Re: Comments from a subgroup of the Society of Actuaries' Committee on Social Security regarding the Social Security ISAP ED

The attached are comments and suggestions from the members of a subgroup of the SOA's Committee on Social Security, formed to look at this ED. Please let me know if you have any questions regarding it - we attempted to include in the tracked document an explanation for all of our suggestions/comments. Its comments range from encouragement to use more consistent language, identification of areas in which clarity would enhance the standard, and a suggestion to expand examples to cover more than just what seems to be a focus on retirement income benefits

.

We applaud the work of the IAA to develop this ISAP, which will benefit those who practice in the area of Social Security programs.

Sam Gutterman, chair

Georges Langis

ISAP nn - Valuation of Social Security Programs

October 2012

This document contains the exposure draft of the proposed *ISAP nn - Valuation of Social Security Programs.* Please distribute this draft to members of your association and your local standard setter(s). Comments (from your organization or your members) should be addressed to SS.ISAP.comments@actuaries.org with "ISAP SS" in the e-mail header.

The preferred format for submitting comments is e-mail or an MS Word (or equivalent) attachment. Please do not send comments as a PDF file. If you submit a mark-up of the actual document please use track changes in MS Word and be sure to include comments explaining why you think each proposed change is necessary.

All comments will normally be posted to the International Actuarial Association website identifying the commenter(s). However, in exceptional cases, in response to a request which the IAA Secretariat is satisfied is for a valid reason, comments may be either posted to the website anonymously or withheld from the website.

The deadline for comments is 28 February 2013.

This document was approved for exposure by the Interim Actuarial Standards Subcommittee of the Executive Committee of the IAA in October 2012.

International Actuarial Association

International Standard of Actuarial Practice nn

Valuation of Social Security Programs

Developed by the
Social Security Task Force of the
Interim Actuarial Standards Subcommittee

Adopted by the IAA Council
[Month Year]

Table of Contents

Preface { tc \l1 "Preface" }

[Drafting Notes - When an actuarial standard setting organization adopts this standard it should:

1. *Replace "ISAP" throughout the document with the local standard name;*
2. *Choose the appropriate phrase and date in paragraph 1.8;*
3. *Choose the appropriate phrase in sub-paragraph 3.1.2.a;*
4. *Review for, and resolve, any conflicts with the local law and code of professional conduct; and*
5. *Delete this preface (including these drafting notes).]*

This International Standard of Actuarial Practice (ISAP) is a model for actuarial standard-setting bodies to consider. The International Actuarial Association (IAA) encourages relevant actuarial standard setting bodies to consider taking one of the following courses of action, if it has been determined that this ISAP is relevant for actuaries in their jurisdiction:

- Adopting this ISAP as a standard with appropriate modification, where items covered in this ISAP are not currently contained in existing actuarial standards;
- Endorsing this ISAP as a standard as an alternative to existing standards;
- Modifying existing standards to obtain substantial consistency with this ISAP; or
- Confirming that existing standards are already substantially consistent with this ISAP.

Such an adopted standard (rather than this ISAP) applies to those actuaries who are subject to such body's standards, except as otherwise directed by such body (for example with respect to cross-border work).

When this ISAP is translated, the adopting body should select three verbs that embody the concepts of "must", "should", and "may", as described in Language, even if such verbs are not the literal translation of "must", "should", and "may".

This ISAP is not binding upon an actuary unless the actuary states that some or all of the work has been performed in compliance with this ISAP

This ISAP was adopted by the IAA Council in [month year].

Introduction { TC "Introduction " \l 1 }

This International Standard of Actuarial Practice (ISAP) applies to actuarial services relating to~~performed in the context of~~ a Social Security Program~~s~~ (SSP~~s~~). The intent of this ISAP is to narrow the range of practice with respect to these services considered acceptable under *ISAP 1 - General Actuarial Practice*. This ISAP is also intended to promote the development of consistent actuarial practice for SSPs throughout the world.

Where this ISAP indicates that a practice~~defines~~ relating to a SSP ~~a~~is acceptable, ~~a practice~~ which would not be appropriate~~cceptable~~ according to~~under~~ ISAP 1, it is clearly identified~~mentioned~~.

In this area of practice, the International Actuarial Association (IAA) previously adopted *IASP 1 - Guidelines of Actuarial Practice for Social Security Programs*, which became effective on January 1, 2003. This was a level 4 standard (which had~~s~~ the effect of a current International Actuarial~~practice~~ ~~n~~Note) and will be superseded by the adopted version of this ISAP.

Formatted: Default Paragraph Font, Font: Times New Roman

Comment [sg1]: Moving this sentence here puts together the two thoughts expressed relating to intent.

Comment [sg2]: Note -- we cannot identify any practice required here that would be inappropriate under ISAP 1 -- so, we suggest that this sentence would be, at best, confusing, and we suggest it be deleted.

Comment [sg3]: Not everyone knows what a 'practice note' is, as the IAA has never had a practice note - thus this would be a very confusing reference in most countries, so we suggest using a current IASB publication type for reference instead.

Because of their significant expertise in preparing long-term ~~financial~~ projections, actuaries often play an important role in carrying out financial analyses of SSPs. Due to the reliance placed on actuarial projections in public policy decision-making, it is important that short- and long-term ~~the~~ demographic and economic analyses of these SSPs ~~provide~~be ~~objectively~~ prepared in an objective manner~~(albeit by their very nature, uncertain) projections of their long-term future developments~~.

~~This ISAP is also intended to promote the development of consistent actuarial practice for SSPs throughout the world.~~

Few existing ~~professional~~ standards and guidelines specifically apply to professional practice regarding SSPs. Most countries have no standards for professional practice in this area. In this regard, ~~the IAA has decided to issue this ISAP~~ with support from~~within~~ the International Social Security Association (ISSA) and the International Labour Organization (ILO), the IAA has decided to issue this ISAP.

This ISAP is intended to complement local requirements in the jurisdiction concerned, including provisions in applicable SSP law~~egislation~~ that specifically refers~~ring~~ to actuarial reports relating to the SSP; it should not be used to override such requirements. Practice consistent with this ISAP should enhance confidence in the professionalism, objectivity and scientific rigour of actuaries providing actuarial services to SSPs.

Although ~~T~~this ISAP applies to actuaries, it~~but~~ may also be helpful for other professionals who conduct an analysis of SSPs. This ISAP ~~i~~was not written with benefits provided in connection with unemployment and work-related incidents (e.g., work-place injuries~~y~~) as a~~the~~ primary focus. However, where appropriate, this ISAP may be used by actuaries providing professional services for these types of programs.

This ISAP only applies to actuarial services performed for an SSP. When the SSP is administered or where guarantees are provided by a non-governmental entity, e.g., by an insurance company or a workers' compensation (work-place injuries~~y~~) board, this ISAP does not apply to actuarial services related to the financial reporting or calculation of liabilities of that non-governmental entity, to the calculation of its premiums or contribution rates, or to similar work.

Comment [sg4]: Actuaries also prepare long-term demographic projections in this context.

Comment [sg5]: First, these projections cover both short and long-term periods. Second, the reference to their uncertain nature doesn't add anything here, as everything in the future is by its nature uncertain.

Comment [sg6]: More precise.

Comment [sg7]: Why use "legislation" here while it really should refer to "law" as defined in 2.8?

Comment [sg8]: A series of editorial suggestions, for enhanced consistency, editorial correctness and better readability.

Comment [sg9]: Not clear what rates this refers to, so added 'contributions. Terminology throughout is inconsistent - here 'premiums or rates'; in 2.14 'contribution rates' is used; in 4.14 b and c 'premiums' is used. We suggest more consistent language.

Section 1. General{ TC "Section 1. General " \l 1 }

1.1. Purpose{tc \l2 "1.1 Purpose } – This ISAP provides guidance to actuaries performing actuarial valuations of SSPs, or reviewing, advising on, or opining on such analyses, to give intended users confidence in particular that:

- Actuarial services are carried out in a professional~~ly~~ manner and with due care;
- The results are relevant to their needs, are presented clearly and understandably, are complete; and
- The assumptions and methodology (including, but not limited to, models and modelling techniques) used are disclosed appropriately.

1.2. Scope{tc \l2 "1.2 Scope } – This ISAP applies to actuaries who are performing, reviewing, advising on, or opining on actuarial valuations of SSPs.

1.3. Compliance{tc \l2 "1.3 Compliance } – There are situations where an actuary may deviate from the guidance of this ISAP but still comply with the ISAP:

1.3.1. Law may impose obligations upon an actuary performing work within the scope of this ISAP. Compliance with requirements of law that conflict with this ISAP is not a deviation from the ISAP.

1.3.2. The actuarial code of professional conduct applicable to the work may conflict with this ISAP. Compliance with requirements of the code that conflict with this ISAP is not a deviation from the ISAP.

1.3.3. The actuary may depart from the guidance in this ISAP while still complying with the ISAP if the actuary provides, in any report, an appropriate statement with respect to the nature, rationale, and effect of any such departure.

1.4. Applicability{tc \l2 "1.4 Applicability } – This ISAP applies to actuaries when performing actuarial services. An actuary who is performing these actuarial services may be acting in one of several capacities such as an employee, management, director, external adviser, auditor, or supervisory authority, of the entity.

1.4.1. The application of this ISAP is clear when there is a chief actuary employed by a SSP or where a single consulting actuary is performing actuarial services for a client who is not affiliated with the actuary.

1.4.2. There are at least two general cases that~~which~~ do not meet the criterion stated in 1.4.1:

a. A team of actuaries is performing actuarial services; or

b. An actuary is performing actuarial services for an affiliated party (such as the actuary's employer or affiliated entities within a group under common control.)

1.4.3. When a team is performing actuarial services, most paragraphs of this ISAP apply to every actuary on the team. However, requirements in some paragraphs need not be met by every actuary on the team personally (e.g., 3.4, 4.2). In the case of such paragraphs, each actuary on the team should identify, if relevant to that actuary's work, which member of the team is responsible for complying with such requirements and be satisfied that the other team member accepts that responsibility.

Comment [sg10]: It is unclear what 'their' refers to -- SSPs, intended users, principals,… Please clarify.

Comment [P11]: Although 1.4 duplicates ISAP 1, the subpoints here are not clearly introduced - it would benefit from a more useful stem. Several of our committee members were confused about what the subpoints relate to - we think this relates to who is responsible for making final decisions in the case where more than one actuary is involved.

Comment [sg12]: We presume this should be "SSP" rather than "entity" which is more appropriate in a general standard.

Comment [sg13]: But there are no criteria given in 1.4.1. Does this relate to the "situation described in 1.4.1" instead?

Comment [sg14]: Since this is a social security ISAP, this should relate to work related to a SSP, shouldn't this be phrase to relate to social security work, rather than general work for a corporation? If so, then a phrase like "affiliated entities with a group" should be deleted, as it does not relate to this practice area, and 'affiliated party' seems awkward when referring to an employer.

Comment [sg15]: Shouldn't this be 'requirements'?

1.4.4. If an actuary is performing actuarial services for an affiliated party the actuary should interpret this ISAP in the context of normal corporate or partnership practices, but following the general principles of this ISAP.

a. The actuary should consider the expectations of the principal. These expectations might suggest that it may be appropriate to omit some of the otherwise required content in the actuary's report. However, limiting the content of a report may not be appropriate if that report or the findings in that report is expected to~~may~~ receive a broader distribution.

b. If the actuary believes circumstances are such that including certain content in the report is not necessary or appropriate, the actuary should be prepared (if challenged by a professional actuarial body with jurisdiction over the actuarial services) to describe these circumstances and provide the rationale for limiting the content of the report.

1.5. Reasonable Judgment{tc \l2 "1.5 Reasonable Judgment **}** – The actuary should exercise reasonable judgment in applying this ISAP.

1.5.1. A judgment is reasonable if it takes into account:

a. The spirit and intent of the ISAPs;

b. The type of assignment and intended users; and

c. Appropriate constraints on available time and resources.

1.5.2. In particular, the actuary should be cautious exercising reasonable judgment in services relating to statutory, supervisory, and financial reporting assignments, which usually require considerable rigour.

Any judgment required by the ISAP (including implicit judgment) is intended to be based on the actuary's professional judgment unless otherwise stated.

1.6. Language{tc \l2 "1.6 Language **}**

1.6.1. Some of the language used in all ISAPs is intended to be interpreted in a very specific way in the context of a decision of the actuary. In particular, the following verbs are to be understood to convey the actions or reactions indicated:

a. "Must" means that the indicated action is mandatory and failure to follow the indicated action will constitute a departure from this ISAP.

b. "Should" (or "shall") means that, under normal circumstances, the actuary is expected to follow the indicated action, unless to do so would produce a result that would be inappropriate or would potentially mislead the intended users of the actuarial services. If the indicated action is not followed, the actuary should disclose that fact and provide the reason for not following the indicated action.

c. "May" means that the indicated action is not required, nor even necessarily expected, but in certain circumstances is an appropriate activity, possibly among other alternatives. Note that "might" is not used as a synonym for may, but rather with its normal meaning.

1.6.2. This document uses various expressions whose precise meaning is defined in section 2. These expressions are highlighted in the text with a dashed underscore and in blue, which is also a hyperlink to the definition (e.g. actuary).

Comment [sg16]: Taken out of context, this requirement seems to represent inappropriate and unprofessional practice. We think that any suggestion that the actuary would consider the expectations of the principal with respect to projections made could be a direct violation of the code of professional conduct. As a result, we are sure that the drafting committee did not intend this to be read in this manner.

If, however, this relates to the extent of the content of a particular report, it may be worthwhile, particularly if a) and b) were included as subpoints to 4.1 instead.

Comment [sg17]: We don't understand why the intent of a standard is here. How is an actuary supposed to intuit the intent of an ISAP. An ISAP is a professional standard - does this mean consistent with general actuarial practice, or common sense, or …? Since the intent is to narrow practice, something more clear would be useful. And we don't understand 'ISAPs' - should this be 'this ISAP'? or…?

Comment [sg18]: This should be clarified -- should judgment be determined as being reasonable if the principal doesn't allocate sufficient resources to do a decent job? We don't think so. Although constraints may be relevant to findings or uncertainty, it should not be relevant to the reasonableness of the judgment.

Comment [sg19]: This point is obscure, at best -- does this imply that other assignments don't require rigour? And this list of three aren't particular relevant to social security program valuations. We think this is trying to indicate that where possible, objective evidence should be applied, and reasonable judgment should only be used when such evidence is not directly applied. We believe that all assignments relating to social security programs require reasonable judgment and require considerable rigour. We suggest either deleting 1.5.2 or modifying the examples given, possibly include reference to the effect of the valuation on the public.

Comment [sg20]: We don't understand why this is here -- all assignments (and shouldn't it be services, rather than assignments?) involving an SSP that may be used, for example in recommending contribution rates, … calls for rigour.

Separately, we don't know what a 'supervisory' assignment would be fo ...

Comment [sg21]: It isn't clear what 'implicit judgment' represents. Does it mean judgment that isn't explicit or documented?

1.7. Cross References{tc \l2 "1.7 Cross References **}** – When this ISAP refers to the content of another document, the reference relates to the referenced document as it is effective on the adoption date as shown on the cover page of this ISAP. The referenced document may be amended, restated, revoked, or replaced after the adoption date. In such a case, the actuary should consider the extent the modification is applicable and appropriate to the guidance in this ISAP.

1.8. Effective Date{tc \l2 "1.8 Effective Date **}** – This ISAP is effective for {actuarial services performed/actuarial services commenced/actuarial services performed relevant to an event}[1] on or after [Date].

[1] *Phrase to be selected and date to be inserted by standard setter adopting or endorsing this ISAP.*

Section 2. Definitions{ TC "Section 2. Definitions" \l 1 }

The terms below are defined for use in this ISAP.

2.1. Actuarial Services – Services based upon actuarial considerations provided to intended users that may include the rendering of advice, recommendations, findings, or opinions.

2.2. Actuary – An individual member of one of the member associations of the IAA.

2.3. Adoption Date – The date on which this ISAP was adopted as a final document by the IAA Council.

2.4. Communication – Any statement (including oral statements) issued or made by an actuary with respect to actuarial services.

2.5. IAA – The International Actuarial Association**.**

2.6. Independent Expert Review – An opinion on (i) whether the assumptions used in the actuarial valuation are within a reasonable range both separately and in the aggregate, and (ii) whether ~~or not~~ the results of the valuation are within a reasonable range. In this context "independent" means an actuary experienced in valuation of SSPs who:

a. Has not been involved in preparing this report; and

b Is not employed by the SSP or its sponsoring agencies.

In this context an actuary or organization contracted by the SSP to perform the Independent Expert Review is not considered to be employed.

2.7. Intended User – Any legal or natural person whom the actuary intends at the time the actuary performs actuarial services to use the report.

2.8. Law – Applicable acts, statutes, regulations or any other binding authority (such as accounting standards, and any regulatory guidance that is effectively binding).

2.9. Opinion – An opinion expressed by an actuary and intended by that actuary to be relied upon by the intended users.

2.10. Report – The actuary's communication(s) presenting some or all results of actuarial services to an intended user in any recorded form, including but not limited to paper, word processing or spreadsheet files, e-mail, website, ~~slide~~ presentations, or audio or video recordings.

2.11. Report Date – The date on which the actuary substantially completes a report. It usually follows the valuation date.

2.12. Social Security Programs (SSPs) – programs with all the following attributes regardless of how they are financed and administered:

2.12.1. Coverage is of a broad segment, if not all, of the population, often on a compulsory or automatic basis;

2.12.2. The program, including benefits and financing method, is prescribed by statute;

2.12.3. The program is ultimately responsible to the government, or a unit of government; and

2.12.4. Program benefits are:

Comment [sg22]: Deleted 'or not' here as it is not parallel with (i).

Comment [sg23]: "slide" is in ISAP 1, but there is no reason to restrict the type of presentation indicated in this example.

Comment [sg24]: We don't understand what the SSP would be responsible to the government for -- certainly the delivery of the benefits, but the program isn't normally responsible for policy, … We think this is backward - we believe it should be the government that is accountable to its citizens for the program….

a. Generally payable or delivered upon one or more contingent events or circumstances, including old age, retirement, death, disability, and survivorship;

b. Poverty-related conditional cash transfers; or

c. Universal social benefits.

2.13. Subsequent Event – an event of which the actuary becomes aware after the valuation date but before the actuary's communication on the results of these actuarial services is delivered.

2.14. Valuation – A~~ny~~ formal analysis of an SSP, including development~~presentations~~ of discounted point in time values, projections of cash flows and associated fund values, and contribution rates.

2.15. Valuation Date – The date at which an SSP is analyzed by the actuary. It usually precedes the report date.

Comment [sg25]: An actuary doesn't analyze a presentation! A presentation is a form of communication.

Section 3. Appropriate Practices{ TC "Section 3. Appropriate Practices" \l 1 }

3.1. Consideration of all Relevant Features of the SSP and Law{ TC "3.1 Consideration of all Relevant Features of the SSP and Law **" \l 2 }** – The actuary should consider all relevant SSP features~~,~~ and current law. The actuary should also take into account established practice (where practical) when no law exists with regard to certain benefit provisions or financial measures (for example, the basis for future indexation of retirement~~pensions~~ benefits~~in payment~~). For a newly established or substantially changed SSP, the actuary should take into account the stated intentions of the SSP sponsor, and relevant experience in other comparable SSPs.

3.2. Data{ TC "3.2 Data **" \l 2 }** – The actuary should consider relevant sources of ~~using the following~~ data, including:

a. National statistics on variables such as fertility, mortality (life expectancy), morbidity, and migration (if such data are not available on a national basis, the actuary may consider information from a wider geographical area that might apply or it may be necessary to rely on relevant and reliable statistics of international organizations);

b. Demographic status and experience of the SSP and the region, as applicable;

c. Economic experience, labour market conditions~~developments~~ and inflation;

d. Financial attributes of the SSP, such as contributions, investment earnings and assets;

e. Benefits of, or claims on, the SSP, as applicable;

f. Number and experience of classes of contributors and beneficiaries of the SSP;

g. Covered salaries and past service credits;

h. Censuses and population surveys, covering, for example, ~~F~~family statistics ~~(including household surveys)~~.

3.3. Assumptions{ TC "3.3 Assumptions **" \l 2 }** – The actuary should use realistic best estimate assumptions in a ~~financial~~ valuation of an SSP. Best estimate assumptions are such that the actuary expects that the resulting projection of the SSP experience is not a material underestimate or overestimate of the obligation. If an actuary uses assumptions that include a margin ~~for any particular reason~~, the actuary should disclose th~~at~~is clearly ~~and properly~~ in the report. The actuary may ~~perform and~~ include in the analysis projections based on other sets of assumptions, such as those that would result in high projected costs and~~or~~ those that would result in low projected costs when such projections are helpful in analyzing and communicating the financial status of an SSP.

The actuary should perform an experience analysis or other research to determine, to the extent that the available data permit, if experience trends are relevant to the setting of certain assumptions.

The actuary should select assumptions that reflect the time horizon~~line~~ of the analysis (which might be 75 years or more). The actuary may select different assumptions for different time intervals in the projection (e.g., a common technique for this is to use recent experience as the basis for the model assumptions for the first "n" years of projection and longer-term trends for the ultimate ~~variable~~ assumptions (i.e., select and ultimate)).

In selecting the model variables and assumptions for an SSP valuation~~financial projections~~,

Comment [sg26]: We don't know of any situation in which practicality would be relevant to considering established practice, although it might relate to (1) where there is no existing interpretation or application of a current law, but that might be useful to refer to interpretation/applicaton or (2) where no relevant experience is available -- but that would be covered in a different section.

Possibly the intent of this is "where practice exists" instead of "where practical"?

Comment [sg27]: An SSP isn't a pension plan, although it may provide retirement benefits.

Comment [sg28]: This stem as stated suggests that these are the only things that should be considered -- clearly this is not the case.

Comment [sg29]: 'developments' seems inconsistent with the rest of this list - possibly better might be "Economic experience, such as labour market participation and inflation, as applicable;".

Comment [sg30]: The actuary should consider more than just what the classes are - this should include differential experience so that assumptions might be developed for different classes, if appropriate.

Comment [sg31]: As stated, this is backward - the particular is family statistics, such as marriage/divorce.

Comment [sg32]: We don't understand why "financial" is used here -- 'financial' should either be deleted here or replace 'valuation' in 2.14.

Comment [P33]: An SSP does not always have an explicitly stated funding policy. Whether realistic best estimate assumptions or assumptions with a margin should be applied will depend upon the funding policy. So, the first sentence should be something like: "The actuary should use assumption ...

Comment [sg34]: This sentence seems inconsistent with the first sentence in 3.3, which says that the actuary should use realistic best estimates - is this a choice or can an ...

Comment [sg35]: 'properly' is redundant - everything done should be done properly.

Comment [sg36]: This sentence is implies that the other sources aren't relevant for this purpose. We disagree - every relevant source of data, … in 3.2 should also considered, as well as ...

Comment [sg37]: 'variable' doesn't add anything - and could be misleading if read as the assumptions being variable. Might better be 'assumptions for key variables'.

the actuary should take into consideration the existence of automatic balancing mechanisms in an SSP since the SSP may be "immunized" from the variance of some variables (e.g., life expectancy).

For a newly introduced SSP or for new benefits~~ schemes~~ to be provided by an SSP where no experience data exist, the actuary may investigate the risk characteristics of the potential covered group through surveys or enquiries until credible data are available. The actuary may also consider~~reference~~ the relevant experience of other SSPs or other countries to establish assumptions.

In this case the actuary should bring to the attention of the intended users that the valuation has been based on ~~very~~ limited data (and perhaps none involving~~relating to~~ actual SSP membership). Accordingly, valuations should be performed more frequently (possibly annually) than would be suitable for a longer established program which has~~provided~~ more data available for analysis.

The actuary should comment on the assumptions as shown in paragraph 4.2.b.

3.4. Balance Sheet Methodology{ TC "3.4 Balance Sheet Methodology" \l 2 **}** – Where a balance sheet is prepared for an SSP and it is up to the actuary to determine the methodology to be applied,~~When applicable~~ the actuary should choose the~~which~~ methodology to use, ~~to produce an SSP's balance sheet~~ based mainly on the financing approach used for the SSP.

3.4.1. For fully funded SSPs (that is, where accrued liabilities are intended to be funded over participants' working years) balance sheets should be produced using a closed membership group approach, under which only current participants are considered, either with or without their assumed future benefit accruals.

3.4.2. For pay-as-you-go or partially funded SSPs, if balance sheets are produced, this should be done using an open group approach, under which contributions and benefits of both current and future participants are considered.

3.4.3. Where law require adoption of an approach for production of a balance sheet that is not consistent~~in line~~ with either section 3.4.1 or 3.4.2~~ as applicable~~, the actuary should communicate the effects of the approach required for the program in question to the intended users.

3.5. Reliance on the Work of Experts from Other Professions{ TC "3.5 Reliance on the Work of Experts from Other Professions" \l 2 **}** – The actuary should follow the guidance in *ISAP 1 - General Actuarial Practice* with respect to reliance on experts from other professions**.**

3.6. Independent Expert Review{ TC "3.6 Independent Expert Review" \l 2 **}** – When an Independent Expert Review is performed:

3.6.1. The actuary who prepared the valuation should cooperate with the reviewing actuary to provide the reviewing actuary with any requested material, and to be available to discuss data, methodology, assumptions, and other factors, as necessary, with the reviewing actuary.

3.6.2. The reviewing actuary should comply with the guidance of this standard in performing the review.

3.7. Responsibility for Assumptions and Methodology{ TC "3.7 Responsibility for Assumptions and Methodology" \l 2 **}** – The actuary should follow the guidance in *ISAP 1 -*

Comment [sg38]: It isn't just for a new 'scheme'. There isn't a definition for a 'scheme' - is this intended to be a SSP, or something else?

Comment [sg39]: 'reference' implies there is only a need for documentation, rather than considering it.

Comment [sg40]: Although we agree with this sentence, shouldn't it also relate to the other items in 3.2a and not just other SSPs - why single out these two sources of information?

Comment [sg41]: Although we agree with this sentence, wouldn't it also apply to any situation in which limited data is available? Why single out the situation of a new 'scheme', which should arise relatively rarely. And the use of 'very' does not add anything here.

Comment [sg42]: Actuarial projections for some SSPs are generally done annually (eg the US). The "possibly" annually reference implies that it is more appropriate to conduct such analysis less frequently than annual. We aren't certain what this is getting at. The appropriateness of frequency of valuations is subject to other factors as well, most of which would be beyond this ISAP, eg law, the financial condition of the SSP, …

Comment [P43]: Although we understand this point, it is usually not up to the actuary to decide the frequency of the balance sheet preparation of an SSP - it is sometimes written in the act…although the actuary can suggest the frequency of a valuation. Certainly a review may be performed more frequently, but a full evaluation may not be practical or resources may not be available for such valuations.

Comment [sg44]: This section seems problematic, and may need further clarity. On the one hand in some countries the actuary is responsible for developing a balance sheet for an SSP. In others, a balance sheet would be ...

Comment [P45]: Definitions of terms such as Balance sheet methodology, general average premium (see 4.1.4 c ii) and probably others should be added to section 2 to avoid confusion.

Comment [sg46]: This is OK, but it and other sections do not address the situation of the actuary relying on actuarial experts (ie outside of the control of the actuary). Shouldn't this be addressed somewhere?

Comment [sg47]: But in some situations the valuation actuary may not have the requested material (this is a very open ended requirement, possibly requiring the actuary to go to extraordinary lengths to provide any ...

General Actuarial Practice with respect to disclosing the responsibility for assumptions and methodology, and the actuary's opinion thereon.

Section 4. Communication { TC "Section 4 Communication " \l 1 }

4.1. Specific Information to be Included in SSP Valuation Reports{ TC "4.1 Specific Information to be Included in SSP Valuation Reports " \l 2 } – This section applies specifically to reports concerning the projected financial status of an SSP. *ISAP 1 - General Actuarial Practice* addresses~~covers~~ ~~information useful to~~ a wider variety of reports. This section is meant to be read and applied in addition to *ISAP 1 - General Actuarial Practice*. The actuary should include the following information in an SSP valuation report (and may include additional information).

4.1.1. Description of the provisions of the SSP related to:

a. Coverage;

b. Nature of the SSP, e.g., defined benefit or defined contribution;

c. Financing approach, e.g., pay-as-you-go, partially funded or fully funded;

d. Source of funding, e.g. worker or employer contributions, investment earnings on designated assets, transfers from government revenues~~,~~ including legislated or contractual contribution rates; and

e. Benefit provisions, e.g. formulae, amounts, restrictions and eligibility conditions.

4.1.2. Key dates:

a. Valuation date;

b. Report date;

c. Date up to which all relevant information had been taken into consideration, if it differs from the report date.

4.1.3. Section on methodology, data and assumptions;

a. Description of the methodology;

b. Key demographic assumptions, such as mortality (life expectancy~~ongevity~~), morbidity, fertility, migration, and unemployment;

c. Key historical demographic data relied upon, such as:

i. Eligible and beneficiary population by relevant demographic characteristic groupings;

ii. Dependency ratios;

iii. Employment earnings by age groups and gender, and averages;

iv. Contributory earnings by age groups and gender, and averages; and

v. Covered payroll and workforce;

d. Key economic data and assumptions, such as inflation, economic growth, and return on investments (if any);

e. The extent, if any, of interdependency among assumptions;

f. Statistics and summaries of the data used as a basis for the SSP valuation assumptions; and

Comment [sg48]: These lists relate primarily, if not exclusively, to retirement programs, with almost no reference to health care related social security programs, eg dealing with health care cost trends, … We suggest adding at least a few references to health care data, assumptions and trends. The alternative would be scope out health benefits provided through a social insurance program, just like it almost does for unemployment benefits (note that we're not sure why the latter is in general scoped out).

Comment [sg49]: Should this be 'in conjunction with'? Or in addition to the items indicated in ISAP 1?

Comment [sg50]: For enhanced completeness

Comment [sg51]: Shouldn't this list include something relating to margins where applicable (since it is referred to in 3.3)?

Comment [sg52]: In this list, probably better to deal with data before assumptions, to be consistent with the stem.

Comment [sg53]: No reference to trends are included here.

Comment [P54]: To be consistent with 3. 2a

Comment [sg55]: A dependency ratio is not data used, but the result of calculations. Although this is a highly useful and informative demographic metric, it would not be directly used in a valuation. One approach would be to list this as an example of a useful metric. Another key metric may be costs in relation to GDP.

g. Sources, quality, and relevance of the data used.

4.1.4. Section on results and findings

a. Key projected demographic values at selected future points in time, such as:

i. Eligible and beneficiary population by relevant demographic characteristic groupings, and how these populations compare to the total population;

ii. Dependency ratios;

iii. Employment earnings by age groups and gender, and averages;

iv. Contributory earnings and averages by age groups and gender;

v. Labour force participation rates by age groups and gender; and

vi. Covered payroll and workforce.

b. ~~Financial p~~Projections showing detailed cash flows and balance sheet values for the recent past and for the future, such as:

i. Contributions;

ii. Investment earnings;

iii. Other income;

iv. Total income;

v. Benefits or claims;

vi. Administrative expenses;

vii. Total expenditures;

viii. Annual balance (income minus expenditure);

ix. Actuarial deficit and funded ratio as of valuation date and other representative dates (for fully-funded retirement benefit~~pension~~ schemes);

x. Nature of assets and / or individual accounts;

xi. Market value of tangible assets / funded assets;

xii. Reserve; and

xiii. Value of notional, non-financial or virtual assets.

The results may be expressed in relation to one or more relevant volume measures, such as the size of the economy or premiums/taxes.

c. Cost rates as appropriate:

i. Pay-as-you-go cost rate;

ii. General average premium or partially funded cost rate; or

iii. Fully funded cost rate; and

d. A presentation designed to provide an indication of the financial sustainability of the SSP, if appropriate.

Comment [sg56]: Should this stem have something similar to the 'at selected future points in time' here and in c? or should this reference be in the stem of 4.1.4 rather than 4.1.4a?

Comment [sg57]: Uncertain what this refers to - reserve for what?

Comment [sg58]: Virtual?

Comment [sg59]: It is not clear whether this should be for each year or the entire projection period. 'premium' is an insurance term - should this be contribution rate? That is the terminology used in a) above

4.1.5. Section on analysis of valuation results that~~which~~ may include the following components:

a. Reconciliation with the previous report, along with explanations of significant changes in results.

b. Discussion of the pattern of ~~financial~~ projections over the years (e.g., as a result of the ageing of the population, maturity of the SSP, and recent changes in SSP design or financing) and their implications~~ thereof~~. The actuary may include a comparison of how benefits are projected to grow or decline with respect to inflation, economic growth or both and during which part of the projection period, as an indicator of potential stability or instability of the system in the longer term.

c. Effect, if material, of any subsequent event.

d. Sensitivity of results to variations in one or more assumptions.

e. Effect of automatic balancing mechanisms (if any) under each scenario used for the projections in the report, where “effect” covers both how the automatic balancing mechanism alters the key parameters of the SSP (such as retirement~~the pension~~ age, or determination of benefits) and how the alteration of the key parameters changes the amounts paid to beneficiaries.

f. Conclusions on the short-, medium-, and long-term financial sustainability of the SSP with due regard to the funding rules under the law if such funding rules exist.

g. Indications of possible sources of future financial instability (e.g., depreciation of future benefits either because of non-indexation or because of indexation lagging behind economic growth, or inadequacy of future contributions due to non-~~-~~indexation of contribution limits).

h. Potential recommendations on possible measures to ensure the long-term financial sustainability of the SSP.

i. Effect~~Impact~~ of any options or guarantees embedded in the benefits of the SSP on the cash flows shown in 4.1.4.b.

j. The suitability of any approach for calculation of capitalised value of liabilities used for an SSP in light of the particular funding method and the time horizon used.

4.2. Actuarial Opinion{ TC "4.2 Actuarial Opinion" \l 2 } – The actuary should provide an opinion with respect to the extent to which the following hold, or do not hold:

a. The data upon which the report is based are sufficient and reliable;

b. The assumptions used for the report are reasonable and appropriate, in the aggregate and/or individually~~; reasonable and appropriate~~;

c. The methodology employed is appropriate and consistent with sound actuarial principles; and

d. The SSP is financially sustainable over the period covered by the projections used for the valuation.

Comment [sg60]: "pension age" is unclear - entering into a plan, leaving a plan?

Comment [sg61]: What does depreciation mean here - is this deterioration in relation to adequacy relative to the cost of living? It is difficult to guess what this is referring to.

Comment [sg62]: We would prefer something like "enhance" or even "help ensure" - even an indexing approach may not 'ensure' long-term financial sustainability, especially if it involves health care benefits. There is no way of ensuring such sustainability.

Comment [sg63]: Uncertain whether recommendations on changes to the SSP should be a required part of all actuarial valuation reports. This is often outside of scope of an actuarial valuation report. In addition, we don't understand what "potential recommendations" represents.

Comment [sg64]: Suitability usually considers a value judgment; is its intent relating to consistency with the funding method?

Or possibly we don't understand what 'capitalised value of liabilities' means, as this is the only place in the ISAP that uses this phrase and there is no definition - capitalized values normally relate to assets.

Comment [sg65]: Just a better order

The actuary should include~~conclude with~~ a formal statement that the report has been prepared, and the actuary's opinion given, in accordance with the applicable local standards of practice or this model ISAP.

Comment [sg66]: We don't understand why this standard should dictate whether the opinion should go at the beginning or end of the report.

Formatted: Indent: Left: 0.95 cm