

**Comment #13 - 1/16/12 - 6:01 p.m.**

Please find below our comments on the exposure draft of ASOP 38, following the order of the draft. We appreciate the efforts of the ASB and its committees in producing this exposure draft.

#### Section 2. Definitions

We do not believe that the exposure draft is sufficiently clear in the definition of user.

Consider the following example: Chief Actuary X is the responsible actuary (as in ASOP 41 paragraph 3.1.4) for a particular statement of actuarial opinion (as defined in the American Academy's Qualification Standards). However, the work was performed by Junior Actuary Z, a member of X's staff, and involved the use of a model outside Z's (and X's) area of expertise. Who is the "user" of the model? To whose work does ASOP 38 apply?

We understand from ASB question # 3 on page iv of the exposure draft transmittal memorandum (but not from the scope section in the exposure draft) that the intent is for ASOP 38 to apply to Z, who used the model directly, and not to X, who is using Z's workproduct and is responsible for the statement of actuarial opinion.

We suggest that the ASB add an explicit definition of "user" to Section 2.

#### Section 3. Analysis of Issues and Recommended Practices

##### 3.1 Overview

In respect to 3.1.b, we believe that it is appropriate for the actuary to rely on a review of the model by an expert, actuary or not.

##### 3.2 Appropriateness of the Model for the Intended Use

We believe that this section as written places an undue burden on the actuary, and in some ways requires that he or she become an expert on the model that is, by definition, outside his or her area of expertise. We provide specific commentary below.

We agree with the ASB that the actuary should make a reasonable effort to investigate the items identified in sections 3.2.1 and 3.2.3, in accordance with our obligation to perform services with "skill and care", as stated in our code of conduct. However, we fear that, as written, some provisions of this requirement could be understood (in particular by those outside the profession) to require exhaustive investigation which would be out of reach or at least highly impractical for an actuary who is not an expert in the area, and expose actuaries to almost certain non-compliance.

As an example, 3.2.1.d requires the actuary to consider "whether there are known current circumstances or situations where the model might produce biased or inaccurate results". This requirement is vague: the use of the passive voice with indefinite subject in "known" and of the

verb "might" expose the actuary to almost certain non-compliance if not otherwise qualified. Is the actuary using catastrophe models required to consider all obscure internet blog postings or all testimony ever produced at rate filings suggesting that models over/underestimate loss potential? The same problems arise from 3.2.1.e: "whether the model has known limitations that are significant and relevant, and what those limitations are"

Likewise, 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" could be read to require the actuary using catastrophe models to keep abreast of developments in engineering and meteorology. This would clearly be overly burdensome. We believe that the requirement for the actuary to be attentive to major developments that may significantly affect the suitability or accuracy of the models for the intended use is already covered in 3.2.1.d, without placing an undue burden on the actuary to keep abreast of areas outside his or her area of expertise, subject to the commentary above.

We therefore suggest that the ASB consider eliminating 3.2.3 and re-writing 3.2.1 to avoid the problems noted above, using language similar to:

"3.2.1 General Considerations—The actuary should use reasonable efforts to consider the following:

- a. the data, assumptions, parameters, or subjective judgments that the actuary reasonably expects to affect the output of the model;
- b. the extent to which there has been prior use of the model. Some models might be widely used for the intended purpose and widely accepted for the intended use. At other times, the actuary may work with models that have undergone relatively little use or are otherwise not widely accepted for the intended use;
- c. the extent to which there has been prior review of the model;
- d. whether there are generally known current circumstances or situations where the model is expected to might produce biased or inaccurate results;
- e. whether the model has generally known limitations that are the actuary reasonably expects to be significant and relevant to the actuary's use of the model in developing the actuarial workproduct, and what those limitations are; and
- f. whether modifications to the model or assumptions inherent in the model are needed in order to generate output appropriate for its intended use."

The ASB may also wish to consider expanding the disclosure requirement in 4.1.d to include commentary on the items in 3.2.1 to ensure that the user of the actuarial workproduct is aware of these considerations.

### 3.3 Actuaries Reviewing Models Outside Their Expertise

We suggest adding the words "area of" between "their" and "expertise" in this title.

We understand that items 3.3.3.a through 3.3.3.d are merely examples of issues the actuary may find appropriate to consider when complying with the requirement to be reasonably familiar with the extent of expert review and testing of the model. However, we note that considering these factors could be overly burdensome. For example, 3.3.3.b., could be understood to require the actuary to become familiar with the professional standards applicable to several professions. Rather, we believe that the appropriate requirement would be for the actuary to consider whether the expert review included review for compliance for applicable non-actuarial standards of practice.

We propose the following edits to this section:

"... applicable field. In considering the level of expert review, the actuary should consider factors such as the following, to the extent practical:

- a. whether there are any generally 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;
- b. whether the model development, testing and validation were evaluated in accordance with applicable 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;
- c. whether the model had undergone peer review by such experts; and
- d. the professional credentials or other apparent qualifications of such experts and the professional affiliation of such experts."

#### 3.4 Actuaries Relying on Model Review by Another Actuary

As noted in our comment on 3.1.b., we believe that the actuary should be allowed to rely on a review by a non-actuary.

We suggest the following edits to the opening sentence of the paragraph:

"The actuary may rely on another actuary or subject-matter expert who has to conducted some or all of the review required in 3.1.b and described in 3.3 for a particular model."

#### 4.1 Actuarial Communications

We suggest adding the word "significant" between the words "any" and "adjustments" in 4.1.b and 4.1.c, to avoid instances of trivial non-compliance.

Other ASOPs exempt actuaries from disclosing reliance on work performed by other actuaries within the actuary's control, as such requirement would be overly burdensome. We suggest that the ASB adopt a similar exemption to the requirement to disclose the reliance described in 3.4 by editing 4.1.e to read:

"where applicable, reliance on another actuary for the model review, as described in section 3.4. For purposes of this item, "another" refers to one not within the actuary's control;"

We also believe that the disclosures proposed in 4.1 do not appropriately address communication to the audience of the risks associated with the use of a model. We encourage the ASB to modify this section to provide guidance to the practitioners in that respect.

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