

## Appendix 2

### Comments on the Second Exposure Draft and Task Force Responses

The second exposure draft of this actuarial standard of practice (ASOP) was exposed for review in September 1999, with a comment deadline of March 1, 2000. Ten letters of comment were received on the second exposure draft. Summarized below are the significant issues and questions contained in the comment letters, printed in roman type. The task force's responses appear in **boldface**.

#### General Observations

Two basic concerns were raised as general observations. One commentator believed the phrase "outside an actuary's area of expertise" was not clear enough to define when the standard applies and when it doesn't. An actuary has some training in econometric techniques but may not be familiar with state of the art methods and protocols. Are econometric models outside the actuary's area of expertise or not? Does the standard apply?

**The task force believes this example clearly shows the need for this standard. Actuaries performing professional services must determine if they are qualified to practice in that area. As such, they are making a determination of their area of expertise and if using models should then determine if this standard applies. Since the situation will differ for every individual actuary, the task force believes the ASOP can not be made more specific and no changes were made.**

The other commentator making a general observation questioned if the ASOP applies when "commercial models" such as @Risk, BestFit, and Evolver are used. The commentator asked "is it not enough to know that these are commercially available products...and have general acceptance as tools...without contacting the vendor to ask questions about the fields of expertise used to develop these models?"

**This standard applies when using any model outside the actuary's area of expertise. The extent of the effort applied will be dependent on the individual circumstances and application of each model. The task force does not believe an unreasonable effort is required on the part of the actuary to apply this standard to the use of "commercial models." In fact, the task force believes that in most cases, the actuary is probably already complying with the standard with perhaps the exception of the documentation requirement.**

## Section 1. Purpose, Scope, Cross References, and Effective Date

Section 1.2, Scope—Some commentators questioned the application of the standard to health companies and some forms of health coverages. They implied the standard should define property and casualty. **The ASOP does not apply to companies but rather to actuaries “performing professional services in connection with property and casualty insurance coverages.” The task force does not believe a definition of property and casualty is possible since it is not static and will tend to change over time. Actuaries will have to determine if the work they are doing is “in connection with property and casualty insurance coverages.”**

One commentator questioned the intent of the phrase “if a conflict exists between this standard and applicable law.” If a regulator requires something that is not either a regulation or a law, does this fall under section 4.5, Deviation from Standard [clause] or is it exempt because of the conflict clause? **The task force believes this depends on the individual circumstances of the situation and made no changes to the text.**

## Section 3. Analysis of Issues and Recommended Practices

Section 3.1, Introduction—One commentator believed the use of the word “basic” in section 3.1(b) sets too high of a standard and suggested replacing it with “general.” **The task force discussed this issue and determined that the requirement to have a basic understanding of the model is appropriate. No change was made.**

Section 3.2, Appropriate Reliance on Experts—Some commentators were concerned with this section. One believed it was confusing and did not provide the actuary with sufficient guidance, others believed it was unreasonable to expect the actuary to know “the extent to which significant differences of opinion exist among experts....” **The task force reviewed the suggested changes from these commentators and made two changes to this section. A sentence was added to clarify that “experts relied upon may either be the experts who provided the model or other experts.” Secondly, the reference to “differences of opinion among experts” was deleted as a separate item and included with section 3.2 (b), “the extent to which the model has been reviewed or opined on by experts in the applicable field.”**

Section 3.3, Understanding of the Model—Some commentators believed the requirement in section 3.3.1, Model Components, stating “The actuary should be aware of the extent to which the model is based on contested or new theory” is unnecessary. They believed it was duplicative since the actuary is required in section 3.2(b) to consider “whether the model has been reviewed or opined on by expert....” and consider “the extent to which significant differences of opinion exist.” **The task force agrees that the language in section 3.2 provides sufficient guidance and deleted the sentence**

**from section 3.3.1 that read, “The actuary should be aware of the extent to which the model is based on contested or new theory.”**

Section 3.4, Appropriateness of the Model for the Intended Application—In section 3.4(b), a few commentators believed it was unreasonable to expect the actuary to “[make a reasonable effort to] be aware of significant developments in relevant fields of expertise.” **The task force disagrees with this concern and made no changes to the text.**

Section 3.5, Appropriate Validation—Section 3.5.2, Model Output, provides a list of items to consider when checking the model output for reasonableness. One commentator believed the list was not necessary as it implies that the actuary must perform all checks on the list. **The task force believes the list of examples provides valuable guidance with regard to the intent of the statement. The task force modified the introductory language to clarify that the list of examples is illustrative. The actuary, however, is not relieved from the duty to check for reasonableness.**

In section 3.5.2(d), one commentator expressed concern that considering “the sensitivity of the model output to variations in the assumptions” was too broad of a requirement. **The task force revised the section to narrow the scope of the sensitivity consideration to “variations in the user input and model assumptions.”**

#### Section 4. Communications and Disclosures

Section 4.1, Documentation—One commentator was confused by the intent of the documentation requirement. **The task force clarified that the “documentation should demonstrate how the actuary met the requirements of sections 3.2–3.7.”**

Section 4.2, Proprietary Information—One commentator offered alternative language for this section to clarify the intent. **The task force shortened the wording without changing the intent or meaning of the section.**

Section 4.3, Disclosure—**To clarify the disclosure requirement, wording was added to this section specifying that the actuary should disclose the model(s) used and any adjustments made to the model results as described in section 3.6.**

