



September 30, 2013

Submitted via email to comments@actuary.org

Modeling
Actuarial Standards Board
1850 M Street NW, Third Floor
Washington, DC 20036

Dear Members of the Actuarial Standards Board:

Subject: ASB Comments—Comments on Exposure Draft of Modeling ASOP

Aon Hewitt welcomes the opportunity to submit comments to the Actuarial Standards Board (ASB) regarding the exposure draft (ED) of the proposed Actuarial Standard of Practice (ASOP), *Modeling*. The ED was published by the ASB in June 2013.

Who We Are

Aon Hewitt empowers organizations and individuals to secure a better future through innovative talent, retirement and health solutions. We advise, design and execute a wide range of solutions that enable clients to cultivate talent to drive organizational and personal performance and growth, navigate retirement risk while providing new levels of financial security, and redefine health solutions for greater choice, affordability and wellness. Aon Hewitt is the global leader in human resource solutions, with over 30,000 professionals in 90 countries serving more than 20,000 clients worldwide. For more information on Aon Hewitt, please visit www.aonhewitt.com.

Summary Comments

Overall, we are concerned that the scope of the proposed ASOP as defined in the ED may be overly broad, and we believe that further clarification is needed with regard to situations where the requirements of the proposed ASOP would and would not apply. Our specific comments on various sections of the ED are discussed in further detail below.

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

The purpose of the proposed ASOP as stated in Section 1.1 of the ED is to “provide guidance to actuaries selecting, designing, building, modifying, developing, or using **models** when performing professional services.” The scope of the proposed ASOP is defined in Section 1.2 of the ED as including “all forms of **models** in all practice areas.” The term “model” is further defined in Section 2.9 of the ED as “[a] representation of relationships among entities or events using statistical, financial, economic, or mathematical concepts and equations.” Thus, virtually any numerical representation of a system could potentially be viewed as a model.

While actuaries may “generally agree that almost all actuarial work involves modeling of some type... ” as noted in the Background section of the ED, not all work that actuaries perform is specifically actuarial in nature. We believe that work performed by actuaries that is not specifically actuarial in nature should not be subject to the requirements of the proposed ASOP. The term “professional services,” which is used in Sections 1.1 and 1.2 of the ED, can be read more broadly than services that are specifically actuarial in nature, and we would propose that these sections be clarified so that they refer only to actuarial services.

Actuaries in various specialty areas may use models for many other purposes beyond developing and supporting statements of actuarial opinion. For example, retirement actuaries may work with plan sponsors or administrative service providers to develop tools for estimating future plan benefit calculations or assessing the impact of potential plan changes on individual participants. While actuarial skills may enhance an actuary's ability to develop such tools, non-actuaries may also provide professional services in developing and maintaining these tools. We do not believe that such tools are specifically actuarial in nature, and it does not seem appropriate to require the application of an ASOP for such non-actuarial professional services.

Section 3. Analysis of Issues and Recommended Practices

Section 3.1 of the ED states that the proposed ASOP applies to "actuarial practice regarding all **models** in all practice areas." While this language is similar to the scope language in Section 1.2 mentioned above, it uses the term "actuarial practice" rather than "professional services." We believe the changes to Sections 1.1 and 1.2 of the ED recommended above are necessary to clarify that the proposed ASOP applies only to those services performed by an actuary that are specifically actuarial in nature, such as developing or supporting statements of actuarial opinion.

Section 3.1.2 of the ED provides that "full application of the guidance in this ASOP may not be necessary" in certain situations where the model being used is designed or built by a vendor or colleague. However, in these situations, the ED would still require the actuary to understand the basic workings of the model, the major sensitivities and dependencies within the model, and the key strengths and limitations of the model. In many situations, an actuary's employer (such as a consulting firm) may already have taken some or all of these steps—for example, in assessing the capabilities of vendor-provided software for performing actuarial valuations for pension and other postretirement benefit plans—and it is not necessary or practical for an individual actuary to duplicate this effort. In these situations, we believe it would be appropriate to allow an actuary to rely on an assessment performed by the actuary's employer or other qualified expert in order to limit the burden on the actuary and any resulting cost to the principal.

Section 3.2.4 of the ED provides that, if the actuary's responsibilities include "expressing an opinion, using or communicating results, or preparing documentation," the actuary should understand potential weaknesses of the model and consider documenting potential limitations. Virtually all models will contain potential weaknesses and limitations. However, some of these potential weaknesses and limitations may not become known or apparent until a subsequent event occurs that significantly differs from the results predicted by the model. It would be impractical for an actuary to assess *all* potential weaknesses and limitations of a model, including those that are not known to be material based on information available at the time the model is used. Additionally, if all potential weaknesses and limitations of the model need to be communicated, it is likely that the language used with the principal would be lengthy and limit the ability to have clear communications. We would propose that the ED be clarified to state that the actuary should understand *known* potential weaknesses of the model and consider documenting *known* potential limitations.

Section 3.2.7 of the ED includes requirements regarding the assumptions and parameters used within a model. In certain situations, a model may be developed by an actuary for use by a principal in their own modeling work. For example, an actuary may develop a model for forecasting pension expense and contributions, and enable the plan sponsor to prepare their own realization of the model based on various inputs such as actual and expected investment returns, interest rates, and other factors. In these situations, the actuary may have limited control over the assumptions used in the model. Imposing a requirement to

disclose an inconsistency in the assumptions and parameters that are selected by the principal (potentially without the actuary's knowledge) would be impractical and overly burdensome in these situations. In addition, it may be impractical or outside the scope of the actuary's assignment to continue to monitor the assumptions after the model has been delivered to the principal. We believe it would be reasonable to appropriately limit the requirement to monitor assumptions based on the scope and duration of the assignment being performed for the principal.

Further, detailed documentation of the assumptions, data, and parameters used in a model may be appropriate in some situations but unnecessary in others. As with the requirement to monitor assumptions, an actuary should consider documenting these items, but the necessary documentation should be appropriately limited based on the scope and duration of the assignment. In addition, other standards of practice such as ASOP 4, *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions*; ASOP 6, *Measuring Retiree Group Benefit Obligations*; and ASOP 41, *Actuarial Communications*; already impose specific documentation requirements, potentially making the documentation requirements in the ED redundant.

Section 3.3.1 of the ED would require the actuary to validate the model's representation of a situation for each realization or set of realizations of the model that is to be relied upon by the intended user. As noted above, there may be situations where a model has been developed by the actuary for use by a principal, and the actuary may have little control over or knowledge of the model realizations being relied upon. Requiring the actuary to validate each possible realization in this situation would be unduly burdensome. In addition, there may be certain realizations of the model (such as stress-testing scenarios) that are inherently difficult to validate and in which a model is intended to provide more of a directional indication than a precise measurement. We believe it would be appropriate to limit the validation requirement to each material realization that is intended to be relied upon, or a range of realizations that the actuary reasonably believes could be relied upon based on their professional judgment.

Section 3.4 of the ED would require the actuary to communicate modeling results in compliance with ASOP 41. While we believe this is appropriate, we also believe that any proprietary restrictions should be considered in relation to any description of the model methodology that is required to be disclosed.

Section 3.6 of the ED would require the actuary to retain documentation or other file material when appropriate to the intended purpose, and to prepare and retain documentation to demonstrate compliance with Section 4 of the ED, Communications and Disclosures. Documentation would be required to include a statement of the purpose of the documentation. These documentation requirements appear to go beyond the documentation requirements of ASOP 41, and do not acknowledge the fact that document retention may be governed by a contractual agreement with the principal or a firm's internal document retention policies. We believe any documentation requirement should be limited to a reasonable or appropriate length of time consistent with any existing contractual agreement or document retention policy, and that the proposed ASOP should not introduce documentation requirements that are more stringent than those prescribed by ASOP 41.

Section 4. Communications and Disclosures

Section 4.1 of the ED provides that, when issuing actuarial communications incorporating modeling, the actuary should disclose as appropriate the intended purpose of the model, any reasons that prevent the model from meeting its intended purpose, and any inconsistency in assumptions and the reasons therefore. We believe that disclosures required in actuarial communications are already addressed by ASOP 41, and

that it is unnecessary to introduce specific disclosure requirements with regard to actuarial communications incorporating modeling, particularly given the broad definition of modeling used in the ED.

Also, as discussed above, a model may be developed by an actuary for use by a principal in their own modeling work. We believe it should be clarified that the communication and disclosure requirements of Section 4.1 of the ED do not apply in these situations. While an actuary can communicate the intended purpose of the model upon delivery of the model to the principal, the actuary may not be aware of reasons that prevent the model from meeting its intended purpose if such reasons are attributable to an unintended use of the model by the principal. As noted in our comments on Section 3.2.7 of the ED, it would also be impractical and overly burdensome to require disclosure of an inconsistency in the assumptions and parameters that are selected by the principal (potentially without the actuary's knowledge).

Additional Examples Needed

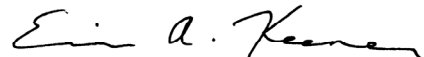
In addition to the changes to specific provisions of the ED recommended above, we believe it would be helpful to actuaries to provide examples of specific situations where the provisions of the ASOP would or would not apply. The definition of "model" in Section 2.9 of the ED is very broad, and could potentially be viewed as applying to all actuarial work. To avoid having the proposed ASOP apply to every calculation an actuary could potentially perform, we believe there should be a minimum level of complexity to actuarial work that is subject to the proposed ASOP. The proposed ASOP should also provide clear examples of situations in which a deviation from the guidance in the proposed ASOP may be appropriate.

Closing

We appreciate the opportunity to submit these comments regarding the ED of the proposed ASOP, *Modeling*. If you have any questions regarding these comments, please contact the undersigned at the telephone number or electronic mail address provided below.

Sincerely,

Hewitt Associates LLC, an Aon Hewitt company

A handwritten signature in black ink that reads "Eric A. Keener".

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