Comment #20 – 9/25/13 – 1:24 p.m.

1. Does the proposed standard provide sufficient guidance to actuaries working with models?
   *There are some areas of confusion, in my opinion. Please see more detailed comments below.*

2. Is the proposed standard sufficiently flexible to allow for new developments?
   *I think the lack of clarity mentioned above and listed below needs to be resolved before I could comment on that.*

3. The draft ASOP starts with a wide scope, but allows the actuary to use professional judgment to identify those instances (such as those involving minimal reliance by the user, or resulting in a non-material financial effect) where some guidance described in this ASOP is not appropriate or practical. Is this clear and appropriate?
   *It is clear, but I am not certain it is appropriate. Isn’t it a given in any standard that it is OK to deviate from an ASOP if sufficient reason is given and (hopefully) documented? This seems to be a special case of that, almost (but not quite), turning this into an optional ASOP. I don’t believe this is the intent.*

4. In those instances where some guidance described in this ASOP is not appropriate or practical and the deviations from guidance are “not material,” the actuary does not need to disclose these deviations. Is this clear and appropriate?
   *Is this appropriate? See response to #3 above. I don’t believe each deviation from the guidance needs to be disclosed, but the reason for the inappropriateness or impracticality of deviation should be disclosed when the deviation is considered “material” and is disclosed.*

   *Is this clear? I had to go back and re-read the ASOP to see if this was “clear,” but after re-reading it, I’d say it is. I realize this comment sounds like there should be a more direct way to communicate this but I don’t have any suggestions and I think what you have is fine.*

5. Appropriate documentation simplifies later use and development of current models as well as allowing easier review by principals and other actuaries. Section 3 contains guidance with regard to documentation. Is this guidance clear and appropriate?
   *Section 3 is clear and appropriate, within the context of the comments made below. However, the “later use and development of current models” is not addressed. I’m not sure additional documentation should be required for this purpose. If the actuary is selecting and/or using the model, it seems unnecessarily burdensome, and if the actuary is building and/or developing a model, other types of documentation should be used. In addition, competitive considerations may preclude disclosure of this type of information.*

6. Does the use of bold font to identify defined terms improve the readability and clarity of the standard? If not, what suggestions do you have to improve the recognition of defined terms in the standard?
   *It is very helpful. For electronically viewed documents, if these could be links within the document, or comments that could be seen when hovering, it would be even more helpful.*
Comments on Exposure Draft: Modeling

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The authors are to be commended for tackling this difficult topic and crafting a consistent and readable document that takes many of the important issues into account. The comments below (and above) are meant as friendly suggestions based on personal experience and not in any way a negative reflection on the fine work already done.

I work for a catastrophe modeler (RMS) that focuses mostly (but not entirely) on P&C risks underwritten by the private markets. In addition, I was one of the original members of the task force that crafted ASOP #38. These slices of background will help, I hope, to keep my comments in context. Although I’ve made some attempt to consider various viewpoints, my reading of the exposure draft is based on heavy exposure to and use of ASOP #38 (or at least the principles it encompasses).

The way the current exposure draft is self-described, along with consideration of ASOP #38, leads to the following categorizations of actuarial work involving models:

<table>
<thead>
<tr>
<th>Item</th>
<th>Actuarial Task</th>
<th>ASOP</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Using Models Outside the Actuary’s Area of Expertise (Property and Casualty)</td>
<td>#38</td>
</tr>
<tr>
<td>B</td>
<td>Using Models Inside the Actuary’s Area of Expertise (All Practice Areas)</td>
<td>Proposed ASOP</td>
</tr>
<tr>
<td>C</td>
<td>Developing/Building Models (All Practice Areas, Inside or Outside Expertise)</td>
<td>Proposed ASOP</td>
</tr>
<tr>
<td>D</td>
<td>Using Models Outside the Actuary’s Area of Expertise (other than P &amp; C)</td>
<td>Proposed ASOP</td>
</tr>
</tbody>
</table>

1. Although a revision to ASOP #38 is being drafted, until it is complete, the actuarial responsibilities related to the field of model use seem patchy. In particular, Item C in the table above seems as though it should require at least as much rigor as Item A.

2. Although a minor point, the difference between “building” and “developing” a model is not clear.

3. I think the concept of the amount of effort being commensurate with the materiality and impact of the model output is a good one and makes sense. But, it has not been clearly delineated or defined when these two standards (the current exposure draft and ASOP #38) are reviewed together.

4. Trade Secret or proprietary concerns related to the model are not addressed and they should be.

5. Paragraphs 3.2.7.a, 1 through 4, refer to credibility. It would be helpful to clarify how current (and proposed?) ASOPs on credibility relate to these comments. The credibility ASOPs seem to call for a “measure” of credibility, with considerations of complements of credibility, etc. Perhaps the Model ASOP intends a somewhat less rigorous definition (which is still allowed under the credibility ASOPs); perhaps not.

6. Paragraph 3.3.2 discusses Appropriate Governance and Controls. Both the title and the discussion are good, and in my opinion, necessary. However, they do not seem to fit together. “Governance” is not defined, especially as it relates to models, be they internal or acquired. The
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examples given are useful for confirming model stability, but don’t relate to governance or controls.

--Kay Cleary, FCAS, MAAA, FCA