

1	Please provide your name (note that anonymous responses will not be accepted)	Andrew D Smith
2	Are you responding as an individual or on behalf of an organisation? If so, please list:	Individual
3	Please provide your email address so we can validate your response is legitimate.	<b>DELETED FOR GDPR PURPOSES</b>
4	Do you request confidentiality of your response?	No
5	To what extent have the TASs been effective in supporting high quality technical actuarial work?	TAS's take the perspective of the user of actuarial work, and force us to consider what we do from the user perspective. This has been helpful.
6	What aspects of the TASs have caused difficulties? Please explain what those difficulties were and how you were able to overcome them.	The requirements regarding documentation, data adequacy and reliability are open to interpretation. While the IFoA is responsible for policing the TAS, there have been few if any disciplinary cases relating to TAS's. The FRC should consider whether the compliance bar has been set at the right level and whether more detailed guidance could be supplied. Is the IFoA disciplinary scheme sufficiently accessible and are there sufficient powers to require redress (for example, further documentation supplied) rather than merely reprimanding a member?
7	[For users of technical actuarial work] Have the TASs been effective in ensuring the quality and clarity of the actuarial information you receive is reliable to any decisions that you take based on that information?	As a researcher I have reviewed many actuarial reports in the public domain citing compliance with TAS 100. In general, I have been disappointed by the level of assumption disclosure, especially in relation to stochastic models which is at times perfunctory. In my view, this has often been insufficient for me to determine the key judgements and how they have affected the conclusions. I believe strengthened disclosure requirements are in the interest both of public debate and also of the reputation of actuaries.
8	Are there any aspects of the TASs that do not help to ensure the quality of actuarial information? Please explain your response with examples of where this has been an issue.	No comment

9	Is TAS 100 of sufficient detail to enable you to have a clear understanding of what is required in order to comply with this TAS? Are there areas of guidance which are vital to your understanding to the TASs?	No. TAS 100 is not sufficiently detailed. In particular, the requirement that documentation “contain enough detail for a technically competent person with no previous knowledge of the technical actuarial work to understand the matters involved and assess the judgements made” is capable of wide differences in interpretation. This is a particular issue in relation to actuarial work for public bodies where, in the UK, the work is made public under freedom of information regulations. It can be exceedingly difficult for members of the public with a legitimate interest in the actuarial work to find the detail sufficient to understand the judgements made. This has been a particular issue in relation to personal injury discount rates and pension superfund proposals.
10	[For users of technical actuarial work] Are there any areas where you would welcome further standards; in particular, new areas where an increasing number of actuaries are performing technical actuarial work?	There is a particular issue with stochastic models, in areas such as economic scenario generators and the modelling of natural and man-made catastrophes. The models can be complex but there is considerable public interest in those assumptions being open to scrutiny, particularly when they affect matters of public concern such as the security of pensions and insurers. There is also an issue with model uncertainty. TAS 100 is worded as if a single model has been selected and the conclusions flow from that. It is good practice, however, to consider multiple models and alternative judgements. An updated TAS should encourage the use of multiple models, especially when individual models are controversial.
11	Do you foresee any issues with the TASs being reviewed and updated in a staggered approach?	No comment
12	Are there specific considerations or factors that actuaries should take into account when making professional judgements?	No comment
13	Does TAS 100 currently give sufficient direction on the nature of professional judgement and what it involves?	The lack of any requirement to consider alternative judgements is a significant shortcoming. There is a risk that assumptions could be cherry-picked to lead to a desired conclusion and nothing in the current TAS protects users of actuarial information from being so misled.

14	[For users of technical actuarial work] In making your decisions based on the actuarial information requested, how much reliance do you place on the professional judgement made which resulted in the actuarial information, and has there been sufficient clarity of how these judgments are arrived at?	I believe I am capable of exercising my own judgement in many areas where actuarial work contains judgemental inputs, for example relating to likely future paths of interest rates, inflation, mortality trends, market returns and other economic variables. Except by chance, my judgements are unlikely to coincide with those of the actuary who drafted the work. Outcomes could be substantially improved if the TAS required actuaries to discuss alternatives to key judgements and show sensitivities to the corresponding assumptions. In many cases, actuaries provide such sensitivities voluntarily. The public good would be enhanced with mandatory sensitivity analysis.
15	How has TAS 100 supported you in determining whether a model is fit for purpose?	The documentation requirement for checks and controls is helpful. It has led to better outcomes as the need to document also encourages more thorough scrutiny and challenge. There are often multiple models which could pass fitness-for-purpose validation and yet give widely different answers. TAS 100 offers scant protection for users of actuarial information against model cherry-picking.
16	How have changes in modelling techniques in recent years impacted on your models used in technical actuarial work? What changes should be made to TAS 100 to reflect these developments?	Consideration should be given to bulk disclosure of assumptions where these are very large in number, as might be the case for example for an economic scenario generator. A new TAS could explicitly encourage detailed disclosures in machine readable form such as spreadsheets, R data frames, CSV or XML files.
17	How has TAS 100 supported you in determining whether sufficient controls and testing is in place for the models used in technical actuarial work?	The documentation requirement is helpful in this regard.

18	<p>How are recent or anticipated changes in modelling techniques, or other influences, changing the nature of model governance and validation? What changes should be made to TAS 100 to reflect these?</p>	<p>Increasing model complexity, particularly for stochastic models, presents a particular challenge. Actuarial disclosures typically show a limited number of assumptions, perhaps in the belief that full disclosure would overwhelm the recipient or compromise intellectual property. However, it is frequently the case that undisclosed assumptions still have a material bearing on the conclusions. I would welcome a requirement that mandates the documentation of any assumption whose variation within a plausible range materially affects actuarial advice.</p>
19	<p>[For users of technical actuarial work] How are recent or anticipated changes in modelling techniques affecting the communication of a) methods and measures used in the technical actuarial work and b) significant limitations to the models?</p>	<p>More specific requirements on limitations would be helpful. Currently, limitations are often reduced to vague platitudes, such as no model is perfect, the future is uncertain etc. On occasions these seem more designed to shield the actuary from liability if forecasts are not borne out, rather than to inform users of actuarial information about potential risks. It is too rare to find specific examples of how a model might produce very different outcome if a key judgement is changed. I would welcome mandated disclosure of such sensitivities.</p>
20	<p>Do you consider standardising the wording of the statement of TAS compliance would lead to better clarity on the quality of the work provided? Please provide rationale for your view.</p>	No comment
21	<p>As an actuary completing a work review as defined in APSX2 , or as a user of technical actuarial work, is the evidence supporting the statement of TAS compliance clear and accessible, and how important is it to have this evidence available to you?</p>	No comment
22	<p>Have there been circumstances where you have experienced issues with making a statement of compliance with TAS 100? Please can you provide examples of such.</p>	No comment
23	<p>Should ISAP 4 be adopted by the FRC? Please provide your rationale supporting your view.</p>	No comment
24	<p>If ISAP 4 is adopted as a UK standard, are there either additions or deletions that we should consider to ensure that it best reflects UK conditions?</p>	No comment