May 14, 2019

Modeling (Fourth Exposure)
Actuarial Standards Board
1850 M Street, NW, Suite 300
Washington, DC 20036

Dear Sir or Madam:

This letter provides the response of Willis Towers Watson to the Fourth Exposure Draft (ED) of the Proposed Actuarial Standard of Practice (“ASOP”) Modeling issued in December 2018.

Willis Towers Watson is a leading global professional services company that employs approximately 45,000 worldwide, over 1,100 of whom are members of U.S. actuarial bodies subject to the standards and approximately 600 of whom are enrolled actuaries. We provide actuarial and consulting services to more than 1,700 defined benefit plans in the U.S. The undersigned have prepared our company’s response with input from others in the company.

We appreciate the opportunity to comment on the current ED.

General comments

We thank you for updating the fourth ED based on the concerns we and others expressed concerning disclosure requirements in the third ED.

To reiterate from our responses to the first three EDs, while the guidance and considerations in these drafts are valuable for the profession and useful for more complex engagements, we continue to strongly believe that this ED is excessive for many projects.

We continue to believe that the level of prescription reflected in this ED conflicts with the sections of ASOP 1 that emphasize professional judgement, as noted in our previous comment letters. We also continue to believe that the specifics in the ED would be viewed as requirements by those outside the profession with the result being that much actuarial work will be done with a checklist approach. Furthermore, those outside the profession may be inclined to engage in litigation if any items of the “checklist” were excluded, despite it having been within the actuary’s best professional judgment to exclude such items. The consequences of this risk will be a reduction in the amount of professional judgment applied, contrary to the principles enumerated in ASOP 1. We believe that the increase in inessential work and litigation risk conflicts with the original intended purpose of this proposed ASOP.

Specific comments

We note that the definition of a “simple model” (Section 2.12 of the third draft) was removed. We believe that this definition’s presence in the ASOP was important. We believe the concept should be retained, and that its usefulness and clarity would have been enhanced by changing the standard from “transparent and can be predicted” to “transparent or can be predicted”.


Section 1.2 (Scope) – The guidance for an actuary reviewing or evaluating models is not clear as to whether it is the model itself that is being reviewed or evaluated (which is what the text seems to literally suggest), or whether it is the use of the model that is being reviewed. That latter interpretation is suggested by the reference to “actuarial services” being performed in accordance with this ASOP. ASOP No. 1 defines actuarial services as “Professional services provided to a principal by an individual acting in the capacity of an actuary. Such services include the rendering of advice, recommendations, findings or opinions based on actuarial considerations.” This definition does not appear to include the development of a model.

Section 2.7: We suggest that the following caveat from the background section of Appendix 1 be added to the definition of a “Model” to emphasize that a model is not bad or inaccurate just because a model did not match actual experience: “A model is only an approximation of reality, not the reality itself, and the differences between the model and actual experience, by themselves, do not indicate a flawed model or noncompliance with standards.”

Section 3.1.4.b: We suggest that the language in this section end at the word “appropriate”. We do not believe that the examples of possible model forms are useful or necessary.

Section 3.1.6: We believe that it is unnecessary, confusing and burdensome to include assumptions setting guidance in this standard, given the Assumptions ASOP currently under development, and given the many other ASOPs that provide assumption setting guidance for certain activities. A pension actuary, for example, will now have to understand and observe all of the assumption setting guidance in the Modeling and Assumption setting ASOPs, as well as ASOPs No. 27 and 35. When detailed, specific assumption setting guidance is provided elsewhere for a particular activity (e.g., ASOP Nos. 6, 27 and 35), we do not believe that any assumption setting guidance in broad, cross-practice ASOPs should apply to those activities. At a minimum, it would be an improvement if this standard referred to the Assumptions ASOP for assumptions guidance, similar to the directive in section 3.1.5 that the actuary refer to ASOP No. 23 for guidance about data quality.

Section 3.1.6.a.1: We suggest referring to ASOP 25 (Credibility Procedures) when discussing using actual experience to the extent it is “relevant and sufficiently reliable”.

Section 3.1.6.a: We suggest adding a fifth line item to add consistency with other ASOPs by addressing “prescribed assumptions set by law” and “prescribed assumptions set by another party” (as used in ASOP Nos. 27 and 35) (e.g., accounting assumptions), and assumptions developed with the opinion of experts. Similarly, in sections 3.1.6 and 4., we do not believe that the actuary should be required to assess whether assumptions that include prescribed assumptions set by law or prescribed assumptions set by another party are reasonable in the aggregate. Such a requirement could suggest that the actuary should select other assumptions to counteract the effects of prescribed assumptions that the actuary does not consider to be reasonable. We note that the latest exposure draft of the Assumptions ASOP removed the requirement to disclose the possibility of an inconsistency between assumptions chosen by the actuary and those prescribed by law. In addition, neither ASOP No. 27 nor ASOP No. 35 requires a pension actuary to evaluate the consistency of assumptions prescribed by law or selected by others with the assumptions selected by the actuary.

Section 3.1.6.b: We note that language regarding margins was significantly revised in response to comments provided on the third exposure draft. We believe that this section no longer provides guidance on margins that is materially different from language in ASOP 1 regarding actuarial judgement. Additionally, we believe
that the inclusion or exclusion of margins within an assumption or parameter falls within the task of setting assumptions and parameters; as such, we believe it is not necessary to separate the language in this section from section 3.1.6.a.

Section 3.3: We believe this section will lead to a tremendous amount of additional, unnecessary work, and potential litigation risk if the work is not performed. In our firm, we maintain a centralized valuation system, with a team of programmers and actuaries who implement and test any system enhancements. An individual actuary using this system will typically check test lives for reasonableness, but the actuary will not duplicate the in-depth testing performed by those who maintain the system. Section 3.3 appears to allow an actuary who has a “limited ability to obtain information about the model or to understand the underlying workings of the model” to nevertheless rely on the model and disclose the reliance. Our system is well documented, and our individual actuaries arguably might not be said to have a “limited ability to obtain information about the model or to understand the underlying workings of the model”. However, it would be unnecessary and incredibly expensive for every actuary who uses the system to check all aspects of its operation that have already been tested by others. We believe that the Modeling Team concept in the 3rd ED was helpful in this regard, although it needed to be softened to a simple “reasonable reliance” standard rather than the extremely difficult requirement to satisfy that “the relying actuary should be reasonably satisfied that the other actuary’s selecting, designing, building, modifying, developing, reviewing, evaluating, or use of the model was performed in accordance with this ASOP.” We do not believe that the addition to Section 1.2 stating that the standard only applies to the extent of the actuary’s responsibilities addresses this concern.

Please let us know if you have any questions. We would be happy to meet with you to further discuss this.

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