

Dave Pelletier
Chair, Actuarial Standards Committee
150 Metcalfe Street, Suite 601
Ottawa, Ontario K2P 1P1
Canada

28 February 2013

Dear Dave

ISAP nn Valuation of Social Security Programs – Exposure Draft

I am pleased to provide comments from the Financial Reporting Council (the FRC) on the exposure draft *ISAP nn Valuation of Social Security Programs* developed by the Social Security Task Force of the Interim Actuarial Standards Subcommittee of the Executive Committee of the IAA. We have discussed the exposure draft with the UK Government Actuary's Department and consider that our comments, expressed in this response, are consistent with theirs. We have also shared this response with the Institute and Faculty of Actuaries.

The FRC sets technical actuarial standards in the UK and oversees the setting of ethical and conduct standards (and other regulatory activities) by the UK Actuarial Profession. Our work is supported by an Actuarial Quality Framework.

As a member of the Standard-Setters Round Table we support efforts to develop model standards which national standard-setters can consider adopting. We appreciate the work that the Interim Actuarial Standards Subcommittee and the Social Security Task Force have done in developing this exposure draft and we welcome this opportunity to contribute to its further development.

We have not set technical standards for actuarial work concerning the UK's National Insurance scheme. However, the UK Government Actuary's Department has kept us informed of the principles which it applies to this work.

We have a number of comments and suggestions for amendments based on our experience of setting standards and on feedback we have received from users and practitioner concerning our standards.

Our primary comments are:

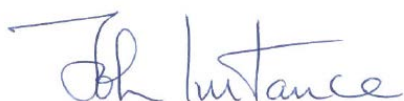
- We agree that actuarial work plays an important role in enabling governments and other sponsors of SSPs make better decisions concerning the ongoing management of such schemes. We therefore agree that standards for actuarial work concerning valuations of SSPs can contribute to ensuring users receive the information they need.
- We agree that, if a decision is made that a specific standard should apply to actuaries' work in relation to SSPs, then it is logical that *ISAP 1 – General Actuarial Practice*, or its relevant national equivalent(s), should also apply. This is consistent with the approach we have adopted more generally which requires work within the scope of the FRC's specific technical actuarial standards (TASs) to comply also with our generic TASs on data, modelling and reporting.

- We consider that the standard should include principles requiring explicit disclosures concerning the uncertainty that is inherent in much work concerning the projection of SSPs. There is likely to be significant uncertainty in work which concerns the often very long term projection of cash flows for social security schemes. The uncertainty can arise from the data, the assumptions concerning changes in demographic and economic factors over the long term, and in the models used to project long term cash flows.
- We consider that users are best served by reports explaining the particular data used, assumptions made, measures adopted, and methodologies followed. We also consider that reports should contain all the information material to the decisions that have to be made. In addition the report should provide a clear explanation of any material limitations in the work performed and the implications of those limitations. We suggest that the Task Force check that this ISAP, together with ISAP 1, includes reporting principles that ensure that users receive this information.
- We are concerned that many of the SSP-specific requirements in the exposure draft additional to the requirements of ISAP 1 are overly prescriptive for a standard. We consider that much of the content would be better provided as educational material. For example paragraph 3.2 prescribes a lengthy list of data that is to be considered, paragraph 3.4 prescribes methodologies that should be used to produce balance sheets and paragraph 4.1 prescribes the contents of what is likely to be a very lengthy valuation report. We consider these paragraphs provide useful guidance but should not be effectively mandatory. This guidance might be included as an appendix to the standard provided its status is made clear (i.e. not having the force of a standard) or as a separate information and assistance note.
- Paragraph 3.3 suggests a frequency for the performance of valuations for new schemes. We understand that sometimes it can be helpful to practitioners to be able to point out the value to users of having additional information but we do not consider it is the purpose of standards to mandate what work should be done.

Detailed comments and suggestions are provided in the exhibit attached to this letter.

We would be happy to discuss these comments with the Task Force.

Yours sincerely



John Instance
Project Director
Codes and Standards Division
DDI: 020 7492 2497
Email: j.instance@frc.org.uk

Exhibit: FRC Comments on ISAP nn – Valuation of Social Security Programs – Exposure Draft

Section 1. General

Paragraph	Text	FRC Comment	
1.1	<p>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:</p> <ul style="list-style-type: none"> • Actuarial services are carried out professionally 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. 	(i)	<p>We do not consider that the purpose of a standard is the provision of guidance. We consider that a standard lays out principles or rules that intended users can expect practitioners to follow, when carrying out work covered by the standard, for the intended users' benefit.</p>
		(ii)	<p>A "valuation" is defined in paragraph 2.14 as "<i>any formal analysis of an SSP...</i>". However, there is no definition of an "<i>actuarial valuation</i>", although there is an implication that it is a subset of the universe of valuations. Does the working party want to limit the scope of the standard in this way?</p> <p>If yes, we suggest it might be better achieved in the definition of a "valuation" by describing it as "<i>any formal-actuarial analysis of an SSP...</i>"</p> <p>We then consider that the adjective "<i>actuarial</i>" in this paragraph 1.1 is unnecessary and it might be deleted.</p>
		(iii)	<p>As an "opinion" is a defined term and the provision of opinions is required by paragraph 4.2, we suggest that "<i>opining</i>" is replaced by "<i>providing an opinion</i>".</p>
		(iv)	<p>We therefore suggest the following purpose:</p> <p><i>To give intended users of work carried out by actuaries performing valuations of SSPs, or reviewing, advising on, or providing an opinion on such valuations, confidence that:</i></p> <ul style="list-style-type: none"> • <i>Actuarial services are carried out professionally and with due care;</i> • <i>The results are relevant to their needs, are presented clearly and understandably, are complete; and</i> • <i>The assumptions and methodology (including, but not limited to, models and modelling techniques) used are disclosed appropriately.</i>
1.2	<p>Scope - This ISAP applies to actuaries who are performing, reviewing, advising on, or opining on actuarial valuations of SSPs.</p>		<p>If the definition of "valuation" is defined as we suggest in our comment on paragraph 2.14 and our comment (ii) on paragraph 1.1, then the adjective "<i>actuarial</i>" describing the valuations in scope might be deleted. As in our comment (iii) on paragraph 1.1, we suggest that "<i>opining</i>" is replaced by "<i>providing an opinion</i>".</p> <p>This work is also within the scope of ISAP 1. We consider that it may be helpful to practitioners if this is explicitly stated for example by inclusion of the following paragraph:</p> <p><i>ISAP 1 – General Actuarial Practice also applies to actuaries who are performing, reviewing, advising on, or providing an opinion on actuarial valuations of SSPs.</i></p>

Exhibit: FRC Comments on ISAP nn – Valuation of Social Security Programs – Exposure Draft

1.3	Compliance – There are situations where an actuary may deviate from the guidance of this ISAP but still comply with the ISAP:	No comment – identical to ISAP 1.
1.3.1	Law may impose obligations upon an actuary . Compliance with requirements of law that conflict with this ISAP is not a deviation from the ISAP.	No comment – identical to ISAP 1.
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.	No comment – identical to ISAP 1.
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.	As stated above we do not consider standards provide guidance. While we accept that this sub-paragraph duplicates the corresponding paragraph of ISAP 1, we suggest that the Task Force consider extending the clause to allow for immaterial departures by adding the sentence. <i>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. If a departure does not have a material effect on the results of the work in question, it need not be considered as a departure and it does not need to be disclosed.</i>
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.	No comment – identical to ISAP 1.
1.4.1	The application of this ISAP is clear when a single consulting actuary is performing actuarial services for a client who is not affiliated with the actuary .	No comment – identical to ISAP 1.
1.4.2	There are at least two general cases 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.)	No comment – identical to ISAP 1.

Exhibit: FRC Comments on ISAP nn – Valuation of Social Security Programs – Exposure Draft

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.	No comment – identical to ISAP 1 other than the references in parentheses.
1.4.4	<p>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.</p> <p>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 may receive broad distribution.</p> <p>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.</p>	We suggest that the wording is amended to make it the same as ISAP 1.
1.5	Reasonable Judgment – The actuary should exercise reasonable judgment in applying this ISAP.	No comment – identical to ISAP 1.
1.5.1	<p>A judgment is reasonable if it takes into account:</p> <p>a. The spirit and intent of the ISAPs;</p> <p>b. The type of assignment; and</p> <p>c. Appropriate constraints on time and resources.</p>	No comment – identical to ISAP 1.
1.5.2	In particular the actuary should be cautious exercising reasonable judgment in statutory, supervisory, and financial reporting assignments	<p>This paragraph was deleted from a draft version of ISAP 1 and replaced by a paragraph considering proportionality.</p> <p>Proportionality should apply to work for SSPs and we also consider that there should be</p>

Exhibit: FRC Comments on ISAP nn – Valuation of Social Security Programs – Exposure Draft

	which usually require considerable rigour.		consistency between ISAPs if possible. We therefore suggest that the same change is made in this ISAP.
	Any judgment required by the ISAP (including implicit judgment) is intended to be the actuary 's professional judgment unless otherwise stated.	(i)	We suggest this is specified as paragraph 1.5.3 as it is in ISAP 1.
		(ii)	We note that professional judgement is defined in ISAP 1 paragraph 2.11. We suggest it is defined in this ISAP to maintain consistency.
1.6	Language		
1.6.1	<p>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:</p> <p>a. "Must" means that the indicated action is mandatory and failure to follow the indicated action will constitute a departure from this ISAP.</p> <p>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.</p> <p>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.</p>		No comment – identical to ISAP 1.
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).		No comment – identical to ISAP 1.
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,		No comment – identical to ISAP 1.

Exhibit: FRC Comments on ISAP nn – Valuation of Social Security Programs – Exposure Draft

	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 – This ISAP is effective for { actuarial services performed/ actuarial services commenced/ actuarial services performed relevant to an event} on or after [Date].		Our preference would be for the ISAP to apply to work relating to events on or after a set date.

Exhibit: FRC Comments on ISAP nn – Valuation of Social Security Programs – Exposure Draft

Section 2. Definitions

Paragraph	Text	FRC Comment	
	The terms below are defined for use in this ISAP.		To avoid confusion and disputes, we consider that terms should be defined consistently across all ISAPs. To emphasise this point we suggest adding an additional sentence. <i>The terms below are defined for use in this ISAP. The definitions are used consistently in other ISAPs.</i>
2.1	Actuarial Services – Services based upon actuarial considerations provided to intended users that may include the rendering of advice, recommendations, findings, or opinions .		We note that “ <i>opinions</i> ” is not a defined term in ISAP 1. By having it as a defined term in this definition it might imply that opinions in the general sense of the word are not included in actuarial services concerning SSP actuarial valuations. Is this what is intended?
2.2	Actuary – An individual member of one of the member associations of the IAA .		No comment – identical to ISAP 1.
2.3	Adoption Date – The date on which this ISAP was adopted as a final document by the IAA Council.		No comment – identical to ISAP 1.
2.4	Communication – Any statement (including oral statements) issued or made by an actuary with respect to actuarial services .		No comment – identical to ISAP 1.
2.5	IAA – The International Actuarial Association.		No comment – identical to ISAP 1.
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.	(i)	We consider that this definition confuses expert with actuary. In the second sentence, “independent” means an actuary. We assume that the word expert has been inadvertently left out and the sentence should read: <i>In this context “independent expert” means an actuary experienced in valuation of SSPs who:</i>
		(ii)	We suggest that rather than define what an independent expert is within the definition of an independent expert review it is better as a separate definition.

Exhibit: FRC Comments on ISAP nn – Valuation of Social Security Programs – Exposure Draft

	In this context an actuary or organization contracted by the SSP to perform the Independent Expert Review is not considered to be employed.	(iii)	There is a reference to the “ <i>actuarial valuation</i> ” in subparagraph (i) and the “ <i>valuation</i> ” in subparagraph (ii). We do not understand the difference. As we commented on paragraph 1.1, we suggest that the adjective “ <i>actuarial</i> ” is deleted.
		(iv)	There is a reference in a. to “ <i>this report</i> ” but it is not clear what report this refers to. It might be made clearer by stating that independent means not having been involved in setting the assumptions or producing the results of the valuation.
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.		We suggest that exactly the same definition is used as in ISAP 1. We appreciate that this means introducing the term “ <i>principal</i> ” which is not used elsewhere in this ISAP but we consider consistency across ISAPs is important.
2.8	Law – Applicable acts, statutes, regulations or any other binding authority (such as accounting standards, and any regulatory guidance that is effectively binding).		The comma after “ <i>accounting standards</i> ” does not appear in the equivalent definition of ISAP 1. While we appreciate this is a trivial difference we suggest deleting it.
2.9	Opinion – An opinion expressed by an actuary and intended by that actuary to be relied upon by the intended users.		We suggest that the opinion be “expressed <i>in a report by an actuary....</i> ” to exclude oral opinions.
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.		No comment – identical to ISAP 1.
2.11	Report Date – The date on which the actuary substantially completes a report . It usually follows the valuation date .		<p>We are uncertain as to the meaning of substantial completion of a report. Is the Task Force concerned that draft reports might be argued to be outside the scope of ISAP?</p> <p>We are also uncertain for the need for this definition as ISAP 1 paragraph 4.2.1 requires the actuary to include the date of the report in the report.</p> <p>If the Task Force considers this definition is necessary then we suggest that the report date is defined as:</p> <p><i>The date on which the actuary substantially completes issues a report to intended users. It usually follows the valuation date.</i></p>
2.12	Social Security Programs (SSPs) – programs with all the following attributes regardless of how they are financed and administered:		No comment.

Exhibit: FRC Comments on ISAP nn – Valuation of Social Security Programs – Exposure Draft

2.12.1	Coverage is of a broad segment, if not all, of the population, often on a compulsory or automatic basis;	It is not clear what is meant by “a <i>broad segment</i> ”. Some SSPs cover only a small proportion of the population, for example in countries where there is a large informal sector which is not covered. We do not consider that condition 2.12.1 is required and could exclude some SSPs from the scope of the ISAP which will not be covered by other actuarial standards.
2.12.2	The program, including benefits and financing method, is prescribed by statute;	No comment.
2.12.3	The program is ultimately responsible to the government, or a unit of government; and	No comment.
2.12.4	<p>Program benefits are:</p> <ul style="list-style-type: none"> 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. 	No comment.
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.	We suggest that exactly the same definition is used as in ISAP 1. We appreciate that in the context of this ISAP the valuation date and the date to which the actuarial services refer are the same but we consider consistency across ISAPs is important.
2.14	Valuation – Any formal analysis of an SSP including presentations of discounted point in time values, projections of cash flows and associated fund values, and contribution rates.	<p>We are uncertain as to what is meant by a “<i>formal analysis</i>”.</p> <p>We suggest replacing the word “<i>formal</i>” with the word “<i>actuarial</i>”. (See our comment (ii) on paragraph 1.1.)</p>
2.15	Valuation Date – The date at which an SSP is analyzed by the actuary . It usually precedes the report date.	No comment.

Exhibit: FRC Comments on ISAP nn – Valuation of Social Security Programs – Exposure Draft

Section 3. Appropriate Practices

Paragraph	Text	FRC Comment	
3.1	<p>Consideration of all Relevant Features of the SSP and Law – 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 pensions 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.</p>	(i)	<p>In the second sentence we consider that “<i>established practice</i>” is, by definition, likely to be practical. However, it might not be relevant. We suggest rewording the sentence as follows:</p> <p><i>The actuary should also take into account established practice (where practical if relevant) when no law exists.....</i></p>
		(ii)	<p>In the same sentence we wonder whether there is an implication that no law usually exists concerning the basis for future indexation of pensions.</p> <p>We suggest deleting the example in parentheses.</p>
3.2	<p>Data – The actuary should consider using the following data:</p> <ul style="list-style-type: none"> 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 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 classes of contributors and beneficiaries of the SSP; g. Covered salaries and past service credits; 	(i)	<p>We consider this list is too prescriptive. We consider that a principle along the following lines is sufficient:</p> <p><i>The actuary should consider what data is required in order to perform, review advise on or opine on the valuation of the SSP.</i></p> <p>If a list of data relevant to SSP’s is seen as helpful then we consider it is better included in educational material rather than in a standard. This educational material can also explain why this data is relevant. It might be included as an Appendix to this ISAP in which case its status as not having the force of a standard should be made clear or in a separate document such as an information and assistance note.</p> <p>We also consider that ISAP 1 3.5.1 which provides a principle concerning the sufficiency and reliability of data and ISAP 1 3.5.3 which provides a principle concerning sources of data for entity-specific assumptions are relevant to this ISAP. These clauses might either be incorporated either directly or by reference in this ISAP.</p>
		(ii)	<p>Should the Task Force continue to include a list of data that should be considered, it should be made clear that any list is not exhaustive.</p> <p>We suggest that a paragraph is inserted in Section 1 of the standard saying:</p> <p><i>Lists are not intended to be exhaustive.</i></p>

Exhibit: FRC Comments on ISAP nn – Valuation of Social Security Programs – Exposure Draft

	h. Family statistics (including household surveys).	(iii)	The list includes examples of jargon in item g. We understand that jargon can be shorthand for expert practitioners but we suggest its use is avoided in a standard or it needs defining.
3.3	<p>Assumptions – 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 that 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 or those that would result in low projected costs when such projections are helpful in analyzing and communicating the financial status of an SSP.</p> <p>The actuary should perform an experience analysis to determine, to the extent that the available data permit, if experience trends are relevant to the setting of certain assumptions.</p> <p>The actuary should select assumptions that reflect the time line of the analysis (which might be 75 years or more). The actuary may select different assumptions for different time intervals in the</p>	(i) (ii) (iii) (iv) (v)	<p>(i) This paragraph covers a range of diverse issues. We suggest that it is split into a number of sub-paragraphs 3.3.1, 3.3.2.....</p> <p>(ii) We suggest deleting the adjective “<i>realistic</i>” applying to “<i>best estimate assumptions</i>” in the first sentence. It is not included in the second sentence which defines what best estimate assumptions are.</p> <p>(iii) We consider that the term “<i>best estimate assumption</i>” can have a number of meanings, for example it might mean the mean or the mode of a distribution. We prefer the term “<i>neutral assumption</i>” which we define as an assumption that is not deliberately either optimistic or pessimistic and does not incorporate adjustments to reflect the desired outcome.</p> <p>(iv) We also suggest that the adjective “<i>financial</i>” applying to a “<i>valuation</i>” is deleted from the first sentence. A valuation is defined in paragraph 2.14, the examples given all appear to be financial valuations.</p> <p>(v) The first sentence requires use of best estimate assumptions; however, the third sentence describes disclosure requirements when the actuary uses assumptions that include a margin. This appears contradictory.</p> <p>ISAP 1 includes principles concerning assumptions which may be set by the actuary, prescribed by the principal or another party or mandated by law. These clauses might be incorporated directly or by reference.</p> <p>We suggest that the first paragraph of 3.3 is clarified. The first sentence might be written as:</p> <p><i>If the actuary sets the assumptions, the actuary should use neutral assumptions in a valuation of an SSP.</i></p>

Exhibit: FRC Comments on ISAP nn – Valuation of Social Security Programs – Exposure Draft

	<p>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 (select and ultimate)).</p> <p>In selecting the model variables and assumptions for SSP financial projections, 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).</p> <p>For newly introduced SSP benefit schemes 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 reference the relevant experience of other SSPs or other countries to establish assumptions.</p> <p>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 relating to actual SSP membership). Accordingly valuations should be performed more frequently (possibly annually) than would be suitable for a longer established program which provided more data for analysis.</p> <p>The actuary should comment on the assumptions as shown in paragraph 4.2.b.</p>	<p>(vi)</p> <p>(vii)</p>	<p>In the third sentence, we are uncertain what clear and proper disclosures are required when using assumptions containing margins.</p> <p>We suggest that the third sentence might be better written as:</p> <p><i>If the actuary uses assumptions that include margins, then the report should disclose the rationale for the margins and explain the relationship between the result using the assumptions that include margins and the result using neutral assumptions.</i></p> <p>It might be helpful to include additional guidance, perhaps in an Appendix, on what the explanation might include, for example:</p> <p><i>An explanation of the relationship might need to include:</i></p> <ul style="list-style-type: none"> • <i>a description of the level of the margin in the result;</i> • <i>a presentation of an approximate result based on neutral assumptions alongside the result; and</i> • <i>a comparison of the assumptions including margins with neutral assumptions and an explanation of the differences.</i> <p>We consider that the fourth sentence of the first paragraph that permits the use of sensitivity tests is better incorporated in a principle that allows for the reporting of uncertainty that is inherent in any projection of an SSP.</p> <p>There is no explicit principle covering the reporting of uncertainty in ISAP 1. We consider this a significant weakness in ISAP 1.</p> <p>We therefore suggest that this ISAP makes such a requirement explicit. For example, we suggest the following paragraph taken from the FRC’s TAS R.</p> <p><i>The report must indicate the nature and extent of any material uncertainty in the information it contains.</i></p> <p>It might be helpful to include additional guidance, perhaps in an Appendix, on what the indication of the uncertainty might include, for example:</p> <p><i>Uncertainty may concern the results of calculations, assumptions on which information is based or other aspects. It may arise from random variations, lack of information or other sources. The extent of any material uncertainty may itself be subject to uncertainty.</i></p> <p><i>There are many ways of indicating the extent of uncertainty, such as:</i></p> <ul style="list-style-type: none"> • <i>giving a range, measure of the value at risk or other statistical calculation;</i> • <i>showing the numerical consequences of changes in assumptions;</i> • <i>presenting the outcomes of scenarios, possibly including extreme scenarios; and</i> • <i>describing the uncertainty and explaining why it has not been quantified.</i>
--	---	--------------------------	---

Exhibit: FRC Comments on ISAP nn – Valuation of Social Security Programs – Exposure Draft

		<p>(viii) Past trends are not always a good guide to the future although if experience has changed over past periods it is an indicator that experience may continue to change in future periods.</p> <p>We consider that for many assumptions required for valuations of SSPs it is worth considering assumptions in pairs - a base or current assumption and an assumption about how this base assumption might change in future periods.</p> <p>We therefore suggest deleting the second and third paragraphs and replacing them with a principle along the following lines:</p> <p><i>For those assumptions used in projections that are expected to vary over time there should be separate assumptions for the base rates and for subsequent changes in those rates.</i></p>
		<p>(ix) In the fourth paragraph, the term “immunized” is jargon that may not be readily understood by all readers of the ISAP and therefore it may be better to replace this with a term that would be more readily understood. Alternatively the term might be defined within section 2. The paragraph might refer to the need for the actuary to take into account that the financial projections of the SSP may not be sensitive to all assumptions.</p>
		<p>(x) We consider that the fifth paragraph starting “<i>For newly introduced SSP benefit schemes.....</i>” is guidance which is better suited for educational material rather than to be included in a standard. As discussed above this guidance might be included in an Appendix or in a separate note.</p> <p>The final sentence of this paragraph might be better included in the list of data which is currently included in paragraph 3.2.</p>
		<p>(xi) For some SSPs the quality of the data may be such that the actuary is unable to determine whether there is a material underestimate or overestimate. He or she may be limited to showing the possible impact of taking different approaches to dealing with data deficiencies. This possibility ought to be explicitly allowed for in this section. However, the treatment of data deficiencies is laid out in ISAP 1 paragraph 3.5.4. In particular 3.5.4(c) requires deficiencies to be disclosed in the report including an indication of the potential impact of those data deficiencies. This clause might be incorporated directly or by reference.</p> <p>Data deficiencies are one possible cause of uncertainty. If, as we suggested in our comment 3.3(vii), a principle to require disclosure of any material uncertainty is included in the ISAP then no further requirement is needed.</p> <p>We also do not agree that it is the role of an actuarial standard to prescribe the frequency of SSP valuations.</p> <p>We suggest that the sixth paragraph is deleted.</p>

Exhibit: FRC Comments on ISAP nn – Valuation of Social Security Programs – Exposure Draft

		(xii)	<p>We do not consider the final paragraph starting “<i>The actuary should comment...</i>” necessary as it effectively just repeats paragraph 4.2.</p> <p>We consider that it would be more helpful to intended users if reports are required to include a rationale for the assumptions used. We suggest including a principle along the following lines:</p> <p><i>The report should describe the rationales for any material assumptions used.</i></p> <p><i>Rationales will need to distinguish between fact, judgements based purely on evidence and judgements influenced by personal opinion.</i></p>
3.4	<p>Balance Sheet Methodology – When applicable the <u>actuary</u> should choose which methodology to use to produce an <u>SSP</u>’s balance sheet based mainly on the financing approach used.</p>		<p>We do not consider that actuarial standards should prescribe particular methodologies as it has the potential to stifle innovation in actuarial methods and encourage group think. We consider that it should left to the actuary’s judgement as to which methodology to use to project the SSP’s cash flows and, if necessary, to produce a balance sheet as at the valuation date.</p> <p>We therefore suggest that paragraph 3.4 is better included in educational material which can also include material on the strengths and weaknesses of each of the closed membership and open membership approaches.</p> <p>We think it is more useful for intended users to understand the reasoning why a particular methodology is selected. For that reason we have included in our reporting standard the following generic requirements:</p> <p><i>For any material calculations that have been performed the report shall explain:</i></p> <ul style="list-style-type: none"> • <i>the nature and objective of the calculations;</i> • <i>any specific measure(s) adopted; and</i> • <i>the methods used to achieve the calculation objective.</i> <p><i>The report shall describe the rationales for the measures and methods used in any material calculations.</i></p> <p>We suggest that a similar requirement is included in this ISAP.</p>
3.4.1	<p>For fully funded <u>SSPs</u> (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 with or without their assumed future benefit accruals.</p>		<p>See comment on paragraph 3.4.</p>
3.4.2	<p>For pay-as-you-go or partially funded <u>SSPs</u>, if balance sheets are produced, this should be done using an open group approach, under which contributions and benefits of both current and future</p>		<p>See comment on paragraph 3.4.</p>

Exhibit: FRC Comments on ISAP nn – Valuation of Social Security Programs – Exposure Draft

	participants are considered.		
3.4.3	Where law require adoption of an approach for production of a balance sheet that is not 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 .		See comment on paragraph 3.4..
3.5	Reliance on the Work of Experts from Other Professions – The actuary should follow the guidance in ISAP 1 - General Actuarial Practice with respect to reliance on experts from other professions.		As we discuss in our comment on paragraph 1.1, we do not like the term guidance for the principles and rules contained in a standard. We accept that guidance can be helpful for actuaries making any judgements necessary in applying the standards but we suggest that is included either as an Appendix to the standard or as a separate document. We therefore suggest deleting the words “ <i>the guidance in</i> ”. <i>The actuary should follow the guidance in ISAP 1 - General Actuarial Practice with respect to reliance on experts from other professions.</i>
3.6	Independent Expert Review – When an Independent Expert Review is performed:		No comment.
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 .		How does this work if an actuary did not prepare the “ <i>valuation</i> ” that is being reviewed? We suggest the following amendment to make this clear: <i>If the valuation that is being reviewed has been prepared by an actuary, that actuary should cooperate with the reviewing actuary.....</i>
3.6.2	The reviewing actuary should comply with the guidance of this standard in performing the review.		We consider that the work of the reviewing actuary is already in scope of this standard by virtue of paragraph 1.2. This paragraph is therefore redundant and we suggest it should be deleted.
3.7	Responsibility for Assumptions and Methodology – The actuary should follow the guidance in ISAP 1 - General Actuarial Practice with respect to disclosing the responsibility for assumptions and methodology, and the actuary ’s opinion thereon.		See comment on paragraph 3.5 concerning guidance.

Section 4. Communication

Paragraph	Text	FRC Comment
4.1	<p>Specific Information to be Included in SSP Valuation Reports – This section applies specifically to reports concerning the projected financial status of an SSP. ISAP 1 - General Actuarial Practice 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).</p>	<p>This section applies to SSP valuation reports and not just reports concerning the projected financial status of an SSP. We therefore consider the first sentence is unnecessary.</p> <p>ISAP 1 does not cover information useful to a wider variety of reports, it lays down standards for actuaries preparing reports.</p> <p>We suggest the following wording:</p> <p>Specific Information to be Included in SSP Valuation Reports – <i>This section applies specifically to SSP valuation reports concerning the projected financial status of an SSP. ISAP 1 – General Actuarial Practice 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).</i></p>
4.1.1	<p>Description of the provisions of the SSP related to:</p> <ol style="list-style-type: none"> Coverage; Nature of the SSP, e.g., defined benefit or defined contribution; Financing approach, e.g., pay-as-you-go, partially funded or fully funded; Source of funding, e.g. worker or employer contributions, transfers from government revenues, including legislated or contractual contribution rates; and Benefit provisions, e.g. formulae, amounts, restrictions and eligibility conditions. 	<p>The term provision has implications of a liability. The SSP is defined by the items listed in (a) through (e).</p> <p>We therefore suggest amending the opening clause as follows:</p> <p><i>A Ddescription of the provisions of the SSP including information concerning related to:</i></p> <p>By using the word including this defines a minimum description and does not preclude the actuary from giving additional information.</p>
4.1.2	<p>Key dates:</p> <ol style="list-style-type: none"> Valuation date; Report date; Date up to which all relevant information had been taken into consideration, if it differs from the report date. 	<p>No comment.</p>
4.1.3	<p>Section on methodology, data and assumptions;</p> <ol style="list-style-type: none"> Description of the methodology; Key demographic assumptions such as mortality (longevity), morbidity, fertility, migration, and unemployment; Key historical demographic data such as: 	<p>ISAP 1 4.2.1 requires reports to include content concerning methodology, assumptions and data used. However it does not specify what that content should be.</p> <p>We consider that the report should include:</p> <ol style="list-style-type: none"> an explanation of the nature and objective of any material calculations performed; an explanation of the methodology used; a description of the rationale for choosing the methodology used;

	<ul style="list-style-type: none"> 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 g. Sources, quality, and relevance of the data used. 	<ul style="list-style-type: none"> d. a statement of the material assumptions; e. a description of the rationale for the choice of those assumptions; f. a description of the material data or any other material information used; and g. a statement of the source of the data or other information. <p>We also consider that if there is any material uncertainty over the quality of data then the report should include:</p> <ul style="list-style-type: none"> a. a description of the uncertainty; and b. an explanation of the approach taken to the uncertainty in the calculations or in the results. <p>We therefore suggest that this section is made more explicit as follows:</p> <p><i>For any material calculations that have been performed the report should explain:</i></p> <ul style="list-style-type: none"> • <i>the nature and objective of the calculations;</i> • <i>any specific measure(s) adopted; and</i> • <i>the methods used to achieve the calculation objective.</i> <p><i>The report should describe the rationales for the measures and methods used in any material calculations.</i></p> <p><i>The report should state the material assumptions on which any calculations or judgements are based.</i></p> <p><i>The report should describe:</i></p> <ul style="list-style-type: none"> a. <i>the rationales for any material assumptions used; and</i> b. <i>the extent, if any, of interdependency among assumptions</i> <p><i>The report should:</i></p> <ul style="list-style-type: none"> a. <i>describe any data or any other information used; and</i> b. <i>state the source of the data or other information.</i> <p><i>If there is any material uncertainty over the accuracy of the data, the report should:</i></p> <ul style="list-style-type: none"> a. <i>describe the uncertainty; and</i> b. <i>explain any approach taken to the uncertainty in the calculations or in the results.</i> <p>We do not consider it is necessary to specify lists of demographic and economic data that might be material which we consider is better provided in educational material rather than in a standard. As discussed, this additional material might be included as an Appendix or as a</p>
--	--	--

			separate document.
4.1.4	<p>Section on results and findings</p> <p>a. Key projected demographic values at selected future points in time such as:</p> <ol style="list-style-type: none"> 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. Labor force participation rates by age groups and gender; and vi. Covered payroll and workforce. <p>b. Financial projections showing detailed cash flows and balance sheet values for the recent past and for the future such as:</p> <ol style="list-style-type: none"> 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 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. <p>The results may be expressed in relation to one or more relevant volume measures, such as the size of the economy or premiums/taxes.</p> <p>c. Cost rates as appropriate:</p> <ol style="list-style-type: none"> i. Pay-as-you-go cost rate; ii. General average premium or partially funded 		<p>We do not consider that it is necessary to prescribe lists of results and findings in such detail. We suggest that such detail is better contained in educational material that can provide context and rationales for when the specified material should be provided.</p> <p>We consider that a sufficient principle is:</p> <p><i>The report should include all material matters relating to the valuation being reported on.</i></p> <p>There is a risk that, if the report is too long and detailed, material information might be obscured by immaterial information. As a consequence the intended users may take sub-optimal decisions. We suggest that this risk might be mitigated by including the following principle.</p> <p><i>A report should not include information that is not material if it obscures material information.</i></p>

	<p>cost rate; or</p> <p>iii. Fully funded cost rate; and</p> <p>d. A presentation designed to provide an indication of the financial sustainability of the SSP, if appropriate.</p>		
4.1.5	<p>Section on analysis of valuation results which may include the following components:</p> <p>Reconciliation with the previous report, along with explanations of significant changes in results.</p> <p>a. 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 the 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.</p> <p>b. Effect, if material, of any subsequent event.</p> <p>c. Sensitivity of results to variations in one or more assumptions.</p> <p>d. 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 the pension age, or determination of benefits) and how the alteration of the key parameters changes the amounts paid to beneficiaries.</p> <p>e. 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.</p> <p>f. 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).</p> <p>g. Potential recommendations on possible</p>		<p>This is rather like a shopping list of issues that might be reported on. As guidance we suggest that it is better included in educational material rather than a standard. This guidance might be included as an Appendix to the standard (making the status of the guidance clear) or as a separate document.</p> <p>However, we do consider that a comparison and reconciliation of results with a previous valuation of the SSP is important information for intended users and this analysis should be included in valuation reports.</p> <p>We also consider that information on the timing and quantum of any cash flows being estimated and valued is useful to users – while useful, present values can sometimes be hard to understand and can hide useful information.</p> <p>We also consider that there should be explicit reporting of risks faced by the SSP and the uncertainty that is inherent in any projection of an SSP.</p> <p>We therefore suggest that this section is reworded to say something along the following lines:</p> <p><i>The report should include a comparison with the report produced for the immediately preceding valuation of the SSP. The comparison should cover assumptions, results of calculations recommendations and other material matters. The comparison of results should include a reconciliation of the two sets of results.</i></p> <p><i>The report should indicate the nature and timing of any future cash flows being quantified.</i></p> <p><i>The report should state the nature and significance of any material risk faced by the SSP explain the approach taken to the risk in the valuation.</i></p> <p><i>The report should indicate the nature and extent of any material uncertainty in the information it contains.</i></p> <p>As discussed above, the additional items that may be commented on can be included either in an Appendix or in an additional document such as an information and assistance note.</p>

	<p>measures to ensure the long-term financial sustainability of the SSP.</p> <p>h. Impact of any options or guarantees embedded in the benefits of the SSP on the cashflows shown in 4.1.4.b.</p> <p>i. 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.</p>		
4.2	<p>Actuarial Opinion – The actuary should provide an opinion with respect to the extent to which the following hold, or do not hold:</p> <p>a. The data upon which the report is based are sufficient and reliable;</p> <p>b. The assumptions used for the report are, in the aggregate and/or individually; reasonable and appropriate;</p> <p>c. The methodology employed is appropriate and consistent with sound actuarial principles; and</p> <p>d. The SSP is financially sustainable over the period covered by the projections used for the valuation.</p> <p>The actuary should 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.</p>	(i)	We are confused about how this clause interacts with the Independent Expert Opinion. Does this just apply to the original work done?
		(ii)	We do not consider that it is necessary to provide a positive opinion on data. We consider that the user should be told where the actuary considers there is material uncertainty about the accuracy of data (see suggested wording on 4.1.3).
		(iii)	<p>Paragraph 3.3 requires the actuary to use realistic best estimate assumptions. ISAP 1 3.7.5 requires an actuary setting assumptions to achieve a reasonable assumption set and final result. If the report contains a rationale for the assumptions chosen (see comment on 4.1.3) then we see no need for a positive opinion on the assumptions.</p> <p>However, we do consider that if the assumptions have been set by someone other than the actuary, and the actuary considers them to be materially inappropriate, the report must contain a statement to that effect.</p>
		(iv)	We do not like the concept of sound actuarial principles. We suggest that a term such as generally accepted actuarial practice is used. However, the IAA might like to consider what sources exist for defining these principles.
		(v)	We agree that a compliance statement is useful.