

Comment #3 – 12/20/11 – 4:59 p.m.

December 21, 2011

ASOP No. 38 Revision
Actuarial Standards Board
1850 M Street, Suite 300
Washington, DC 20036

RE: Proposed Revision of Actuarial Standard of Practice No. 38

Dear Members of the Task Force to Revise Actuarial Standard of Practice (“ASOP”) No. 38 of the Casualty Committee of the Actuarial Standards Board:

The following are comments on the Exposure Draft of the Proposed Revision of ASOP No. 38. We have organized our comments into three areas: General Comments, Comments on Issues Requested by the Committee, and Comments on Specific Items in the Exposure Draft. All comments represent our own views and not necessarily those of our employer.

A. General Comments

The changes proposed in the Exposure Draft of ASOP No. 38 may create professional responsibility that the actuary cannot and should not reasonably be expected to uphold. The Exposure Draft appears to create the responsibility to monitor the development, peer review, and implementation of models outside our area of expertise, responsibilities that are not required by actuaries from other disciplines. The expectations placed on the casualty actuary are overly broad, ill-defined, and unreasonable.

The duty of care placed on actuaries in the Exposure Draft of ASOP No. 38 is inconsistent with the standard of care in other actuarial standards of practice and does not appear to be consistent with the current state of actuarial practice. According to the Exposure Draft, an actuary using a model that incorporates specialized knowledge outside the actuary’s expertise should:

1. Evaluate the appropriateness of the model for its intended use, and
2. Review the model or rely on a review of the model by another actuary.

According to ASOP No. 41, on the other hand, if an actuary uses an assumption selected by another party, and is unable to judge the reasonableness of the assumption because the actuary is not qualified to do so, the actuary should disclose this fact. According to ASOP No. 36, the actuary can use another actuary's work and render an opinion if, in his/her professional judgment, it is reasonable to do so. The actuary's obligation is to disclose the level of review he/she has done.

Models are often used to derive an assumption or set of assumptions to be used in an actuary's analysis (such as a catastrophe load, a set of future inflation figures, etc.). The use of a model that incorporates knowledge outside the actuary's expertise is akin to the use of an assumption selected by another party.

Many of the considerations the actuary would need to take into account could only be accomplished if the actuary has a level of expertise with the model and its subject matter. The level of understanding required by certain elements of the Exposure Draft would only exist if the model were within the actuary's field of expertise, in which case, paradoxically, ASOP No. 38 would not apply. Examples:

- In section 3.2.1 the actuary should consider whether there are known current circumstances or situations where the model might produce biased or inaccurate results; and whether the model has known limitations that are significant and relevant, and what those limitations are.
- In section 3.2.3, the actuary should consider whether significant current developments in the subject matter addressed by the model and in relevant fields of knowledge are likely to affect the appropriateness of the model for the intended use.
- In section 3.3.1 the actuary should be reasonably familiar with the major components of the model and how such components interrelate or have interdependence within the model.
- In section 3.3.2, the actuary should consider if the model is based on currently accepted practices within the applicable fields of expertise.
- In section 3.3.3 the actuary should be reasonably familiar with the level of expert review and testing that the model has previously undergone.

We note that other disciplines use some of the same models as casualty actuaries, and are not subject to this standard. For example, a casualty actuary using an economic scenario generator model is subject to this standard whereas a life actuary who uses the same model is not. This puts the casualty actuary in a difficult position professionally, restricting the casualty actuary from venturing into new areas because the standard is onerous. This also places casualty consulting actuaries and property and casualty insurance companies at a commercial disadvantage relative to their counterparts in other disciplines. The expense of using a model outside the actuary's

expertise will be greater to a casualty consulting actuary or property and casualty insurance company, all else being equal, than the corresponding expense to an actuary or firm from another discipline.

The other disciplines have twice decided that they do not want this standard to apply to them (first in 2000 and again when this standard was being revised). It would be helpful if the Casualty Committee discussed the reasoning of the other disciplines, as the same reasoning may now apply to models commonly used by casualty actuaries, and as such, the Casualty Committee should consider restricting the scope or restricting the standard of care required by the Exposure Draft.

B. Comments on Issues Requested by the Committee

The Committee specifically requested comments on the following issues:

Issue 1. This exposure draft does not require the actuary to use the latest version of a model if the previous version is appropriate for its intended use. Is this sufficiently clear?

This subject appears to be addressed in section 3.2.2, where, if a model has undergone significant revisions subsequent to its review, the actuary should be reasonably familiar with these revisions in order to apply professional judgment as to whether the model, either revised or as originally reviewed, is appropriate for use in developing the intended actuarial work product. However, this section does not make it clear that the actuary is not required to use the latest version if the previous version is appropriate for its intended use.

Issue 2. This exposure draft maintains similar language as the existing standard regarding documentation (see section 3.7). Is this appropriate in light of the adoption of revised ASOP No. 41, Actuarial Communications?

We believe section 3.7 is still appropriate, as it summarizes the specific documentation needed to demonstrate how the actuary has met the guidance of ASOP No. 38. However, it is unclear whether the documentation discussed in section 3.7 is intended to be included within the actuarial communication.

Issue 3. Is section 1.2, Scope, clear in identifying that it is a user of the model itself that is subject to this proposed revision and not an actuary who uses the work product prepared by another actuary or other expert who used the model?

The scope of actuarial work that would be subject to the proposed revision is unclear. First, many actuaries do not themselves physically “use” models. Instead, someone on their actuarial staff may enter the data, run the model, and summarize the output. However, we believe that the subsequent use of the model output by the actuary would

mean that the actuary would be subject to ASOP No. 38. Thus we suggest that the standard include a discussion of what it means to “use” a model.

Issue 4. Since June 2000, when this standard was originally adopted, property and casualty actuaries have made use of a wider variety of models. Is this proposed revision still appropriate for all models used outside the actuary’s expertise that are related to property and casualty insurance coverages and products?

This standard was originally developed when the use of catastrophe models became widespread among actuaries. However, the scope of the standard was written to apply to all models and not just catastrophe models. It is inappropriate to have a standard apply to actuaries when using any model as the challenges associated with different types of models are different. The level of scrutiny and review that is appropriate and possible is not the same for all models. In general, the further the model is from the actuary’s area of expertise, the less appropriate (and possible) it is to expect the actuary to evaluate and review the model. It is punitive to bind the actuaries to this standard for models yet to be developed, especially as they will likely be based on science and technology about which the actuary may have little knowledge.

The Actuarial Standards Board (“ASB”) currently has discussion drafts relating to Enterprise Risk Management practice and we are fully supportive of this initiative and would not want ASOP No. 38 to conflict with the provisions that would ultimately be contained in a standard that is specific to Enterprise Risk Management.

We believe the ASB should consider the development of different requirements for different classes of models. These different requirements could be implemented within a single actuarial standard of practice, or within separate actuarial standards of practice.

C. Comments on Specific Items in the Exposure Draft

The following are our comments on specific areas of the proposed revision:

1. *Section 3.1 states that the actuary should “evaluate the appropriateness of the model for its intended use” and “review the model or rely on a review of the model by another actuary.”*

Many of the models used by actuaries are proprietary. In this circumstance, we think it is unreasonable to expect an actuary to have access to the inner workings and development of a model to complete such a review. It is also possible in such circumstances that the only persons to have reviewed such a model would be the developers themselves.

2. *Section 3.2.1.a states that the actuary should consider “the data, assumptions, parameters, or subjective judgments that affect the output of the model.”*

As the model is beyond the actuary's area of expertise, it is unreasonable to expect the actuary to know and understand the data, assumptions, parameters, and subjective judgments that would affect the output of the model.

3. *Section 3.2.1.c states that the actuary should consider "the extent to which there has been prior review of the model."*

It is not clear by whom such prior review is meant to have been completed. Prior review by the actuary? Prior review by another actuary or expert? Prior review by the persons who developed the model? It is also not clear what burden is placed and should be placed on the actuary to know the extent to which the model has been reviewed.

4. *Section 3.2.1.d states that the actuary should consider "whether there are known current circumstances or situations where the model might produce biased or inaccurate results."*

It is not clear by whom such current circumstances or situations should be known. The actuary cannot be expected to be familiar with every possible aspect of a model that is outside of the actuary's expertise. The level of review and research required by the actuary as a result of this section is unclear. The standard seems to require a level of knowledge that would require the actuary to become an expert in the subject matter, which is counter-intuitive, since if that were the case, ASOP No. 38 would not apply.

5. *Section 3.2.1.e states that the actuary should consider "whether the model has known limitations that are significant and relevant, and what those limitations are."*

It is not clear by whom such limitations are meant to be known. The actuary cannot be expected to be familiar with every possible aspect of a model that is outside of his expertise. The level of review and research required by the actuary as a result of this section is unclear.

6. *Section 3.3.3.a states that the actuary should consider factors such as "whether there are any known significant differences of opinion among such experts regarding aspects of the model that could be material to the actuary's use of the model."*

It is not clear by whom such differences of opinion are meant to be known or what level of research is required by the actuary to determine this.

7. *Section 3.3.3.b states that the actuary should consider factors such as "whether there are non-actuarial professional standards that apply to the development, testing, validation, or use of the model, and whether the model has been evaluated and has met such standards."*

This section appears to place an undue burden on the actuary.

8. *Section 3.3.3.c states that the actuary should consider factors such as “whether the model had undergone peer review by such experts.”*

This section appears to place an undue burden on the actuary.

9. *Section 3.3.3.d states that the actuary should consider factors such as “the professional credentials or other apparent qualifications of such experts and the professional affiliation of such experts.”*

This section appears to place an undue burden on the actuary.

10. *Section 3.4 states that “the actuary may rely on another actuary who has conducted some or all of the review for a particular model.”*

As many of the models intended to be within the scope of the ASOP No. 38 are outside an actuary’s area of expertise, we believe that actuaries should rightly be able to rely on the review of models by appropriate experts. Thus, we recommend re-wording section 3.4 to state reliance on “another qualified professional.”

11. *Section 3.5 states that “If variations in the model output have minimal impact on the actuary’s results and conclusions, then the model has limited relative importance.”*

We agree that the review of the model should be commensurate with the relative importance of the model output on the actuary’s results and conclusions. We suggest that this concept be discussed in the overview of the ASOP.

As currently worded, this section suggests that as long as the model output does not vary materially, the model itself has limited relative importance. We do not believe this was the intent. Rather, we believe the importance of the model should be a function of what impact the model results have on the actuary’s estimates. For example, if an actuary uses a model whose output varies from a factor of 1.200 to 1.210, but if the use of that factor represents 40% of the actuary’s total estimate, the model should be considered to be significant.

12. *Section 3.7 states that “the actuary should create documentation that demonstrates how the actuary has met the guidance of the ASOP.”*

It is not clear whether such documentation is expected to be included in the actuarial communication, or whether such documentation would be internal to the actuary. We recommend that it not be required to be included in the actuarial communication, and that section 3.7 be expanded to make this clear.

13. *Section 4.1.e states that the actuary should disclose “where applicable, reliance on another actuary for the model review”*

Similar to our comment on section 3.4, we recommend changing this to state “reliance on another qualified professional.”

14. *Section 4.1.g states that the actuary should disclose “the disclosure in ASOP No. 41, section 4.3, if the actuary states reliance on other sources and thereby disclaims responsibility for any material assumption or method selected by a party other than the actuary”*

The inclusion of section 4.1.g suggests that it would be possible for the actuary to state reliance on other sources and thereby disclaim responsibility for the results of a model outside the actuary’s expertise. This seems counter to the requirement that the actuary evaluate the appropriateness of the model for its intended use. If section 4.1.g is intended to apply in instances where the actuary has relied on a review of the model by another actuary, then it seems unnecessary, because this contingency is covered in section 4.1.e. If section 4.1.g is intended to apply wholesale to the use of a model outside the actuary’s expertise, this suggests that there are instances where the proposed ASOP No. 38 would not apply.

Sincerely,

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