A new framework for Technical Actuarial Standards

Consultation
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Foreword

Actuarial work is central to many financial decisions in insurance and pensions, but is increasingly recognised as adding value in other areas where the modelling and evaluation of risk and financial returns over time is required. High quality actuarial work assists users by enabling them to make decisions in support of their objectives while mitigating risks to the achievement of those objectives. Poor quality or insufficient actuarial work can result in decisions being made which are detrimental to the public interest.

Technical actuarial standards that promote the reliability and usefulness of actuarial work have an important role to play in ensuring the quality of that work. We launched our Technical Actuarial Standards (TASs) in 2009 with TAS R: Reporting Actuarial Information which set out high-level principles for the reporting of actuarial information. We subsequently issued six more TASs. The TASs have been a success; the feedback that we have received is that they have contributed to an improvement in the quality of actuarial work.

In this document we set out proposals which build on the success of the TASs. We propose introducing a new TAS (Technical Actuarial Standard 100: Principles for Actuarial Work “TAS 100”) which will consolidate and refine the principles in the existing Generic TASs. TAS 100 has been written so that it can be followed for any piece of actuarial work. Currently the TASs only apply to certain specified actuarial work in insurance, pensions and the management of funeral plans. The widening of scope will provide assurance to users that all the actuarial work upon which they rely is of good quality.

We also propose, in due course, to make a number of changes to improve the existing TASs which apply to specific types of actuarial work. These include using a new risk assessment process to identify what work should be covered by these TASs and changes to make the TASs easier to use.

We would welcome your feedback on the proposals which we believe will benefit both users and practitioners alike.

Melanie McLaren
Executive Director, Codes and Standards
Financial Reporting Council
18 November 2014
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1 Introduction

1.1 The Financial Reporting Council (FRC) is the UK’s independent regulator responsible for promoting high quality corporate governance and reporting to foster investment. It issues and maintains Technical Actuarial Standards (TASs) for actuarial work in the UK. The Institute and Faculty of Actuaries (IFoA) requires its members to comply with the TASs for actuarial work within their scope.

1.2 The purpose of this consultation paper is to seek views on proposals which we consider will enhance the existing TAS framework with benefits to both users and practitioners. These proposals are:

- to replace the existing Generic TASs by a single generic TAS (Technical Actuarial Standard 100: Principles for Actuarial Work or TAS 100) comprising high-level principles which are applicable to all actuarial work;
- to implement a risk assessment process focusing on risks to the public interest, building on the feedback we receive on the discussion paper Joint Forum on Actuarial Regulation: A risk perspective, which will underpin decisions to make work subject to the Specific TASs; and
- to review the content and structure of the Specific TASs.

1.3 We are also proposing to issue a new document, the Framework for FRC Actuarial Standards, which will describe the authority, scope and application of the FRC’s actuarial standards and related material. Exposure drafts of TAS 100 and the Framework are included in this consultation.

1.4 From a user perspective, the benefit from these changes will be that a wider range of actuarial work will meet minimum quality standards. From a practitioner perspective, the benefits from these changes will be an improved, shorter and simpler set of standards.

1.5 This document has been written for those carrying out actuarial work and those who rely on actuarial work.

1.6 Various stakeholders have provided valuable input during the preparation of this document. We are grateful for this input.

Next steps

1.7 Subject to the outcome of this consultation, we propose to issue TAS 100 during 2015 and we plan to consult on exposure drafts of the revised Specific TASs in 2015.

1.8 Subject to the outcome of this consultation, TAS 100 will initially be effective for work completed on or after 1 January 2016 that is not subject to the existing TASs. At the point when all the new TASs for specified work have become effective, all actuarial work will be subject to TAS 100 and the current Generic and Specific TASs will be withdrawn.

Responses to this exposure draft

1.9 We would welcome views on the matters addressed in this document, and in particular on the questions listed at the end of each section and collated in section 9. Comments should reach the FRC by 8 March 2015.
2 The FRC’s review of actuarial standards and regulation

Introduction

2.1 In this section, we describe the existing structure of the TASs and the review of actuarial regulation undertaken in 2013 by the FRC.

Existing FRC technical actuarial standards

2.2 The FRC has issued seven TASs which support its Reliability Objective that the “users for whom a piece of actuarial information was created should be able to place a high degree of reliance on the information’s relevance, transparency of assumptions, completeness and comprehensibility, including the communication of any uncertainty inherent in the information”.

2.3 There are three Generic TASs, applying across a wide range of actuarial work, principally in insurance and pensions, on Data, Modelling and Reporting Actuarial Information. There are also four Specific TASs, applying to work in insurance, pensions, funeral plans and transformations. The Generic TASs were issued in 2009 and 2010 and the Specific TASs were issued in 2010 and 2011.

2.4 When the TASs were published we made a commitment to review them after four years. It is now four years since the first TASs came into effect and we consider it is an appropriate time to review the TAS framework and content, taking account of feedback we have received since the TASs came into force.

Post-implementation review of the TASs

2.5 During 2012 and 2013 we reviewed the impact of the TASs following their implementation to understand how they have affected actuarial work. We met a wide range of stakeholders and received feedback on how the TASs had affected the work that they undertake. These stakeholders included practitioners, users including trustees and non-executive directors of insurers, member representative bodies, lawyers and regulators. The conclusions can be found in two reports on the post-implementation review1.

FRC’s review of actuarial regulation

2.6 In 2013, the FRC carried out a review of actuarial regulation with the participation of the IFoA. The review considered whether the framework for the regulation of actuaries and actuarial work in the UK public interest remained appropriate and whether it adequately addressed the risks of poor quality actuarial work.

2.7 The review was carried out against the backdrop of the FRC’s experience in actuarial standard-setting, the FRC’s oversight of the IFoA’s regulatory activities over the previous seven years, significant changes in financial services regulation and the continuing fallout from the financial crisis of 2007/8. It considered the current standard-setting model in which the FRC sets technical standards for actuarial work and the

1 https://www.frc.org.uk/Our-Work/Codes-Standards/Actuarial-Policy/TAS-Post-implementation-reviews.aspx
IFoA sets ethical standards for its members. It also took account of work by supranational bodies developing international actuarial standards.

2.8 In terms of standard-setting, the review concluded that the current model provided by the Morris Review remained sensible and identified ways in which the current arrangements might be improved.

Standard-setting responsibilities

2.9 The conclusions of the review relating to the FRC’s and the IFoA’s respective standard-setting responsibilities were that:

- the FRC should continue to set TASs for actuarial work carried out within the UK geographic scope;
- the IFoA should continue to be responsible for setting ethical standards for all of its members, and for technical standards to be applied by its members carrying out work outside the UK geographic scope;
- there should be mechanisms to permit more flexibility in relation to the IFoA’s and FRC’s respective standard-setting roles so that, in appropriate circumstances, the FRC can, with the IFoA’s agreement, include ethical material in its TASs and the IFoA can, with the FRC’s agreement, produce technical guidance; and
- further steps should be taken to formally implement the recommendation of the Morris Review that the FRC should have a reserve ability to issue ethical standards in certain circumstances.

2.10 A revised version of the Memorandum of Understanding between the FRC and the IFoA implementing the third and fourth of these conclusions was agreed in July 2014.

2.11 Details of the FRC’s and the IFoA’s standards-setting roles are set out in a statement issued on 24 July 2014. The statement:

- provides an update on the conclusions of the FRC’s 2013 review relating to actuarial standards;
- sets out common principles which the FRC and the IFoA follow in setting actuarial standards;
- explains how more flexibility will be introduced into the standard-setting framework;
- recognises international developments; and
- sets out the next steps the FRC and IFoA envisage in the development of actuarial standards.

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2 Work done in relation to the UK operations of entities, as well as to any overseas operations which report into the UK, within the context of UK law or regulation


The structure of the FRC’s TASs

2.12 The conclusions of the review relating to the structure of the FRC’s technical actuarial standards were that there should be:

- high-level principles which are recognised as applicable to all actuarial work (sections 4 and 5 of this paper); and
- more narrowly focused specific standards where there is a need for additional requirements in the public interest beyond the high-level principles and the requirements of the IFoA and other regulators (section 6 of this paper).

Working with other regulators

2.13 The review concluded that we should seek to improve senior management collaboration between the FRC, IFoA, Prudential Regulation Authority, Financial Conduct Authority and the Pensions Regulator concerning actuarial matters. The Joint Forum on Actuarial Regulation (JFAR), whose members comprise the regulators listed above, was established in 2013 with a remit to coordinate regulatory responses to public interest risks relating to actuaries and/or actuarial work, and will amongst other things:

- seek to identify known and emerging risks relevant to the public interest and agree how to respond to them; and
- provide input to and comment on the need for and content of changes to relevant ethical and technical standards.

European and international actuarial standards

2.14 The development of international actuarial standards has the potential to affect actuarial practice in the UK and the framework for actuarial standards that supports that practice. The FRC and the IFoA therefore agreed that they would work closely together to influence the development of these standards.

Conclusions and proposals

2.15 Our proposals to implement the recommendations concerning technical actuarial standards described in paragraph 2.12 are set out in Sections 3, 4, 5 and 6.
3 Proposals for the FRC’s actuarial standards framework

Introduction

3.1 In this section we set out our proposals for a new framework for the FRC’s actuarial standards implementing the conclusions of the FRC’s review of actuarial regulation described in paragraphs 2.6 to 2.14. These proposals are to:

- replace the existing Generic TASs by a single generic TAS (Technical Actuarial Standard 100: Principles for Actuarial Work or TAS 100) comprising high-level principles which are applicable to all actuarial work;
- develop and implement a risk assessment process focusing on risks to the public interest, which will underpin decisions to make work subject to the Specific TASs; and
- review the content and structure of the Specific TASs.

The current framework

3.2 The current framework for actuarial standards is set out below:
3.3 Our proposed new framework for actuarial standards will be as follows:

**New Framework**

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3.4 We describe each element of the new framework briefly below. Sections 4, 5, and 6 provide more detail on our proposals on the scope of TAS 100, its principles and provisions, and the changes to the TASs for specified work.

**A new framework document: Framework for FRC Actuarial Standards**

3.5 We intend to publish a new document, the *Framework for FRC Actuarial Standards*, which will describe the authority, scope and application of the FRC’s actuarial standards and related material. An exposure draft of the *Framework for FRC Actuarial Standards* is contained in Appendix A.

3.6 We plan to publish the *Framework for FRC Actuarial Standards* in 2015 and it will become effective when the new framework is fully implemented at which point the *Scope & Authority of Technical Actuarial Standards* will be withdrawn.

3.7 The key features of the draft document are:

- historical context to FRC actuarial standards;
- our procedures for developing or amending FRC actuarial standards;
- a description of the authority of FRC actuarial standards;
- the scope and application of FRC actuarial standards;
- a high-level description of FRC actuarial standards; and
- a description of when supporting material including guidance may be issued.

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6 Consultation: A new framework for Technical Actuarial Standards (November 2014)
3.8 Some of the material in the draft has been adapted from the Scope & Authority of Technical Actuarial Standards.

Geographic scope

3.9 Section 4.5 of the Framework for FRC Actuarial Standards explains that the geographic scope of the FRC’s actuarial standards is limited to work done in relation to the UK operations of entities, as well as to any overseas operations which report into the UK, within the context of UK law or regulation. This definition of scope applies regardless of the location or domicile of the person carrying out the work. This is unchanged from the current geographic scope of the FRC’s TASs.

A single new generic TAS

3.10 The FRC’s review of actuarial regulation concluded that we should consult on issuing high-level principles (derived mainly from the Generic TASs) which can be applied to all actuarial work.

3.11 We have concluded that the following measures can be taken to adapt the Generic TASs so they are suitable for wider application without significant additional costs to either practitioners or users:

- consolidate most of the principles of the Generic TASs into a single generic TAS;
- include principles on assumptions in that document; and
- delete some principles and transfer some other principles to the TASs for specified work.

3.12 We have therefore developed a set of outcome-focused high-level principles with supporting provisions (see section 5) which we propose will form a new generic TAS (Technical Actuarial Standard 100: Principles for Actuarial Work) and which would replace the Generic TASs.

ISAP 1

3.13 We have considered consistency of UK actuarial standards with International Standard of Actuarial Practice 1 General Actuarial Practice (ISAP 1) (see Appendix F) in our review. We expect in due course to be able to conclude that the combined requirements of TAS 100, the IFoA’s Actuaries’ Code and cross-practice Standards as they are applied in the UK, are substantially consistent with the requirements of ISAP 1 issued by the International Actuarial Association. This view is shared by the IFoA.

3.14 Draft text to this effect is included in the Framework for FRC Actuarial Standards at paragraph 7.2.

TASs for specified work

3.15 TAS 100 will be applicable to all actuarial work. However, we consider that further standards are required for areas of work where there is a need for additional requirements in the public interest beyond the high-level principles in TAS 100. Our current intention is that these standards will be based on the existing Specific TASs with some changes to ensure compatibility with TAS 100 and taking account of feedback we have received.
### Risk-based approach

3.16 When the existing Specific TASs were developed we considered various matters when deciding what work should be included in their scope including the risk to the public interest. In future we propose to use a risk assessment process to identify work which is to be included in the scope of the revised Specific TASs. This process is discussed in paragraphs 6.4 to 6.8.

3.17 The risk assessment process will take account of:

- feedback we receive on the discussion document JFAR: A risk perspective; and
- discussions with the JFAR.

### Structure

3.18 We propose to issue TASs for different practice areas with sections containing principles for specific areas of work within that practice area.

3.19 With this structure and the introduction of TAS 100, practitioners will only need to refer to two TASs for most work compared with up to five under the current structure (three Generic TASs and two Specific TASs when the Transformations TAS applies).

### Nomenclature

3.20 We propose to use numbers to describe the different TASs.

### Guidance

3.21 There may be circumstances where those using the TASs would want guidance to support compliance with the TASs. Such guidance may be issued by the FRC or the IFoA depending on the circumstances.

3.22 The FRC may issue guidance on technical actuarial matters which supports its Reliability Objective if:

- it considers that it is appropriate for the FRC to issue the guidance; and
- it is necessary or otherwise desirable to clarify a requirement of a TAS.

3.23 In determining whether it is appropriate for it to issue the guidance, the FRC will follow its Principles for the Development of Codes, Standards and Guidance6.

3.24 The IFoA may, with the agreement of the FRC, issue guidance for its members. Circumstances in which the FRC may agree that the IFoA should develop technical guidance for its members might include (but are not limited to):

- where the introduction of additional technical guidance from the IFoA is an appropriate way to address the needs of users;
- where there is a need to supplement a Specific TAS and other legal and regulatory requirements in light of special factors prevailing in a particular area of actuarial work that are not addressed in the Specific TAS; and

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6 [https://www.frc.org.uk/FRC-Documents/FRC/About-the-FRC/Principles-for-the-development-of-Codes.pdf](https://www.frc.org.uk/FRC-Documents/FRC/About-the-FRC/Principles-for-the-development-of-Codes.pdf)
• additional guidance on matters that are covered by a Specific TAS is considered
necessary and preferable to amending the Specific TAS.

3.25 The issuance of guidance by the IFoA will be dependent on the FRC being satisfied,
having taken advice from its Actuarial Council, that the guidance will support IFoA
members in complying with the TASs.

Other related documents

Scope & Authority of Technical Actuarial Standards

3.26 As its title suggests the Scope & Authority of Technical Actuarial Standards sets out
the key matters relating to the scope and authority of the FRC’s technical actuarial
standards.

3.27 The schedule to the Scope & Authority sets out the scope of the Generic TASs. We
have received some feedback that this can be confusing to users of the TASs as the
scope of the Generic TASs cannot be ascertained directly from the TASs themselves.
We therefore propose that TAS 100 and each Specific TAS should include a section
setting out its scope.

3.28 The text in the Scope & Authority describing the authority of the TASs will be included
in the Framework for FRC Actuarial Standards. Some other elements of the Scope &
Authority will not be needed if the proposed changes to the technical actuarial
standards are made - for example, definitions of Reserved Work and Required Work
will no longer be required.

3.29 We intend to withdraw and archive the Scope & Authority when the Framework for
FRC Actuarial Standards becomes effective.

Significant Considerations documents

3.30 When we developed the TASs we produced alongside each TAS a Significant
Considerations paper which set out the rationale for the development of the TAS.
These documents were helpful to practitioners in the transition to the TASs from the
Guidance Notes but we understand that they are used much less now that
practitioners are familiar with the TASs.

3.31 We do not propose to issue any further Significant Considerations papers. We will set
out the rationale for any changes to our standards in the consultation papers and
feedback statements produced when standards are first published or amended. This
approach will mean that there are fewer documents with which practitioners need to be
familiar.

Each of the existing Significant Considerations papers will be withdrawn at the same
time as the relevant existing TAS is withdrawn.

Questions:

Q3.1 Do you have any comments on the draft Framework for FRC Actuarial
Standards (paragraphs 3.5 to 3.8 and Appendix A)?

Q3.2 Do you have any comments on our proposal to withdraw and archive the
existing Scope & Authority (paragraphs 3.26 to 3.29)?
Q3.3 Do you have any comments on our proposed approach to the Significant Considerations documents (paragraphs 3.30 to 3.31)?
4 Scope of TAS 100: Principles for Actuarial Work

Introduction

4.1 In this section we consider the scope of the proposed generic standard, TAS 100: Principles for Actuarial Work.

Scope

4.2 We propose that TAS 100 should apply to all actuarial work.

4.3 Currently, the three Generic TASs only apply to:

- work which falls within the scope of one or more Specific TASs;
- Reserved Work; and
- any work which is presented as complying with TASs whether expressly or by implication.

4.4 There are a number of important areas of existing work that are not covered by the TASs including much of the actuarial work carried out for sponsors of pensions schemes, financial projections supporting insurers’ business plans, and certain insurance risk securitisations. Additionally practitioners are expanding into new areas, such as enterprise risk management and work developing hedging strategies for insurers and pension schemes.

4.5 When we first considered the scope of the TASs we were cautious about extending the scope too far as we were uncertain of the potential costs of the new standards and we did not want to discourage users from obtaining relevant actuarial work. Our post-implementation review of the TASs indicated that practitioners were becoming comfortable with the TASs and were not finding resistance from users to their application.

4.6 We have always considered that users have the right to expect that all actuarial work is carried out professionally and to a good standard. TAS 100 has been developed to provide a measure of the minimum standard that users should expect. It establishes high-level outcomes to be achieved in all actuarial work.

Definition of actuarial work

4.7 There is no widely accepted definition of “actuarial work” reflecting the wide range of work where actuarial techniques are used, much of which can be carried out by non-actuaries and entities not controlled by actuaries.

4.8 TAS 100 is capable of being applied whenever such techniques are used, and we do not wish to restrict its application artificially through a narrow definition of its scope. However, we recognise that we need a practical definition of actuarial work which can be used by other regulators when mandating the use of TAS 100. The work which we consider should be in the scope of TAS 100 is work which users are entitled to treat as actuarial work either because:

1) the nature of the work is clearly actuarial; or

2) the work is presented (either explicitly or by implication) as actuarial.
We would normally expect both these conditions to be met, since the majority of work which is clearly actuarial can be expected to be presented as such. However, we need to address the possibility that work is not presented as actuarial even though it clearly is, or that work is presented as actuarial even when its nature is more ambiguous.

4.9 We consider that there are two key characteristics which make the nature of the work actuarial. The first is that the work must use principles and/or techniques of actuarial science (such as financial modelling of contingent events). The second is that the work involves the use of judgement on matters such as the quality of data, the selection of assumptions, and the use of models.

4.10 Work can be presented as actuarial if it is explicitly badged as “actuarial” or if there is an implication that it is actuarial work. For example, if work is presented as a response to a request for actuarial work, or as reflecting generally accepted actuarial practice, or as having been performed by an actuary or an actuarial firm acting in an actuarial capacity, a user will normally be entitled to treat that work as actuarial.

4.11 We therefore propose to define actuarial work as work:

1) which involves the exercise of judgement and where the use of principles and/or techniques of actuarial science is central; or
2) which the user is entitled to treat as actuarial work because it is presented as actuarial, whether expressly or by implication.

4.12 This proposed definition and its use in defining the scope of TAS 100 is consistent with the approach in the current Specific TASs which refer to actuarial work although only in the context of specific areas of work. The TASs state “what constitutes actuarial work depends on matters such as whether users would reasonably expect the work to be performed using actuarial techniques, and whether the work involves risk, uncertainty or modelling. Actuarial work often involves the exercise of judgement. Some work performed by actuaries might not be actuarial work.”

Consistency with ISAP1

4.13 The proposed definition in paragraph 4.11, and its use in defining the scope of TAS 100, is also consistent with the ISAP 1 definition of actuarial services although necessarily different as ISAP 1 is restricted to work performed by actuaries. The ISAP definition of actuarial services is:

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

Actuarial Science

4.14 Our proposed definition refers to “actuarial science”. We recognise that actuarial science is not well-defined but it is referred to in the IFoA’s Charter:

the objects of the Institute and Faculty of Actuaries shall be, in the public interest, to advance all matters relevant to actuarial science and its application and to regulate and promote the actuarial profession

Actuarial science is also the term commonly used by educational bodies.

4.15 The principles and techniques of actuarial science include combinations of financial modelling, projections of contingent events, the consideration of the time value of
money, probabilities, demographic tables, analysis of risk and statistical techniques. Some of the principles and techniques of actuarial science are drawn from related fields including mathematics, statistics, economics and finance and are not exclusive to actuaries.

4.16 It has been suggested that we need to define “actuarial science” as without such a definition, the definition of actuarial work is “circular”. However we consider that in most cases it will be clear whether the work is “actuarial” and that in other cases judgement will need to be exercised. The FRC supports the exercise of judgement and a risk-based, proportionate approach to regulation. Accordingly, we do not consider that a tighter definition is necessary or desirable.

4.17 We have included “is central” in the definition so that TAS 100 need not apply when there is some use of actuarial principles and/or techniques, but these principles and/or techniques are not needed to perform the work or are an incidental component of the work.

4.18 Judgement will be required in considering whether actuarial principles and/or techniques are central to the work. Factors which might be considered include the amount of actuarial work involved, whether actuarial involvement was necessary and what proportion of the whole work was dependent upon the use of actuarial principles and/or techniques.

4.19 There may be work in which the principles and/or techniques of actuarial science are not central, but where the work is clearly presented as actuarial. In such cases the second clause of the proposed definition of actuarial work applies, so that the work is actuarial work, and TAS 100 applies.

4.20 There may be large pieces of work where there is a self-contained component of work which is actuarial work. The component piece of work must comply with TAS 100, however, the additional work does not need to comply provided it contains no other elements of actuarial work.

4.21 Work is presented as actuarial either by the way it is described or because it is presented in an actuarial capacity. In many cases, if actuarial principles and/or techniques are central to the work, it is also likely to be presented as actuarial.

**Compliance with TAS 100**

4.22 By virtue of clause 1.6 of the IFoA’s disciplinary scheme, all members of the IFoA will be required to comply with TAS 100 when performing actuarial work within the geographic scope of the FRC’s actuarial standards.

4.23 Like the existing TASs, TAS 100 has been written so it can be followed much more widely than by just actuaries - for example by any individual (whether an actuary or not) or any entity such as an actuarial consulting firm or an insurance company which performs actuarial work. The FRC cannot mandate the application of TAS 100 although we encourage wider adoption. Other regulators, professional bodies or those commissioning work can and may wish to require compliance with TAS 100 by entities and individuals, who may or may not be actuaries, for actuarial work, particularly where the work is complex and where there is a significant public interest. The members of the JFAR will consider the application of TAS 100 in coordinating their responses to identified risks relevant to the public interest concerning actuaries and/or actuarial work.
4.24 To reflect this we therefore propose to include the following text in TAS 100:

| Members of the IFoA must comply with TAS 100 when performing actuarial work. Other professional bodies, relevant regulators and contracting parties may require entities and individuals who are not members of the IFoA to comply with TAS 100. Wider adoption is encouraged. |

**TAS 100 - examples of work in/out of scope**

4.25 In most cases we consider that it should be clear whether work is actuarial work or not. For example all technical work involving financial projections carried out by an actuary in a reserved role (such as a Scheme Actuary) will be in scope. On the other hand when an actuary is carrying out administrative work then that work will not be in scope. However there will be some areas of work where judgement will be needed to determine whether work needs to comply with TAS 100.

4.26 Appendix E describes a number of areas of work and considers whether or not compliance with TAS 100 would be required. The conclusions presented may vary according to the circumstances of particular situations. In addition, the conclusions do not necessarily have any implication regarding the requirement for compliance with other actuarial standards or the Actuaries’ Code.

**Unique post-holders**

4.27 Some work carried out by holders of unique posts is not treated as Reserved Work by virtue of paragraph 18 of the *Scope & Authority of Technical Actuarial Standards*. As a result, such work is not subject to the Generic TASs unless it is included in a Specific TAS or is presented as complying with the TASs. This work would be in the scope of TAS 100 under the proposed definition of actuarial work.

**Questions:**

Q4.1 Do you agree that the extension of the scope of application of TAS 100 to all actuarial work would be of benefit to users of actuarial work? If you disagree, please explain why.

Q4.2 Do you agree with the proposed definition of actuarial work? If not, please provide reasons and suggest an alternative approach (paragraph 4.11).

Q4.3 Do you agree with the analysis of different areas of work in Appendix E?
5 TAS 100: Principles for Actuarial Work

Introduction

5.1 In this section we discuss the proposed content of Technical Actuarial Standard 100: Principles for Actuarial Work (TAS 100), an exposure draft of which is included in Appendix B.

High-level principles

5.2 We propose to have six high-level principles. The first principle is on judgement which is relevant to all aspects of actuarial work. The next four principles cover the key stages of actuarial work – handling data, selecting assumptions, modelling and communicating actuarial information to users. The sixth principle concerns the documentation of the underlying actuarial work. Each of the principles is outcome-focused and explicitly supports the FRC’s Reliability Objective.

5.3 The proposed high-level principles are:

Judgement shall be exercised in a reasoned and justifiable manner; material judgements shall be communicated to users so that they are able to make informed decisions understanding the matters relevant to the actuarial information.

Data used in actuarial work shall be sufficient and reliable for the purpose of that work and subject to sufficient scrutiny and checking so that users can rely on the resulting actuarial information.

Assumptions used, or proposed for use, in actuarial work shall be appropriate for the purpose of that work so that users can rely on the resulting actuarial information.

Models used in actuarial work shall be fit for purpose and be subject to sufficient controls and testing so that users can rely on the resulting actuarial information.

Communications shall be clear, comprehensive and comprehensible so that users are able to make informed decisions understanding the matters relevant to the actuarial information.

Documentation shall contain enough detail for a technically competent person with no previous knowledge of the actuarial work to understand the matters involved and assess the judgements made.

5.4 We consider that the first five of these high-level principles succinctly capture what users should be able to expect from actuarial work in order to be able to rely on the resulting actuarial information.

5.5 The rationale for each of these high-level principles is set out below:

Judgement

5.6 Judgement is a key aspect of all actuarial work. It is required in scrutinising data, choosing assumptions, constructing and using models and communicating information to users. How judgement has been exercised should be communicated to the user when that judgement is material to the user’s decisions. Judgement is also needed in following standards, particularly where these are principles-based.
5.7 We therefore propose to include the text in paragraph 5.3 which is similar to the text which appears in Section C of the Generic TASs. We also propose to require communication of material judgements as we consider this enhances transparency and as users need to know about material judgements which may affect their decisions.

Data

5.8 Data is used in almost all actuarial work. The quality of the output from actuarial work and the reliability of any recommendations made depend on the reliability of the data on which the work is based. Therefore data should to be checked for completeness, accuracy and validity. The proposed high-level principle reflects these requirements for data used in actuarial work. It is derived from the purpose stated in paragraph A.1 of TAS D.

5.9 There are occasions when data is very limited and we considered whether the principle should include the words “to the extent possible” before “sufficient and reliable”. However we consider that the quality of the data on which actuarial work is based is fundamental to the reliability of the resulting actuarial information. If data is limited or unreliable proportionate action needs to be taken to seek additional relevant data or to improve it and the user needs to be informed of the implications of either of these approaches. This is covered in provisions 2.2, 2.4 and 2.5 supporting the data principle.

Assumptions

5.10 Assumptions are fundamental to actuarial work. Assumptions may concern matters such as the relationship between factors in a model or possible future outcomes for demographic and economic experience. Actuarial information and therefore decisions made as a result of that information depend on the assumptions made. Therefore assumptions need to be fit for purpose. The proposed high-level principle reflects this requirement for assumptions used in actuarial work. It is derived from the purposes in paragraphs A.1 of the Specific TASs as they relate to assumptions and it encompasses the Pensions, Insurance and Funeral Plan TAS principles on assumptions for models being appropriate for the purpose of the calculation (paragraph D.2.2 of those Specific TASs).

Modelling

5.11 Actuarial work makes extensive use of models. Often these models can be very complex. Actuarial information and the resulting decisions depend on reliability of these models. It is therefore important that models are fit for purpose and subject to adequate testing. The proposed high-level principle reflects these requirements for models used in actuarial work. It is derived from the purpose stated in paragraph A.1 of TAS M and the principles on models being fit for purpose and sufficiently tested (TAS M paragraphs C.3.1 and C.3.5).

Communications

5.12 Actuarial work often uses specialised methods. Actuarial information may also be subject to significant uncertainty. In order that users can understand the resulting actuarial information and take informed decisions, they need to have clear, comprehensive and comprehensible communications. The proposed high-level principle reflects these requirements of communications of the results of actuarial work. It is derived from the purpose stated in paragraph A.1 of TAS R.
5.13 We have used the term “communication” rather than “report”, the term used in the TASs, to cover both permanent and non-permanent communications including oral reports. This approach is consistent with ISAP 1.

Documentation

5.14 We consider that the existence and preparation of documentation affects the quality of the information that is provided to users, and that requirements that some matters be documented are therefore desirable and proportionate.

5.15 In many cases the main purpose of documentation is to establish an audit trail for future practitioners. Therefore, if documentation is required (for example on the data, assumptions, and models used in the actuarial work), we consider that the level of documentation should be sufficient for a technically competent person with no previous knowledge of the actuarial work to understand the matters involved and assess the judgements made. We have therefore included this wording, which is consistent with the documentation principle in the existing TASs.

The provisions

5.16 We propose that under each of the high-level principles on data, assumptions, modelling and communications there will be provisions which support the high-level principle. These provisions would have the same status as the high-level principles although they would focus on achieving the high-level outcome rather than specifying an outcome of their own.

5.17 The provisions have been mainly derived from the boxed principles in the Generic TASs and those on assumptions in the Specific TASs. To improve accessibility, in some places the language has been simplified.

5.18 The proposed provisions can be found in the exposure draft of TAS 100 in Appendix B. The source of these provisions is set out in Appendix D. The rationale for the principles in each of the TASs was set out in the original consultations for the Generic TASs.

5.19 TAS 100 contains some new requirements which facilitate confirmation of substantial consistency of UK actuarial standards with ISAP 1. These are:

Data shall be relevant to the entity (provision 2.1)

5.20 Paragraph 5.6 of TAS D refers to data being sufficiently accurate, and relevant. By implication relevance is by reference to the entity. Provision 2.1 of TAS 100 makes this explicit and is consistent with paragraph 3.5.3 of ISAP 1 which refers to entity-specific data.

Communications shall state when assumptions are set by a third party or by regulation. Communications shall state whether any assumptions set by a third party are not reasonable for the purpose of the work and provide an indication of their impact on the actuarial information (provision 3.6)

5.21 Paragraph C.4.8 of TAS R refers to situations where a third party sets assumptions and paragraph C.4.9 states that where the assumptions are considered to be materially inaccurate or inappropriate there will need to be a statement to that effect. We have adopted the more detailed approach to disclosure in paragraph 3.8 of ISAP 1.
Communications shall include the results of the actuarial work and the sensitivity of the results to variations in key assumptions (provision 5.2)

5.22 Paragraph C.5.2 of TAS R requires reports to include an indication of uncertainty. Paragraph C.5.4 of TAS R sets out possible approaches to do this including showing the numerical consequences of changes in assumptions. In practice we would expect that reports will show the sensitivity of results to variations in key assumptions where this is material to users’ decisions. We have, therefore included this as a supporting provision which is consistent with paragraph 3.7.7 of ISAP 1.

Communications shall describe any margins for adverse deviations allowed for in the actuarial work (provision 5.6)

5.23 Paragraph C.5.4 of TAS M requires reports that include estimates that are not neutral to indicate the relationship to neutral estimates. Paragraph 3.7.3 of ISAP 1 states that the incorporation of margins for adverse deviations in assumptions should be disclosed. For consistency we have adopted a similar approach to ISAP 1, using language which non-practitioners may be more familiar with.

Boxed text in Generic TASs not included in TAS 100

5.24 There are some principles currently in boxed text in the Generic TASs which we have not included in TAS 100 mostly because we considered that they were too detailed for the new TAS. We intend to consider each of those when we review the Specific TASs. Some might be included in the Specific TASs (eg the production of cash flows for certain pieces of work\(^7\)) but there may be some (eg the requirement to explain whether the results of a calculation of a monetary amount are the outcome of a valuation or planning exercise\(^8\)) which will not be included in the TASs for specified work.

Application

5.25 When considering their approach to compliance, practitioners might use the following three stage process:

1. Applicability

5.26 The first stage is to consider applicability – determining whether the work is actuarial work and then deciding which principles and provisions are relevant to that piece of work. Those principles and provisions which are not relevant do not need to be considered further.

2. Materiality

5.27 The second stage is to consider whether each of the remaining principles and provisions has a material effect – whether applying the principle or provision could, individually or collectively with other principles and provisions, influence the decisions to be taken by users of the resultant actuarial information.

5.28 It might be possible to ignore some principles and provisions altogether on grounds that the information that has to be provided to comply with those principles and provisions

\(^7\) TAS R C.5.10
\(^8\) TAS R C.3.7
provisions is immaterial – this would not constitute a departure from TAS 100. However, if the work overall is material it is inconceivable that every principle and provision of TAS 100 can be dismissed entirely as requiring immaterial or disproportionate information to be produced.

3. Proportionality

5.29 The final stage is to consider how to comply with each of the material principles and provisions. TAS 100 allows a proportionate approach to be taken which takes account of the scope of the assignment, the nature of the decision and the benefit which users will get from the work. For major assignments a detailed approach might be taken. For pieces of work where the decisions are less significant, a less detailed approach based on approximate methods might be followed with the report only including high-level explanations.

Compliance statement

5.30 We considered whether TAS 100 should require a statement of compliance. A compliance statement would confirm that the work is in the scope of TAS 100 and that the work complies with TAS 100. It has been suggested to us that a compliance statement should not be mandated as it would require some additional work and would not be valued by users. On balance, we have concluded that TAS 100 should require a compliance statement as there will be some users who will find it of value and, by having to make a statement, practitioners will need to use their judgement to determine whether the work they are carrying out is actuarial work and whether the work is compliant with the TAS.

Aggregation

5.31 For many pieces of work there is more than one communication. Compliance with the reporting principles of the current TASs is required for the aggregation of reports rather than each report separately. We propose that there is a similar approach for TAS 100 and have included a statement that the requirements of TAS 100 on communications apply to the aggregate communications for a piece of work and not to each individual communication.

Guidance

5.32 The Generic TASs contain material which sits below the boxed principles. Much of this text supports the boxed text with, for example, illustrations of how compliance with the boxed text might be achieved.

5.33 This unboxed text was helpful to practitioners in complying with the principles-based approach of the TASs for the first time. In our post-implementation review, some practitioners told us that they found this text helpful, but others suggested that not all of it was necessary and in some cases, the inclusion of lists might discourage practitioners from adopting other equally valid approaches.

5.34 We have considered whether to retain some or all of the unboxed text in a guidance document, possibly with other material such as answers to frequently asked questions which we have maintained on our website. We have decided not to issue guidance as we would like TAS 100 to be self-standing and we do not consider that guidance is necessary.
Other matters

Glossary

5.35 Each of the existing TASs includes definitions of commonly used terms in that TAS. Many of the terms are used in one or more of the TASs. To reduce duplication we propose to maintain a separate glossary of terms used in TAS 100 and the TASs. Defined terms will appear in bold in the TASs. As a first step, an exposure draft Glossary of terms used in TAS 100, is contained in Appendix C. When we revise the Specific TASs we will include definitions of the terms used in the Glossary.

Regular reviews of TAS 100

5.36 We will review TAS 100 regularly and intend to carry out a full review (which might not result in any changes or require any consultation) at least every five years.

Questions:

Q5.1 Do you agree with the proposed high-level principles (paragraph 5.3)?
Q5.2 Do you agree with the proposed provisions in TAS 100 on data (Appendix B)?
Q5.3 Do you agree with the proposed provisions in TAS 100 on assumptions (Appendix B)?
Q5.4 Do you agree with the proposed provisions in TAS 100 on modelling (Appendix B)?
Q5.5 Do you agree with the proposed provisions in TAS 100 on communications (Appendix B)?
Q5.6 Do you have any comments on the application of TAS 100 (paragraphs 5.25 to 5.29)?
Q5.7 Do you agree that a compliance statement should be required (paragraph 5.30)?
Q5.8 Do you agree with the proposed approach on guidance material (paragraphs 5.32 to 5.34)?
Q5.9 Do you agree with the proposal to include defined terms in a separate glossary (paragraph 5.35)?
Q5.10 Do you consider the definitions of the terms in the glossary are clear (paragraph 5.35)?
Q5.11 Do you have any other comments on the exposure draft of TAS 100?
6 Technical Actuarial Standards for specified work

Introduction

6.1 In this section we consider the technical actuarial standards for specified work including the process by which we will determine which work will be covered by these standards and their structure.

Current Specific TASs

6.2 Currently, the Specific TASs apply to all Reserved Work and some specified work. As the Specific TASs were developed we considered various matters when deciding what work should be included in their mandatory scope. These matters included:

- the degree of reliance likely to be placed on the work;
- whether users rely on the work having been performed by an actuary or in accordance with actuarial standards;
- whether the work is Reserved Work;
- whether the work is work that is usually performed by an actuary; and
- the importance of the actuarial information for the users’ decisions.

Risk-based approach

6.3 In determining whether it is appropriate for the FRC to issue an actuarial standard, the FRC will follow its Principles for the development of Codes, Standards and Guidance. Robust reasons, careful research and consultation must therefore underpin all our interventions.

6.4 In future we propose to use a risk assessment process to determine whether areas of work should be subject to Specific TASs. This will include using the output of the work of the JFAR. One of the objectives of the JFAR is to identify, analyse and respond to risks to the public interest relating to actuarial work. In October 2014, the FRC published a discussion paper JFAR: A risk perspective which described a number of public interest risks to which actuarial work is relevant which the JFAR had identified.

6.5 There is no single definition of public interest and the analysis in the risk perspective discussion paper considers a number of stakeholders for example:

- policyholders and pensioners who want their benefits to be secure and to be treated fairly;
- investors including shareholders and creditors;
- the taxpayer and wider economic benefits; and
- the community including environmental and welfare risks.

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9 https://www.frc.org.uk/FRC-Documents/FRC/About-the-FRC/Principles-for-the-development-of-Codes.pdf
6.6 The JFAR focuses on risks with significant actuarial involvement either where actuaries contribute to the risk, or where actuaries are an important part of risk mitigation.

6.7 The output of the JFAR’s analysis will support our decisions on whether to include work in the scope of the TASs. This process is designed to ensure that the Specific TASs apply to work where there is a high degree of public interest.

6.8 It is possible that this process will result in some work which is not currently in the Specific TAS being in the scope of the TASs. Conversely, some of the work currently in the scope of the Specific TASs might not be in the scope of the revised TASs.

**Structure of the TASs**

6.9 We considered two broad options for structuring the Specific TASs.

6.10 The first was to set a standard for each area of work. With this approach specific standards would be focused and in some cases might be short. However, it could result in a large number of standards, possibly with duplication in some cases, as there may be principles which would be applicable for different areas of work within a practice area.

6.11 The second approach we considered was to maintain a similar structure to the current approach of having TASs specific to particular practice areas, but placing any relevant provisions that are not already included in TAS 100 in these specific TASs, enabling us to dispense with the existing Generic TASs.

6.12 We propose to adopt the second approach as it will result in fewer documents with less repetition and will involve less change. An additional benefit will be that within each proposed new TAS for specified work, all provisions specific to a particular practice area, other than the generic ones already in TAS 100, will be written in the context of that practice area, making them more targeted and relevant to that area. We consider that this will make them easier for practitioners to interpret and apply.

**Content of TASs**

*Example content of TASs*

6.13 We envisage the following content for the TASs:

1) introduction including application and effective date;

2) scope;

3) generic principles relevant for the practice areas covered by the TAS; and

4) chapters with principles and provisions for specific areas of work within that practice area.

**Principles**

6.14 We propose that the TASs will contain principles from the existing Specific TASs, some principles from the Generic TASs which do not appear in TAS 100 and possibly some new principles, particularly for areas of work not currently in the scope of the Specific TASs.
6.15 We will consult on the content of the TASs in 2015.

**Regular reviews of the TASs**

6.16 We will monitor the TASs regularly to ensure they remain effective and will carry out a full review (which might not result in any changes or require any consultation) every five years. This review will include a review of the work in the scope of TASs.

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<th>Questions:</th>
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<tr>
<td><strong>Q6.1</strong> What areas of work specified in scope of the current Specific TASs do you consider should not be subject to more detailed actuarial standards (paragraph 6.8)?</td>
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<tr>
<td><strong>Q6.2</strong> What work which is not currently in the scope of the Specific TASs do you consider should be subject to the more detailed standards (paragraph 6.8)?</td>
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<td><strong>Q6.3</strong> Do you agree with the proposed structure of the TASs (paragraphs 6.9 to 6.12)?</td>
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<td><strong>Q6.4</strong> Do you have any other comments on the proposals for technical actuarial standards in section 6?</td>
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7 Implementation

Introduction

7.1 In this section we set out the proposed timing and next steps for implementing the new framework and revised standards.

TAS 100: Principles for Actuarial Work

7.2 Subject to the outcome of this consultation we propose to issue TAS 100 during 2015 and that it will be effective for all actuarial work, completed on or after 1 January 2016, which is not in the scope of the current TASs.

7.3 We consider that by specifying the implementation date in advance we are giving practitioners sufficient preparation time.

7.4 We plan to publish the Glossary of terms used in TAS 100 when TAS 100 is issued. Additional terms may be added to the Glossary when the revised Specific TASs are issued.

TASs for specified work

7.5 Subject to the feedback we receive from this consultation, we plan to publish exposure drafts of each of the revised TASs for specified work in 2015 with the final TASs being published in 2016.

7.6 The new TASs will be effective no earlier than six months after publication and TAS 100 will become effective for all actuarial work at the same time.

Interim Arrangements

7.7 The existing Generic TASs and the current Specific TASs will continue to apply to Reserved Work and actuarial work which falls within the scope of one or more of the current Specific TASs until the revised Specific TASs are effective.

7.8 Actuarial work that is presented as complying with the existing TASs must comply with the Generic TASs until the Generic TASs are withdrawn.

7.9 All other actuarial work and actuarial work that is presented as complying with TAS 100 must comply with TAS 100 from 1 January 2016.

Framework for FRC actuarial standards

7.10 Subject to the feedback we receive from this consultation, we plan to publish the Framework for FRC actuarial standards in 2015 at the same time as TAS 100 with it coming into effect on the same day as the TASs for specified work.

Scope & Authority of Technical Actuarial Standards

7.11 We will need to make one change to the Scope & Authority to support the transition prior to the document’s withdrawal at the point when all the new TASs become effective. The Scope of Authority states, in its schedule, that any work which is presented as complying with a TAS must comply with the Generic TASs. We propose to amend the schedule so that during the transitional period any work which is
presented as complying with a TAS other than TAS 100 must comply with the Generic TASs.

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<th>Questions:</th>
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<tr>
<td>Q7.1  Do you have any comments on the proposed implementation of the new framework in Section 7?</td>
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<tr>
<td>Q7.2  Are the proposed interim arrangements clear (paragraphs 7.7 to 7.9)?</td>
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8 Impact assessment

Introduction

8.1 In this section we consider the impact of our proposals on TAS 100 including the resulting benefits and costs; our analysis focuses on the impact of our proposals on work carried out by members of the IFoA.

The rationale for technical actuarial standards

8.2 Actuarial work typically involves the use and interpretation of financial models to help institutions manage financial risks on behalf of or relating to their customers.

8.3 Actuaries mainly advise insurers and trustees and sponsors of pension schemes, whose combined assets are estimated at nearly three trillion pounds\(^{11}\), but actuarial techniques can be applied to many other types of entity, large and small, needing to consider the financial implications of uncertain events.

8.4 There is therefore a broad public interest, both in aggregate and in the largest institutions, in the quality of UK actuarial work, with particular reliance being placed by:

- entities reliant on actuarial information and advice, including the Government, insurers, governing bodies of pension schemes (private and public), and sponsoring employers;
- shareholders, markets and other corporate investors in these institutions;
- independent auditors and third party advisors with responsibilities for reviewing and reporting on the financial condition, reporting and performance of these institutions;
- policyholders and pension scheme members who rely on decisions made by these institutions and other bodies to manage risks and investments on their behalf;
- the actuarial profession and its practising members concerned about the continuing reputation of the profession and relevance of actuarial services;
- Government and regulators responsible for fostering investment and growth, public sector pensions and social security, financial stability, consumer protection, and confidence in UK markets and professional services.

8.5 The public interest is most acute when there are large aggregations of risk, as with the largest insurers and pension schemes, depending on the nature of their activities, or where there are systemic or correlated risks arising from market failures such as misselling, cycles, spirals and catastrophes. These areas are typically the focus of the sectoral regulators, with reliance being placed on the IFoA to regulate its members more generally.

8.6 Following a number of high profile individual and systemic failures by entities advised by actuaries, the Morris Review identified an inherent failure in the market for actuarial services resulting from information asymmetry (or understanding gap) between the producers (typically actuaries or entities advised or controlled by actuaries) and users.

\(^{11}\) ABI data bulletin: *Funds held in Life and Pension products in 2012*, published November 2013
of actuarial information. The Morris Review made a number of detailed findings and recommendations to improve the reliability of actuarial work. Subsequently the FRC issued its TASs.

8.7 The objective of the FRC’s TASs, articulated in the Reliability Objective, is therefore that the users for whom a piece of actuarial information was created should be able to place a high degree of reliance on the information’s relevance, transparency of assumptions, completeness and comprehensibility, including the communication of any uncertainty inherent in the information.

Aim of proposals

8.8 The aim of the proposals in this consultation is to build on the TASs through a new framework which:

- simplifies the content, framework and structure of FRC actuarial standards;
- consolidates and refines the high-level principles in the Generic TASs (and a small number of common principles in the Specific TASs) into a single standard (TAS 100) which sets out the high-level outcomes which users and the public can expect from actuarial work in the UK;
- extends the scope of application of TAS 100 so as to reflect that expectation and establish TAS 100 as a standard against which users and the public can assess the quality of all actuarial work in the UK; and
- refines the Specific TASs ensuring they focus on matters of public interest.

Benefits

Users and the public interest

8.9 TAS 100 is intended to assist users as it will result in more work, including some areas of high risk and developing areas of actuarial work, where risks may not yet have been identified or crystallised or where there is limited regulation, being subject to minimum quality standards.

8.10 TAS 100 will promote the reliability and usefulness of all actuarial work through its high-level principles which aim to ensure that:

- data used is sufficient and reliable for its purpose and subject to sufficient controls;
- assumptions used are appropriate for the purpose of the calculations for which they are used;
- models used are fit for purpose and subject to sufficient controls and testing; and
- communication of work is clear, comprehensive and comprehensible enabling intended users to make informed decisions and understand the matters relevant to the work.

8.11 We consider that TAS 100 will drive more consistency of practice between different actuarial fields by imposing minimum requirements for good practice that apply to all work within different practice areas.

8.12 The benefits of the wider scope of TAS 100 include a reduction in any gap in users’ expectations about whether actuarial work, upon which they base their decisions, is subject to professional standards.
8.13 TAS 100 is short, clear and outcome-focused. We consider that it will be easily understood by users and other stakeholders and therefore it may be more likely that other regulators and contracting parties will require work to comply with TAS 100 than with the existing TASs.

Practitioners

8.14 Practitioners will benefit from improvements to the structure, style and content of the TASs which will result in a simpler framework, reduced volume of regulatory material and standards which are easier for practitioners to use and understand.

Consistency with international standards

8.15 The widening of the scope of actuarial standards will enable the FRC and the IFoA to confirm that the technical components of UK standards (the IFoA is responsible for ethical standards) meet the test of substantial consistency with International Standard of Actuarial Practice 1 (ISAP 1), issued by the International Actuarial Association, so enhancing the international reputation of UK actuarial standards and actuarial work, and potentially reducing the burden on international groups.

Costs

8.16 The proposed changes should not lead to material changes to work which is currently in the scope of the TASs – we expect that work which is compliant with the current TASs will be compliant with TAS 100. There may be some changes needed to processes as a result of the restructure but these should not be major changes as the fundamental requirements of the TASs will not change. Therefore, we consider that costs relating to work already in the scope of the TASs will not be significant.

8.17 The biggest impact of the proposals is to bring more work into the scope of the FRC’s TASs. The extra work coming into scope, none of which is reserved to actuaries, includes:

- some work for pension scheme trustees (eg asset/liability modelling, actuarial advice on pension scheme buy-ins and advice concerning insurance of risk benefits);
- much of the work for pension scheme sponsors such as pension scheme design, advice on pensions aspects of mergers and acquisitions and liability management;
- some work for insurance companies (eg actuarial work for management information and some investment related work);
- expert witness work; and
- actuarial work in wider fields.

8.18 Evidence collected in our post-implementation review indicated that the transitional costs of implementing the TASs ranged between very small amounts and 10% of the actuarial costs of the relevant organisation. The costs depended on several factors including the nature of the work and the size of the firm. The costs were proportionally higher for smaller organisations.

8.19 The application of TAS 100 to work which is not currently subject to the TASs will result in transitional costs. However, we would expect that these costs will be lower than for the TASs because most practitioners have experience of implementing the TASs and because TAS 100 is less onerous than the TASs and is derived from material already implemented.
8.20 Our post-implementation review of the TASs indicated that the long-term costs of complying with the TASs are not significant. TAS 100 is shorter and less onerous than the TASs. We therefore consider that the long-term costs of complying with TAS 100 for work not covered by the TASs will not be significant.

**TASs for specified work**

8.21 We will consider the impact of the introduction of new TASs for specified work when we consult on them next year.

**Adoption of TAS 100 by other regulators**

8.22 Other regulators might choose to require compliance with TAS 100 for certain areas of work. In such cases we would expect that these regulators would carry out their own assessment of the costs and benefits of requiring compliance with TAS 100.

**Questions:**

Q8.1 Do you agree that TAS 100 could be applied to a wide range of actuarial work without disproportionate costs?

Q8.2 Do you have any comments on our analysis of the impact of the changes set out in section 8?
9 Invitation to comment

Questions

9.1 The FRC invites the views of those stakeholders and other parties who wish to comment on the content of this document. In particular we would welcome responses to the questions below. Please provide reasons for your response and provide an alternative approach where you disagree with our proposals.

Q3.1 Do you have any comments on the draft Framework for FRC Actuarial Standards (paragraphs 3.5 to 3.8 and Appendix A)?

Q3.2 Do you have any comments on our proposal to withdraw and archive the existing Scope & Authority (paragraphs 3.26 to 3.29)?

Q3.3 Do you have any comments on our proposed approach to the Significant Considerations documents (paragraphs 3.30 to 3.31)?

Q4.1 Do you agree that the extension of the scope of application of TAS 100 to all actuarial work would be of benefit to users of actuarial work? If you disagree, please explain why.

Q4.2 Do you agree with the proposed definition of actuarial work? If not please provide reasons and suggest an alternative approach (paragraph 4.11).

Q4.3 Do you agree with the analysis of different areas of work in Appendix E?

Q5.1 Do you agree with the proposed high-level principles (paragraph 5.3)?

Q5.2 Do you agree with the proposed provisions in TAS 100 on data (Appendix B)?

Q5.3 Do you agree with the proposed provisions in TAS 100 on assumptions (Appendix B)?

Q5.4 Do you agree with the proposed provisions in TAS 100 on modelling (Appendix B)?

Q5.5 Do you agree with the proposed provisions in TAS 100 on communications (Appendix B)?

Q5.6 Do you have any comments on the application of TAS 100 (paragraphs 5.25 to 5.29)?

Q5.7 Do you agree that a compliance statement should be required (paragraph 5.30)?

Q5.8 Do you agree with the proposed approach on guidance material (paragraphs 5.32 to 5.34)?

Q5.9 Do you agree with the proposal to include defined terms in a separate glossary (paragraph 5.35)?

Q5.10 Do you consider the definitions of the terms in the glossary are clear (paragraph 5.35)?
Q5.11 Do you have any other comments on the exposure draft of TAS 100?

Q6.1 What areas of work specified in scope of the current Specific TASs do you consider should not be subject to more detailed actuarial standards (paragraph 6.8)?

Q6.2 What work which is not currently in the scope of the Specific TASs do you consider should be subject to the more detailed standards (paragraph 6.8)?

Q6.3 Do you agree with the proposed structure of the TASs (paragraphs 6.9 to 6.12)?

Q6.4 Do you have any other comments on the proposals for technical actuarial standards in section 6?

Q7.1 Do you have any comments on the proposed implementation of the new framework in Section 7?

Q7.2 Are the proposed interim arrangements clear (paragraphs 7.7 to 7.9)?

Q8.1 Do you agree that TAS 100 could be applied to a wide range of actuarial work without disproportionate costs?

Q8.2 Do you have any comments on our analysis of the impact of the changes set out in section 8?

Responses

9.2 For ease of handling, we prefer comments to be sent electronically to TASReview@frc.org.uk. Comments may also be sent in hard copy form to:

The Actuarial Policy Team
Financial Reporting Council
8th Floor
125 London Wall
London
EC2Y 5AS

9.3 Comments should reach the FRC by 8 March 2015.

9.4 All responses will be regarded as being on the public record unless confidentiality is expressly requested by the respondent. A standard confidentiality statement in an e-mail message will not be regarded as a request for non-disclosure. We do not edit personal information (such as telephone numbers or email addresses) from submissions; therefore only information that you wish to publish should be submitted. If you are sending a confidential response by e-mail, please include the word "confidential" in the subject line of your e-mail.

9.5 We aim to publish non-confidential responses on our website within ten working days of receipt. We will publish a summary of the consultation responses, either as a separate document or as part of, or alongside, any decision.
Appendix A: Exposure draft of the Framework for FRC Actuarial Standards

<table>
<thead>
<tr>
<th>Applies to all actuarial work</th>
<th>TAS 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply to specified work</td>
<td>TASs 200, 300 etc (Pensions, Insurance, Funeral Plans, Other)</td>
</tr>
<tr>
<td></td>
<td>Guidance</td>
</tr>
</tbody>
</table>

1 Historical context

1.1 Following the Morris Review of the Actuarial Profession, published in March 2005, HM Treasury asked the FRC to take on responsibility for setting technical actuarial standards in the UK, and overseeing the regulation of the actuarial profession in the UK, including the setting of ethical standards for its members, by the Institute and Faculty of Actuaries (IFoA).

1.2 In July 2014, following a review of their respective standard-setting responsibilities in the UK, the FRC and the IFoA issued a statement confirming that the FRC’s and IFoA’s respective standard-setting responsibilities should continue as before but that there should be scope, by agreement, for more flexibility in the way in which those responsibilities are discharged.

1.3 The FRC and the IFoA have agreed these arrangements for setting technical actuarial standards in a Memorandum of Understanding (MoU). The MoU also commits the IFoA to require its members to comply with those standards.

2 Introduction

2.1 This framework document explains the authority, scope and application of the FRC’s actuarial standards and guidance. It also describes the other documents the FRC may issue.


2 https://www.frc.org.uk/Our-Work/Publications/Actuarial-Policy-Team/Memorandum-of-Understanding.pdf

32 Consultation: A new framework for Technical Actuarial Standards (November 2014)
2.2 The FRC’s actuarial standards are developed in line with *FRC Codes and Standards: Procedures*. These procedures are intended to ensure transparency and consistency in the development and review of its codes, standards and guidance.

2.3 In considering whether to issue an actuarial standard or guidance, the FRC follows principles set out in *Principles for the development of codes, standards and guidance*. In particular the FRC will only consider issuing or amending a code, standard or guidance if it is satisfied that:

1. there is a clearly defined issue relevant to the FRC’s mission and responsibilities;

2. the change is the most appropriate way to address the issue;

3. one or more of the following conditions is met:
   - a change is necessary to comply or align with a legal requirement; or
   - a change is required in the light of developments in international standards or in UK or European regulation; or
   - the risks to the public interest of not acting are significant, for example, a risk of systemic and/or market failure; or
   - it is possible to eliminate or significantly simplify a current requirement; or
   - it is necessary to clarify a current requirement; or
   - it is possible to create significant additional benefits in the public interest; or
   - a change is necessary to underpin the effectiveness of the FRC’s enforcement and disciplinary activities;

4. the anticipated benefits of the change outweigh the costs.

3 The FRC’s Reliability Objective for actuarial standards

3.1 In support of its mission to promote high quality corporate governance and reporting to foster investment, the FRC has adopted strategies to:

- create a framework that encourages trustworthy behaviour by directors and professionals and engagement with them by investors; and
- encourage production of trustworthy information that contributes to informed decisions.

3.2 The FRC’s work to support these strategies through actuarial standards continues to be guided by its Reliability Objective for actuarial standards that it developed when it took on its actuarial standard-setting role:

*Users for whom a piece of actuarial information was created should be able to place a high degree of reliance on the information’s relevance, transparency of*

3 https://www.frc.org.uk/About-the-FRC/Procedures/Regulatory-policies.aspx
4 https://www.frc.org.uk/FRC-Documents/FRC/About-the-FRC/Principles-for-the-development-of-Codes.pdf
assumptions, completeness and comprehensibility, including the communication of any uncertainty inherent in the information.

The authority of the FRC’s Technical Actuarial Standards

3.3 The authority of the FRC’s actuarial standards derives from the FRC’s powers and mandate, and from the recognition which is given to the FRC’s standards in legislation, and by other bodies which choose to adopt them or require compliance with them.

3.4 The Companies (Audit, Investigations and Community Enterprises) Act 2004 recognises the FRC’s functions in the UK of:

a) issuing standards to be applied in actuarial work; and

b) issuing standards in respect of matters to be contained in reports and communications required to be produced or made by actuaries or in accordance with standards to be applied in actuarial work.

In addition:

- the disciplinary schemes of the IFoA and the FRC recognise the authority of FRC standards by providing that any departure from an FRC actuarial standard may amount to misconduct, rendering a member of the IFoA liable to disciplinary action;

- the regulatory regimes for pensions and for insurance have recognised certain FRC standards for the purposes of requirements imposed on the entities and individuals they regulate; and

- compliance with the FRC’s actuarial standards is likely to be taken into account when the adequacy of actuarial work is considered in a court of law or in other regulatory or legal practices.

4 Scope and application of the Technical Actuarial Standards

Actuarial work

4.1 The FRC’s Technical Actuarial Standards (TASs) are intended to be applicable to work which involves the use of actuarial principles and/or techniques and the exercise of judgement or is presented as such, including for example financial models used in insurance and pensions and projections of contingent events. Compliance with the TASs is encouraged whether such work is undertaken by individual actuaries, non-actuaries, consulting firms or financial institutions.

4.2 For the purpose of specifying the mandatory application of the TASs, actuarial work is defined as work:

a) which involves the exercise of judgement and where the use of principles and/or techniques of actuarial science is central; or

b) which the user is entitled to treat as actuarial work because it is presented as actuarial, whether expressly or by implication.

4.3 This definition supports regulators, including the IFoA, which mandate the use of the TASs either for actuarial work generally or for certain areas of actuarial work.

4.4 The actuarial work to which a particular TAS applies will be identified within the TAS.
Geographic scope

4.5 The intended geographic scope of the TASs is limited to work done in relation to the UK operations of entities, as well as to any overseas operations which report into the UK, within the context of UK law or regulation. This definition of scope applies regardless of the location or domicile of the person carrying out the work.

Materiality

4.6 Each of the principles and relevant supporting provisions in the TASs should be followed unless compliance with it can have no material effect on the decisions of users. To the extent that departures from a TAS do not have a material effect on the decisions of the users of the actuarial work in question, they need not be considered as departures and they need not be disclosed.

4.7 Particulars of any material departure from a TAS, including the reasons for the departure, should be identified in the document which communicates the results of the work to which the TAS applied.

Proportionality

4.8 The TASs are written so that nothing in them should be interpreted as requiring work to be performed that is not proportionate to the scope of the decision or assignment to which it relates and the benefit that users would expect from the work. The existence of standards is not a substitute for professional judgement, or consideration for the needs of the user(s), when delivering an individual piece of work.

Conflicts with other legal, regulatory or professional obligations

4.9 There may be exceptional circumstances in which compliance with a TAS would result in a failure to meet another legal, regulatory or professional obligation that governs the work. In such cases, to the extent necessary to comply, a departure from the TAS is permitted provided that reasonable steps have been taken to comply with the TAS and ensure the reliability of the resulting actuarial information, and that the departure is identified and the reasons for the departure are given. Members of the IFoA are reminded that under the Compliance Principle of the Actuaries’ Code they will take reasonable steps to ensure they are not placed in a position where they are unable to comply with all relevant legal, regulatory and professional requirements.

Responsibility for compliance

4.10 The TASs are intended to assist in the achievement of the Reliability Objective. In applying the TASs, it is important to be guided by the spirit and reasoning behind them.

4.11 The degree to which an individual or entity is responsible for compliance with TASs will depend on the circumstances of the assignment, including the relevant legal, regulatory and professional framework. For this purpose, an IFoA member will be treated as “responsible” for (part of) the work, if he or she has the authority to determine, or to veto, the content of (the relevant part of) the final work product, whether or not any other individual also has an equivalent authority, or power of veto, over the work. This is a matter which, in the event of an allegation of misconduct or negligence, may have to be determined by the appropriate tribunal.
4.12 For the purpose of the FRC’s definition of “responsible”, being a signatory or a joint signatory of the work would normally be strong prima facie evidence that the individual had authority to prevent, or disclose, departures from the TASs. But delegating the role of signatory to another IFoA member would not, of course, prove that someone other than that IFoA member was responsible for the work.

4.13 The TASs may be relevant to IFoA members’ obligations under the Actuaries’ Code and other standards issued by the IFoA, even if they are not “responsible” for the work. Such obligations may arise if IFoA members are associated or concerned with services or communications which are presented as involving actuarial work, generally accepted actuarial practice or any similar expression which implies compliance or compatibility with actuarial standards as they are applied in the UK. Relevant obligations under the Actuaries’ Code would include:

- obligations to challenge non-compliance by others, to speak up to clients or employers, or both, if they believe, or have reasonable cause to believe, that a course of action is unlawful, unethical or improper; and to report behaviour that they have reasonable cause to believe is improper (Compliance Principle);
- an obligation to take such steps as are sufficient and available to them to ensure that any communication with which they are associated is accurate and not misleading, and contains sufficient information to enable its subject-matter to be put in proper context (Communication Principle).

5 Early adoption of Technical Actuarial Standards

5.1 Some individuals or entities may wish to comply with a TAS in advance of the published effective date. In some circumstances this is acceptable and is to be encouraged if the individual or entity concerned does not need the full amount of time allowed to prepare for implementation.

5.2 There may be occasions when early adoption is not appropriate. This would typically be the case when, for example:

- compliance with the new TAS would put the entity in breach of an existing TAS; and
- a TAS is to come into force in parallel with other events such as a change in legislation without which the adoption of the TAS would be premature.

5.3 When issuing a new TAS, the FRC will normally indicate whether early adoption is appropriate or not.

6 Style and content of the Technical Actuarial Standards

6.1 The TASs are principles-based and outcome-focused. However, this approach does not exclude specific detail, where appropriate, as a means to convey the requirements of the standard.

6.2 The TASs should have sufficient detail to enable those carrying out work to have a clear understanding of what is required in order to comply with the TAS. The TASs should not be so rigid that they prevent the continuing development of actuarial methodology.
6.3 The TASs are primarily technical but they may also, with the agreement with the IFoA, contain material which relates to ethical matters. Such circumstances may include, but are not limited to:

- when the FRC is producing a TAS for a category of actuarial work for which the IFoA does not propose to issue a standard;
- when the FRC is producing a TAS in response to an international standard which contains ethical matters; and
- when the FRC is producing a TAS in respect of actuarial work which may or may not be undertaken by IFoA members, and it is important to have a standard with broader applicability.

6.4 The FRC may in certain circumstances exercise a reserve ability to issue ethical standards without the IFoA’s agreement. It has been agreed that the FRC would only use this ability when it reasonably considers that action is necessary in the public interest and after it has consulted with the IFoA and has given the IFoA reasonable opportunity to address the matter.

6.5 The MoU between the FRC and IFoA describes the circumstances in which the FRC may include ethical requirements in its TASs or set its own ethical standards.

7 Technical Actuarial Standard 100: Principles for Actuarial Work

7.1 The FRC’s overarching TAS is Technical Actuarial Standard 100: Principles for Actuarial Work (TAS 100). TAS 100 establishes high-level principles and outcomes, in support of the Reliability Objective, which users and the public can expect to be followed and achieved for all actuarial work in the UK.

7.2 In the FRC’s view (a view shared by the IFoA), the combined requirements of TAS 100, together with the IFoA’s Actuaries’ Code and Actuarial Practice Standard X2 as they are applied in the UK, are substantially consistent with the requirements of International Standard of Actuarial Practice 1 General Actuarial Practice (ISAP 1) issued by the International Actuarial Association.

8 Technical Actuarial Standards for specified work

8.1 TASs for specified work (called TAS 200 onwards) include additional principles for work in specified areas. In deciding whether or not a particular area of actuarial work should be the subject of TASs, the FRC considers the risk of the work in question to the public interest and whether the principles described in 2.3 are met. This will depend on a range of factors including factors relating to scale of the work and other factors suggesting there is a matter (actual or potential) which might need to be addressed in standards.

9 Technical Guidance

9.1 The FRC may issue non-mandatory guidance on technical actuarial matters if it considers that there is a clearly defined issue and that guidance is the most appropriate way to address it. The FRC and the IFoA have agreed that the IFoA may also issue non-mandatory guidance on technical actuarial matters subject to the consent of the FRC provided that the FRC is satisfied that the guidance will support compliance with the TASs.
10 Other FRC publications

AS TM1

10.1 Pensions legislation provides that statutory pension illustrations must be produced in accordance with 'relevant guidance' prepared by a prescribed body. The FRC is the prescribed body for that purpose and the Actuarial Standard Technical Memorandum \textit{AS TM1: Statutory Money Purchase Illustrations} is that 'relevant guidance'.

Other

10.2 The FRC may issue pronouncements other than the TASs, technical guidance and AS TM1. The FRC will indicate the authority, scope and application of such pronouncements as they are issued.

11 Review of Technical Actuarial Standards and technical guidance

11.1 In accordance with FRC principles\textsuperscript{5}, TASs and technical guidance will be kept under regular review and reconsidered at least once every 5 years.

\textsuperscript{5} \url{https://www.frc.org.uk/FRC-Documents/FRC/About-the-FRC/Principles-for-the-development-of-Codes.pdf}
Appendix B: Exposure draft of TAS 100: Principles for Actuarial Work

Terms in **bold** are defined in the *Glossary of terms used in TAS 100.*

**Purpose**

Technical Actuarial Standard 100: Principles for Actuarial Work (TAS 100) promotes high quality **actuarial work.** It supports the FRC’s Reliability Objective that the **users** for whom actuarial information is created should be able to place a high degree of reliance on that information’s relevance, transparency of assumptions, completeness and comprehensibility, including the communication of any uncertainty inherent in the information.

**Scope of application**

TAS 100 is applicable to all **actuarial work** within the geographic scope of FRC actuarial standards.

**Actuarial work** is work:

1) which involves the exercise of judgement and where the use of principles and/or techniques of actuarial science is central; or

2) which the **user** is entitled to treat as actuarial work because it is presented as actuarial, whether expressly or by implication.

**Actuarial work** is not limited to work undertaken by an actuary.

**Compliance**

The Institute and Faculty of Actuaries requires its members to comply with TAS 100. Wider adoption is encouraged. Other professional bodies, relevant regulators and contracting parties may require entities and individuals who are not members of the IFoA to comply with TAS 100.

**Materiality:** Each of the principles and provisions in TAS 100 shall be followed unless compliance with it can have no **material** effect on the decisions of **users.**

**Proportionality:** 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 risks inherent in the

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1 The geographic scope of the FRC’s actuarial standards is limited to actuarial work done in relation to the UK operations of entities, as well as to any overseas operations which report into the UK, within the context of UK law or regulation. (FRC’s *Framework for Actuarial Standards*)

2 APS X1.
decision or assignment to which the work relates and the benefit that users would be expected to obtain from the work.

Aggregation: The requirements of TAS 100 on communications apply to the communications in aggregate for a piece of work and not to each individual communication.

Disclosure: Communications shall include a statement confirming compliance with TAS 100. Particulars of any material departure from TAS 100 shall be disclosed to the user with the reasons for the departure.

Commencement date

This standard applies to actuarial work which is not in the scope of the Generic TASs and which is completed on or after 1 January 2016.

The Principles

1. Judgement shall be exercised in a reasoned and justifiable manner; material judgements shall be communicated to users so that they are able to make informed decisions understanding the matters relevant to the actuarial information.

2. Data used in actuarial work shall be sufficient and reliable for the purpose of that work and subject to sufficient scrutiny and checking so that users can rely on the resulting actuarial information.

Provisions

2.1. Data shall be relevant to the entity.

2.2. If data is insufficient or unreliable it shall be improved by adjusting or supplementing it to the extent that is proportionate.

2.3. Data used in actuarial work shall be documented.

2.4. Communications shall describe the data used in the actuarial work, the source of the data, the checks and controls that have been applied, the actions taken to improve insufficient or unreliable data, any uncertainty in the data, and the approach taken to deal with that uncertainty.

2.5. Communications shall state any limitations in the actuarial information resulting from the use of insufficient or unreliable data and provide an indication of their impact on the actuarial information.

3. Assumptions used, or proposed for use, in actuarial work shall be appropriate for the purpose of that work so that users can rely on the resulting actuarial information.

Provisions

3.1. Assumptions used in, or proposed for use in, actuarial work shall be derived from as much relevant information as is sufficient or, if there is insufficient relevant information, as is available.

3.2. Assumptions used in actuarial work shall be consistent with each other.

3.3. Assumptions used in actuarial work shall be documented.
3.4. **Communications** shall state the **material** assumptions and describe their rationale. If **Communications** shall include a comparison of the assumptions with those used in any relevant previous actuarial work, with an explanation of any differences, and a description of any change in the rationale underlying the assumptions used.

3.5. **Communications** shall describe the relationship of any assumptions which are not **neutral** to **neutral** assumptions.

3.6. **Communications** shall state when assumptions are set by a third party or by regulation. Communications shall state whether any assumptions set by a third party are not reasonable for the purpose of the work and provide an indication of their impact on the **actuarial information**.

4. **Models** used in **actuarial work** shall be fit for purpose and be subject to sufficient controls and testing so that **users** can rely on the resulting **actuarial information**.

**Provisions**

4.1. An explanation of how a model is fit for purpose and what it does shall be documented.

4.2. Controls and tests that have been applied to a model shall be documented.

4.3. **Communications** shall describe the **methods** used in the **actuarial work** and explain their rationale.

4.4. **Communications** shall include an explanation of any changes to the models used from the previous exercise (if one exists) carried out for the same purpose.

4.5. **Communications** shall include explanations of any significant limitations of the models used and the implications of those limitations.

5. **Communications** shall be clear, comprehensive and comprehensible so that **users** are able to make informed decisions understanding the matters relevant to the **actuarial information**.

**Provisions**

5.1. **Communications** shall state the purpose of the work, its **users** and who commissioned the **actuarial work**.

5.2. **Communications** shall include the results of the **actuarial work** and the sensitivity of the results to variations in key assumptions.

5.3. **Material** information provided orally shall be confirmed in permanent form.

5.4. **Communications** shall include a comparison of results of calculations with the previous exercise (if one exists) carried out for the same purpose, with an explanation of any differences.

5.5. **Communications** shall describe the **measures** used in the **actuarial work**, explain their rationale and include an explanation of any changes to the **measures** used from the previous exercise (if one exists) carried out for the same purpose.

5.6. **Communications** shall describe any margins for adverse deviations allowed for in the **actuarial work**.
5.7. **Communications** shall:

- indicate the nature and extent of any *material* uncertainty in the *actuarial information* they contain; and
- state the nature and significance of each *material* risk or uncertainty faced by the *entity* in relation to the *actuarial work* and explain the approach taken to the risk.

5.8. **Communications** shall indicate any *material* changes or events that are known by a person responsible for the *communication* to have occurred since the effective date of the *data* and other information on which the *actuarial work* is based.

5.9. If a person responsible for a *communication* becomes aware of any evidence of that *communication* not being understood by any *user*, that person shall provide clarification or information to correct the misunderstanding.

5.10. **Communications** shall not include information that is not *material* if it obscures *material actuarial information*.

6. **Documentation** shall contain enough detail for a technically competent person with no previous knowledge of the *actuarial work* to understand the matters involved and assess the judgements made.
Appendix C: Glossary of terms used in TAS 100

Terms appearing in bold in TAS 100 are used with the meanings set out below.

**actuarial information**

The output of actuarial work.

**actuarial work**

Work:

1) which involves the exercise of judgement and where the use of principles and/or techniques of actuarial science is central; or
2) which the user is entitled to treat as actuarial work because it is presented as actuarial, whether expressly or by implication.

**communication**

A statement of actuarial information in permanent or non-permanent form. Formal written reports, letters, draft reports, emails and presentations are examples of permanent communications.

**data**

Facts or information usually collected from records or from experience or observation. Examples include membership or policyholder data, claims data, asset and investment data, operating data (such as administrative or running costs), benefit definitions and policy terms and conditions.

**to document**

To record in documentation.

**documentation**

Records of facts, opinions, explanations of judgements and other matters. Documentation may be paper or electronic based. It is not necessarily provided to users. Documentation is material if it concerns a material matter.

**entity**

The pension scheme, insurance company, fund or other body that is the subject of the work being performed.

**material**

Matters are material if they could, individually or collectively, influence the decisions to be taken by users of the related actuarial information. Assessing materiality is a matter for judgement which requires consideration of the users and the context in which the work is performed and reported.

**measure**

The approach that is used to define how an (uncertain) asset or liability amount is quantified. Two different measures of the same asset or liability may produce different results.

**method**

The mechanism that is used to quantify an (uncertain) asset or liability amount. Two different methods of calculating the same asset or liability measures should produce similar results.
**model**

A representation of some aspect of the world which is based on simplifying assumptions.

A **model** is defined by a **specification** that describes the matters that should be represented and the inputs and the relationships between them, **implemented** through a set of mathematical formulae and algorithms, and **realised** by using an **implementation** to produce a set of outputs from inputs in the form of **data** and parameters.

**neutral**

A **neutral measure**, assumption or judgement is one that is not deliberately either optimistic or pessimistic and does not incorporate adjustments to reflect the desired outcome. A **neutral** estimate is one that is derived using **neutral measures**, assumptions and judgements. There may be a range of **neutral estimates**, reflecting inherent uncertainty.

**realisation**

An **implementation** together with a set of inputs and the corresponding outputs.

For an **implementation** that is a conventional computer program, a **realisation** is a run of the program, together with the inputs used and the outputs produced. Runs with different data or parameters are different **realisations** even if the program itself has not changed.

**specification**

A description of a **model** that describes the matters to be represented, the inputs and their interactions with each other, and the outputs to be produced.

**users**

Those people whose decisions a **communication** is intended to assist. Those to whom the **communication** is addressed, regulators and third parties for whose benefit a **communication** is given are examples of possible **users**.
Appendix D: Derivation of provisions in TAS 100

D.1 This appendix explains the derivation of each of the provisions in the exposure draft of TAS 100.

Data

D.2 The proposed provisions on data are:

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<tr>
<td>2.1</td>
<td>Data shall be relevant to the entity.</td>
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<td>2.2</td>
<td>If data is insufficient or unreliable it shall be improved by adjusting or supplementing it to the extent that is proportionate.</td>
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<tr>
<td>2.3</td>
<td>Data used in actuarial work shall be documented.</td>
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<tr>
<td>2.4</td>
<td>Communications shall describe the data used in the actuarial work, the source of the data, the checks and controls that have been applied, the actions taken to improve insufficient or unreliable data, any uncertainty in the data, and the approach taken to deal with that uncertainty.</td>
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<tr>
<td>2.5</td>
<td>Communications shall state any limitations in the actuarial information resulting from the use of insufficient or unreliable data and provide an indication of their impact on the actuarial information.</td>
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D.3 Provision 2.1 is not explicitly contained in the TASs but has been included for consistency with paragraph 3.5.3 of ISAP 1.

D.4 Provision 2.2 is based on paragraph C.5.11 of TAS D (incomplete/inadequate data) but with “insufficient or unreliable” used instead of “materially incomplete or inadequate”. The alternative text is consistent with the text in paragraph 3.5.1 of ISAP 1.

D.5 Provision 2.3 is based on paragraphs C.5.3 of TAS D (documenting data definitions), C.5.7 of TAS D (documenting checks), C.5.12 of TAS D (documenting treatment of incomplete or inaccurate data) and paragraph C.4.4 of TAS M (documentation of data used in models).

D.6 Provision 2.4 combines requirements in paragraphs C.4.1 of TAS R (describing data and its source) and C.4.3 of TAS R (describing uncertainty of data). It includes communication of the source of data which is not covered by TAS D or TAS R and which we consider to be good practice.

D.7 Provision 2.5 builds on paragraph C.5.2 of TAS R (indicating uncertainty) with the provision specifically considering limitations of actuarial information from insufficient or unreliable data rather than just uncertainty in actuarial information.

Assumptions

D.8 The proposed provisions on assumptions are:

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<tr>
<td>3.1</td>
<td>Assumptions used in, or proposed for use in, actuarial work shall be derived from as much relevant information as is sufficient or, if there is insufficient relevant information, as is available.</td>
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<tr>
<td>3.2</td>
<td>Assumptions used in actuarial work shall be consistent with each other.</td>
</tr>
<tr>
<td>3.3</td>
<td>Assumptions used in actuarial work shall be documented.</td>
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</table>
3.4 Communications shall state the material assumptions and describe their rationale. Communications shall include a comparison of the assumptions with those used in any relevant previous actuarial work, with an explanation of any differences, and a description of any change in the rationale underlying the assumptions used.

3.5 Communications shall describe the relationship of any assumptions which are not neutral to neutral assumptions.

3.6 Communications shall state when assumptions are set by a third party or by regulation. Communications shall state whether any assumptions set by a third party are not reasonable for the purpose of the work and provide an indication of their impact on the actuarial information.

D.9 Provision 3.1 is based on the requirement in paragraphs D.2.3 of the Pensions TAS, the Insurance TAS and the Funeral Plans TAS (assumptions to be based on sufficient/relevant information).

D.10 Provision 3.2 is based on C.4.22 of TAS M (consistency of assumptions).

D.11 Provision 3.3 is based on paragraph C.4.18 of TAS M (documentation of assumptions).

D.12 Provision 3.4 is based on paragraphs C.4.4 of TAS R (communicating assumptions), C.4.6 of TAS R (describing rationale), C.5.17 of TAS R (comparisons) and paragraph D.2.11 of the Pensions TAS (changes to assumptions).

D.13 Provision 3.5 is based on paragraph C.5.4 of TAS M (non-neutral estimates).

D.14 Provision 3.6 covering disclosure when assumptions are set by a third party or regulation ensures consistency with paragraph 2.8 of ISAP 1. It covers similar ground to paragraph D.2.7 of the Pensions TAS (opinion on assumptions).

Modelling

D.15 The proposed provisions on modelling are:

4.1 An explanation of how a model is fit for purpose and what it does shall be documented.

4.2 Controls and tests that have been applied to a model shall be documented.

4.3 Communications shall describe the methods used in the actuarial work and explain their rationale.

4.4 Communications shall include an explanation of any changes to the models used from the previous exercise (if one exists) carried out for the same purpose.

4.5 Communications shall include explanations of any significant limitations of the models used and the implications of those limitations.

D.16 Provision 4.1 is based on paragraph C.3.1 of TAS M (models being satisfactory representations and documented as such).

D.17 Provision 4.2 is based on paragraph C.3.6 of TAS M (documentation of checks).

D.18 Provision 4.3 is based on paragraphs C.4.6 (c) of TAS R (describing rationale for methods and measures) and C.5.8 (c) of TAS R (for any material calculations, the methods used).
D.19 Paragraph 4.4 is based on paragraph D.3.1 of the Insurance TAS (changes measures, methods or assumptions) but extended to models.

D.20 Provision 4.5 is based on paragraph C.5.8 of TAS M (limitations of models).

Communication

D.21 The proposed provisions on communications are:

| 5.1 | Communications shall state the purpose of the work, its users and who commissioned the actuarial work. |
| 5.2 | Communications shall include the results of the actuarial work and the sensitivity of the results to variations in key assumptions. |
| 5.3 | Material information provided orally shall be confirmed in permanent form. |
| 5.4 | Communications shall include a comparison of results of calculations with the previous exercise (if one exists) carried out for the same purpose, with an explanation of any differences. |
| 5.5 | Communications shall describe the measures used in the actuarial work, explain their rationale and include an explanation of any changes to the measures used from the previous exercise (if one exists) carried out for the same purpose. |
| 5.6 | Communications shall describe any margins for adverse deviations allowed for in the actuarial work. |
| 5.7 | Communications shall: |
| | • indicate the nature and extent of any material uncertainty in the actuarial information they contain; and |
| | • state the nature and significance of each material risk or uncertainty faced by the entity in relation to the actuarial work and explain the approach taken to the risk. |
| 5.8 | Communications shall indicate any material changes or events that are known by any person responsible for the communication to have occurred since the effective date of the data and other information on which the actuarial work is based. |
| 5.9 | If a person responsible for a communication becomes aware of any evidence of that communication not being understood by any user, that person shall provide clarification or information to correct the misunderstanding. |
| 5.10 | Communications shall not include information that is not material if it obscures material actuarial information. |

D.22 We have used the term “communications” instead of “reporting” which is used in the current TASs. This is because we recognise that for some smaller pieces of work compliance might be achieved rather for some elements rather than in a permanent form. However, we have included a provision that, where information is material, it should be provided in a permanent form (provision 5.3).

D.23 Provision 5.1 is based on paragraph C.3.3 of TAS R (purpose of work).
D.24 Provision 5.2 includes presentation of results which is implicitly required by paragraph C.5.1 of TAS R (completeness) and sensitivities which is not required explicitly by the TASs and ensures consistency with paragraph 3.7.7 of ISAP 1.

D.25 Provision 5.3 is a shortened version of C.2.6 of TAS R which requires material information to be provided in writing.

D.26 Provision 5.4 is based on paragraph C.5.17 of TAS R (comparison with previous exercises).

D.27 Provision 5.5 is based on paragraphs C.4.6 (c) of TAS R (describing rationale for methods and measures), C.5.8 (b) of TAS R (for any material calculation the measure adopted) and paragraph D.3.1 of the Insurance TAS (changes to measures, methods or assumptions).

D.28 Provision 5.6 requires a description of any margins for adverse deviations in actuarial work and ensures that the approach in TAS 100 is consistent with paragraph 2.7.3 of ISAP 1.

D.29 Provision 5.7 is based on paragraphs C.5.2 (uncertainty) and C.5.5 (risks faced by the entity).

D.30 Provision 5.8 is based on paragraph C.3.13 of TAS R (subsequent events).

D.31 Provision 5.9 is based on paragraph C.6.4 of TAS R which requires clarification of matters where there has been a misunderstanding.

D.32 Provision 5.10 is based on paragraph C.6.6 of TAS R which states that reports should not include information which is not material if it obscures material information.
Appendix E: Examples of work in/out of scope of TAS 100

E.1 We consider below whether compliance with TAS 100 would be required for different areas of work. The conclusions presented may vary according to the circumstances of particular situations. In addition, the conclusions do not necessarily have any implications regarding the requirement for compliance with other actuarial standards or the Actuaries' Code.

Work presented as actuarial

E.2 Currently, any work which is presented as complying with TASs, whether expressly or by implication, is required to comply with the TASs. The proposed definition of actuarial work brings into the scope of TAS 100 all work which is presented as actuarial. This includes work explicitly presented as being actuarial – for example work with “actuarial report” in the title of the document provided to the user. In several of the examples below work is actuarial work because of the way it is presented.

Simple calculations using actuarial factors in pensions and insurance work

E.3 Simple calculations in pensions and insurance work can be divided into two categories. The first category is arithmetic calculations where no judgement is needed such as pension scheme transfer value calculations which use predetermined actuarial factors and follow instructions. These calculations are often carried out by administrative staff who do not have actuarial training. We consider that under the proposed approach these calculations are not actuarial work (unless presented as such) as they require simple arithmetic rather than techniques of actuarial science and no judgement is used. However, the production of the underlying factors would be actuarial work as actuarial techniques are used and judgement is needed when setting the assumptions.

E.4 The second category of simple calculation is where judgement is needed, for example in determining the method to be followed or the assumptions to be used. These cases might include bespoke calculations which might be simple but need actuarial expertise. Work in this category would be actuarial work.

E.5 Currently, simple calculations are in the scope of the TASs if the work is reserved to actuaries or if the work is in the scope of a Specific TAS.

Complex calculations using actuarial factors in pensions and insurance work

E.6 Complex calculations using actuarial factors are performed in a wide range of work in pensions and insurance. They may be performed using a spreadsheet or bespoke systems. Such calculations clearly use actuarial techniques and they will almost always require the use of judgement on matters such as setting assumptions. Even when the assumptions are prescribed it is likely that some judgement will be needed, for example in dealing with incomplete data. Therefore, in almost all cases we would expect that complex calculations using actuarial factors are actuarial work.

E.7 Complex calculations are in the scope of the existing TASs if the work is reserved to actuaries or if the work is in the scope of a Specific TAS.
Asset/liability modelling

E.8 Asset/liability modelling is work which uses techniques of actuarial science to project and value asset and liability cash flows and requires judgement and is therefore actuarial work under the proposed definition. It is carried out by actuaries and other investment professionals. Actuaries performing this work will have to comply with TAS 100. Other individuals and entities may also be required to comply with TAS 100 by the user of the work or by relevant regulators.

E.9 Asset/liability modelling to support investment decisions is not in the scope of the existing TASs although some asset/liability modelling to determine regulatory capital of insurers is in the scope of the Insurance TAS.

Actuarial software development

E.10 Software for actuarial work may be developed in-house or by specialist software houses. Examples of such software are systems for Solvency II internal models, for pricing general insurance products, and for pension scheme valuations. The development of these models requires actuarial expertise, actuarial principles are central to the work and judgement will be required throughout the development of a model. Therefore this work is actuarial work. However, components of the overall exercise, for example programming, might not be actuarial work.

E.11 Actuarial software development is not in the scope of the existing TASs although work which uses the software often is in scope.

Financial models used in investment banks

E.12 There is a wide range of financial models used in investment banks. Some of these models are complex and many will be used in transactions or decisions involving substantial sums of money. In such cases it is important that the models are of a high standard with appropriate checks and with users understanding the model limitations. Complexity and the financial significance of the decisions supported by results from these models are not in themselves sufficient to make the work in which these financial models are used actuarial work. However, some of these financial models, such as those used in pricing longevity swaps, catastrophe bonds, or other insurance or pension risk hedging instruments, use actuarial techniques and judgement will be used at various points in the modelling. Often such work is carried out by actuaries. Such work is actuarial work under the proposed definition.

E.13 The majority of financial modelling work in investment banks is not generally in the scope of the existing TASs. However some of this modelling work may now be in the scope of TAS 100.

The work of a pension scheme trustee

E.14 Pension scheme trustees often use actuarial information to assist them in making decisions. Sometimes an actuary will act as a trustee. The work underlying the actuarial information is actuarial work but the use of the actuarial information for trustee decisions, even when an actuary is a trustee, is not actuarial work as the use of principles and/or techniques of actuarial science is not a central requirement to perform the work.

E.15 The routine work of pension scheme trustees is not in the scope of the existing TASs.
The work of a Chief Risk Officer

E.16 The Chief Risk Officer (CRO) of an insurance company is sometimes an actuary. Much of the work of the CRO will not be actuarial work as the techniques and principles of actuarial science are not central to the work. However there may be some work carried out by the CRO which is actuarial work.

E.17 Currently, the work of CROs in connection with regulatory work is in the scope of the TASs but some other work is not.

The work of an insurance company non-executive director

E.18 Non-executive directors of insurance companies, like pension scheme trustees, often use actuarial information to assist them in making decisions. The work underlying the actuarial information is actuarial work but the use of the actuarial information for decisions is not actuarial work as the use of principles and/or techniques of actuarial science is not a central requirement to make the decision.

E.19 The routine work of insurance company non-executive directors is not in the scope of the existing TASs.

Reviewing actuarial work

E.20 There are two different ways in which actuarial work may be reviewed.

E.21 Firstly there is internal review (for example peer review) or some other form of internal review of work carried out which is performed as part of the exercise. The internal review on its own is not actuarial work as it is not a discrete exercise but part of the exercise as a whole, the product of which, as actuarial work, is in scope of TAS 100. Internal review is not in the scope of the existing TASs.

E.22 The second type of review is performed as a separate exercise. Such a review could be, for example, a second actuarial opinion or part of the audit of an insurer’s or a pension scheme sponsor’s financial statements. This type of review is likely to be presented as actuarial work to the user: the receiver of the second opinion or the auditor providing the audit opinion on the financial statements. We would also expect that the practitioner would have performed some independent validation of the work being reviewed which would use the principles and/or techniques of actuarial science. This second type of review is therefore usually actuarial work and subject to TAS 100.

E.23 Some of this second type of review work is in the scope of the existing TASs (eg providing actuarial support to auditors concerning the application of IAS 19 or actuarial work concerning insurance business performed by an auditor’s expert).

Actuaries working in wider fields

E.24 Actuaries in wider fields may use actuarial techniques and use judgement in their work even though the work might not be in a traditional area of actuarial work. This work is actuarial work under the proposed approach although in most cases non-actuaries performing the work would not have to comply with TAS 100 unless the user or a regulator required it. Most work in wider fields is not in the scope of the existing TASs unless it is presented as complying with the TASs.
Appendix F: ISAP 1

F.1 The International Actuarial Association (IAA) is the worldwide association for professional actuarial associations. The IFoA is a member of the IAA.

F.2 An International Standard of Actuarial Practice (ISAP) is a model for actuarial standard-setting bodies to consider produced by the International Actuarial Association (IAA). The intention of an ISAP is to promote a greater consistency of approach to actuarial practice, so as to increase the confidence of users and the public in actuarial work, but without unnecessarily constraining the exercise of actuarial judgment or creativity.

F.3 The IAA approved its first ISAP, ISAP 1, on general actuarial practice, at its Council meeting on the 18 November 2012. ISAP 1 covers technical and ethical matters and applies to all actuarial services which it defines as:

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

F.4 For ISAPs which are relevant in a jurisdiction, actuarial standard-setting bodies are encouraged to:

- adopt the ISAP as a standard with appropriate modification;
- endorse the ISAP as a standard as an alternative to existing standards;
- modify existing standards to obtain substantial consistency with the ISAP; or
- confirm that their existing standards are already substantially consistent with the ISAP.