of models. We propose the following tentative definitions. These definitions are deliberately inclusive to cover all modelling practices.

Model – A practical representation of relationships among entities or events using statistical, financial, economic, or mathematical concepts. A model uses assumptions, data and algorithms that simplify a more complex system and produces results that are intended to provide useful information on that system. Calculations simple enough to be effectively performed manually would not be considered a model.

Model Governance – The application of a set of procedures and an organizational structure designed so that intended users can place their confidence in the results of the model.

We realize this will include small modelling jobs but we note that the Principle of Proportionality (Paragraph 1.5.2 of ISAP 1) will apply particularly in this case. We will propose adding these definitions of Model and Model Governance, to the Glossary (possibly with other definitions)

The proposed ISAP [1A] will provide guidance on the appropriate governance to manage the risks inherent in any use of models. The guidance is intended for actuaries developing or using models to support their work and will cover:

- Review of existing models whether developed in-house or by a third party (including confirmation that the model is appropriate for the intended application of the model, documentation of the model construction, and validation of the model);
- Governance of the development and change of models (when the actuary is called upon to develop or change a model);
- Selection of models (including their appropriateness for the intended use);
- Usage of models (including:
 - adequate control processes for production runs, changes to the model, and adjustments to the data,
 - sufficient number of runs of stochastic models, and
 - understanding of material differences between different runs of the model); and
- Communicating the development and management of risk of models (including limitations, simplifications, uncertainties, and any material changes made to the model).

We will take into account standards on Model Governance (e.g. Solvency II and Sarbanes Oxley) when writing the ISAP.

4. Principle of Subsidiarity

The ASC considered whether the proposal for a model ISAP conflicts with the principle of subsidiarity and concluded that it did not. The ASC confirms its intent that the proposed ISAP is to comply with the principle of subsidiarity.