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BY E-MAIL TO: [APT@frc.org.uk](mailto:APT@frc.org.uk)

7 May 2021

Dear Sirs

**FRC Post Implementation Review Technical Actuarial Standards (TASs): Call for feedback**

PricewaterhouseCoopers LLP (PwC) welcomes the opportunity to respond to the above call for feedback (the Consultation).

PwC is one of the largest employers of actuarial staff, at over 450, in the UK. Our actuarial staff are involved in a wide variety of sectors and roles including the more traditional areas of insurance (life and non-life), and pensions consulting, as well as wider fields such as banking, risk consulting and commercial and government consulting. We have actuarial staff who support our Audit practice in the audit of insurance and banking clients, as well as auditing pension liabilities, and as a result we have a large number of users of technical actuarial work. Our submission therefore includes the perspectives of both the practitioner and the users of actuarial work.

Our full submission is covered in the appendix to this letter. We draw out the following points that we have considered in making our submission:

- Overall, it is our view that the principles-based content of the TASs has supported the preparation of high quality technical actuarial work across the profession. From our perspective, the impact of the current set of TASs themselves has been relatively limited as they have codified what was existing good practice.
- Actuaries apply their skills to a very diverse range of problems, and in a growing list of industries. The objective to provide appropriate and relevant guidance to all actuaries operating across the spectrum of actuarial work is an ambitious one, but one that we believe the high-level, principles-based nature of the TASs goes a long way to meet. In considering incremental additions for particular circumstances, it will be important to accept that it will never be possible to foresee every eventuality.
- We agree that techniques and regulation will continue to develop and the relevance and application of the TASs needs to be reviewed to ensure they remain useful to support and protect practising actuaries. In doing so we consider it fundamental to the broad application of the

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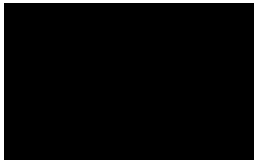
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standards, and their flexibility in remaining relevant to new applications, to maintain the principles-based approach and the concept of proportionality.

- The pending implementation of IFRS17 in 2023 is an example of the sort of fundamental change that actuaries will have to deal with from time to time, and for which the principles of the TASs should hold true. We believe the additional guidance provided by the International Actuarial Association (IAA) in ISAP 4 is useful, but it is not drafted in a manner consistent with the principles-based nature of the TAS and as such we are not in favour of its adoption.

Please contact [REDACTED] or myself if you would like to discuss the contents of this letter.



Yours faithfully

For and on behalf of PricewaterhouseCoopers LLP



Partner





## Appendix - Response to consultation questions

### 1. PROCESS

*Question 1: Please provide your name (note that anonymous responses will not be accepted).*

[REDACTED]

*Question 2: Are you responding as an individual or on behalf of an organisation? If so, please list.*

An organisation - PricewaterhouseCoopers LLP

*Question 3: Please provide your email address so we can validate your response is legitimate. The responses to this survey are being collected and processed by the Financial Reporting Council (FRC) in order to inform certain aspects of the Actuarial Policy Team's work. In particular, the data collected through this survey will be used by the FRC APT for the Technical Actuarial Standards Post Implementation Review. The FRC will process any personal data provided by you in accordance with the General Data Protection Regulation and the Data Protection Act 2018. More information about how we handle the personal data of stakeholders is contained in the privacy notice on the FRC website at <https://www.frc.org.uk/about-the-frc/procedures-and-policies/privacy-the-frc>.*

[REDACTED]

*Question 4: Do you request confidentiality of your response? (note: if so, your response will NOT be published to the FRC website as described in paragraphs 1.23 to 1.25)*

We are happy for our response to be published.



## **2. OVERARCHING QUESTIONS**

*Question 5: To what extent have the TASs been effective in supporting high quality technical actuarial work?*

The TASs have supported the preparation of high quality technical actuarial work across the market. From our perspective, the impact of the current set of TASs themselves has been relatively limited as they have codified what was existing good practice.

The content of TAS 100 is principle based and common sense good practice. To the extent that the TASs are used to set direction for actuarial education or may be used by smaller actuarial teams to help develop good practice, we consider them on the whole to be straight-forward, concise and helpful.

We note that the consultation does not specifically request comment on data used by actuaries and the extent to which it is appropriate to the work being performed. We are aware of some aspects of actuarial work where this has been a recent area of focus, for example in the support of audits. The TASs do not stipulate what testing should be performed over data that is used by actuaries, but rather that the 'checks and controls...shall be documented.' In our experience, we consider the provisions of the TASs relating to data are appropriate.

*Question 6: What aspects of the TASs have caused difficulties? Please explain what those difficulties were and how you were able to overcome them.*

As the TASs have codified good practice, which we believe we were already complying with, their implementation has not caused us any material difficulties.

*Question 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?*

Our actuarial staff are involved in a wide variety of sectors and roles including the more traditional areas of insurance (life and non-life), and pensions consulting, as well as wider fields such as banking, risk consulting and commercial and government consulting. Our actuarial staff also support our Audit practice in the audit of insurance and banking clients, as well as auditing pension liabilities. As a result we have a large number of users of technical actuarial work.

In the context of audits, the information provided by the actuary is either in their role as an audit specialist (inhouse to PwC) or an expert (either externally appointed by the client or inhouse to PwC). In a specialist role (inhouse), we have defined work plans within our audit file in which the actuary documents their work in a prescribed format to ensure TAS compliance. These work plans are subject to our internal quality and review procedures with the requirements of TAS forming part of that review process. The TASs therefore form part of the overall risk and quality framework for our audit work.



Inhouse expert roles have similar procedures in place. From a user perspective, references to the TASs is an extremely useful element of the overall assessment of the work of the actuary. Any report that does not make such a statement is immediately subject to additional technical scrutiny. However, such references do not replace the need for the user to fully understand the scope of the work and the conclusions reached by the actuary.

Where expert roles are performed by individuals or organisations external to us, we have observed different interpretations of, and approaches to complying with, the TASs and different quality and detail of actuarial information. It may be the case that we see varying quality as we (PwC) were not the intended user of a report. We note users are defined in the TASs as “those people whose decisions a communication is intended (at the time it is provided) to assist”, and therefore it is perhaps not surprising that recipients of reports may face challenges obtaining sufficient clarity if they were not the original intended user. Further, we note that if we were not the intended user of the report, the TASs do not apply, and we think it inappropriate that they should apply to an unintended user. However, to the extent that the quality and detail varies, the TASs may not have been fully effective in their objectives.

For users of technical actuarial work outside of audits there are similar considerations as set out above. The TASs form part of our overall risk and quality framework for the preparation of actuarial information.

*Question 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.*

We do not view there are any such aspects.

*Question 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?*

TAS 100 is of sufficient detail for us to have a clear understanding of compliance requirements. We consider the concise principles based nature of the standard is helpful given its application to a wide variety of work. Introducing additional detail risks creating challenges for one type of work whilst assisting another.

*Question 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?*

We are observing the increasing use of actuaries and their risk modelling skills in less traditional areas such as banking, asset valuation (e.g. equity release mortgages), risk consulting and commercial and government consulting. For actuaries working in these less traditional areas, users may value the



technical, modelling or analytical skills that an actuary may bring to an issue, but have limited or no understanding of what the title 'actuary' means, particularly if the work is not presented as technical actuarial work. For these areas the TASs currently do not apply, and our view is that further standards are not required.

In the area of modelling, as a firm we have developed guidance that is more specific than the TASs around the development and use of models (see Question 15). This may be an area where the TASs could potentially be enhanced.

*Question 11: Do you foresee any issues with the TASs being reviewed and updated in a staggered approach?*

No, we do not foresee any issues with a staggered approach to reviewing and updating the TASs provided there is sufficient notice and advertising of changes. Generally, this has not been an issue in the past.



### 3. PROFESSIONAL JUDGEMENT

*Question 12: Are there specific considerations or factors that actuaries should take into account when making professional judgements?*

This depends to a degree on the context, but stepping back, we would view the principles set out in the Actuaries Code and the detail in the existing TASs and Actuarial Professional Standards are sufficient.

*Question 13: Does TAS 100 currently give sufficient direction on the nature of professional judgement and what it involves?*

Yes. Compliance with TAS 100 will ensure the user of actuarial work is clear on the judgements made.

However, if it is viewed that further direction on the nature of professional judgement is required then we would recommend a list of considerations (which by definition would be non-exhaustive) or an aide memoire so that relevant aspects have been properly considered when coming to a judgement. Importantly, this should avoid a 'tick box' mentality. The Actuarial Association of Europe (AAE) commentary paper on the application of professional judgement by actuaries (January 2020) could form a basis for this.

*Question 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?*

Depending on the nature of the relationship, as set out in Question 7, we place significant reliance on the professional judgement made in actuarial information. As stated in our reply to Question 7, the clarity of information is generally strong, however as noted above, where reliance is placed on an expert (external to PwC), the level of detail in the reports can, on occasion, make it harder to obtain sufficient clarity on how these judgements were arrived at. However, we also note users are defined in the TASs as "those people whose decisions a communication is intended (at the time it is provided) to assist.", and therefore it is perhaps not surprising that recipients of reports may face challenges obtaining sufficient clarity if they were not the intended user. Finally we note that if we were not the intended user of the report, the TASs do not apply.



#### 4. MODELLING

*Question 15: How has TAS 100 supported you in determining whether a model is fit for purpose?*

Section 4 of TAS 100 clearly sets out the requirement that models should be fit for the user to rely on the resulting actuarial information. Compliance with this section ensures a model is fit for purpose.

As a firm we have developed more specific guidance around developing and using models to reflect the specific nature of our business, the specific technologies we employ and the requirements of our clients.

One important area where our own guidance is more specific than the TASs is on the distribution of a model. It may be necessary to draw a distinction between models used only by the developer, over which they retain complete control and those models to be provided to others, where the developer loses control over how the model is used. The difference being that in the former case the data used and the model purpose will be known and can be tested at build, whereas the data and use in the second situation will be less known and so the model must be significantly more robust. Ensuring this robustness may require additional and specific skill sets, and enhanced levels of documentation.

We note the development of ISAP 1A by the International Actuarial Association (IAA). Although generally still principles based, the ISAP goes beyond TAS 100, for example in requiring a model risk management framework to be in place, and by requiring the validation of a model be performed by individual(s) who did not develop the model, unless to do so imposes a burden that is disproportionate to the model risk. While this approach may be appropriate for larger, multi-use models, there is the possibility that its use on simpler one-use models may be disproportionate. If ISAP 1A is adopted in the UK then use of proportionality should be a key consideration.

*Question 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?*

New modelling platforms are always emerging or being adopted (e.g. R, Python etc.) and there is a gradual trend away from Excel (spreadsheet based model). However, we believe that TAS 100 is at a high enough level that the principles apply as well to older modelling practices as to the newer modelling practices.

However, a potential issue of this trend is dilution of market understanding of tools used. Whereas in the past most industry participants would share a common understanding of the strengths and weaknesses of the limited number of tools widely used (e.g. Excel), fewer people will have experience with the new tools and therefore there is an increased risk of misunderstanding their operation, application and output. Some of the new tools may lack the flexibility (compared to earlier tools) for the user to include checks and commentary that assist new users' understanding. A greater focus on, and requirement for detailed documentation and clear communication may be necessary to help alleviate this risk.





Specifically with regards to emerging artificial intelligence and machine learning technologies, we view the provisions of the existing TAS are sufficient, whilst we acknowledge that such models may potentially be less transparent than traditional (e.g. spreadsheet) based models.

*Question 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?*

We do not view that TAS 100 has supported in this area as it sets out only the overall requirement that needs to be met. This is an area where we believe professional judgement applies. Given the vast array of model types covered by the scope of the TAS, it is unlikely that further prescriptive guidance would be helpful.

*Question 18: 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?*

See our answer to Question 16, which covers this.

*Question 19: [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?*

At this point in time, there has been no change to the communication described above, however, as modelling techniques become more sophisticated and diverse, this will place greater emphasis on the need for clear communication to understand the impact on a) and b).

## **5. STATEMENT AND EVIDENCE OF TAS COMPLIANCE**

*Question 20: 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.*

No, we do not see any benefit in standardising the statement of TAS compliance. At the most fundamental level, the question of whether an actuary has complied with the TAS's should be a binary one. Actuaries often use the statement of compliance to explain how they have complied within the specific circumstances of the work that they have performed. This can be helpful given the very broad range of work to which the TASs apply.

The requirement to state compliance with the TASs is an important prompt to each actuary to stop and consider whether their work has done so. Standardising the statement text risks making compliance a



tick box exercise and weakening the perceived responsibility of each actuary to consider how they have complied.

In the context of reporting to users who are not familiar with actuarial work we consider the compliance statement has limited value. This is often the case in wider fields, where users may value the technical, modelling or analytical skills that an actuary may bring to an issue, but have limited or no understanding of what the title 'actuary' means, particularly if the work is not presented as technical actuarial work.

*Question 21: As an actuary completing a work review as defined in APS X2, 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?*

#### *Practitioner view*

The evidence supporting the statement of TAS compliance is the documentation of the work itself. The work is the more important part, rather than the statement of compliance with the TASs. In the specific context of a work review under APS X2 performed internally at PwC, the underlying documentation, including a completed TAS compliance checklist, would be available to the reviewer within our electronic filing system. We would expect the review to focus on the work performed primarily, with the statement of compliance being a contributing data point, albeit a necessary one.

A further consideration is the broad set of activities that we do under the definition of "Technical Actuarial Work" as defined in TAS 100. For example, our actuaries operate in life insurance, non-life insurance, pensions, banking and the wider commercial and government sectors. In the non-insurance and certain pension areas, it is arguable in many cases as to whether our clients would view our work as "Technical Actuarial Work" as defined in TAS100, rather than data analytics, credit modelling or general consulting services.

As a result, as practitioners we see little benefit to our users in providing additional detail as to how we have assessed compliance with our standards, particularly as they are unlikely to be familiar with the standards.

#### *User view*

As described in our response to Question 7, we have established procedures for how we execute and document our work. While we acknowledge the TASs form a useful component of the overall quality framework, and statement of compliance is an important starting point in our decision whether to use a piece of actuarial work, our view is that our procedures go beyond the requirements of TASs. When receiving technical actuarial work, we therefore rely more on our established framework than the TASs in isolation.

Our internal electronic filing systems ensure that the statement of TAS compliance is clear and accessible to us.



*Question 22: 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.*

We have not experienced such issues. The provision that “Nothing in TAS 100 should be interpreted as requiring work to be performed that is not proportionate to the nature, scale and complexity of the decision or assignment to which the work relates and the benefit that users would be expected to obtain from the work.” is helpful in this regard.

## **6. IFRS 17**

*Question 23: Should ISAP 4 be adopted by the FRC? Please provide your rationale supporting your view.*

The adoption of International Financial Reporting Standard 17 (IFRS 17) from 1 January 2023 (assuming endorsed in the UK) will represent the largest single change ever in how insurers account for their insurance contract liabilities.

ISAP 4 provides a level of additional guidance for actuaries working on IFRS 17 that does not currently exist elsewhere and in this regard is helpful. However, it is notably more technical and less principles based than the current TASs and equivalent guidance for other significant reporting standards, for example, Solvency II, does not exist.

We therefore view adoption of ISAP 4 would go contrary to the more principles-based approach set out in the TASs and as such we are not in favour of its adoption.

*Question 24: 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?*

As set out in Question 23, we are not in favour of adoption of ISAP 4 as a TAS as this would be contrary to the principles-based approach.

In the context of guidance for actuaries working on IFRS 17 there are certain aspects of ISAP 4 that could be refined to make it more specific to the major UK product lines. For example, by noting judgements in selecting the reference portfolio when determining the top down discount rate for annuity business; or by capturing other aspects of IFRS 17 that are either not mentioned or mentioned briefly, such as the application of the contractual service margin (in general) and the fair value approach on transition.