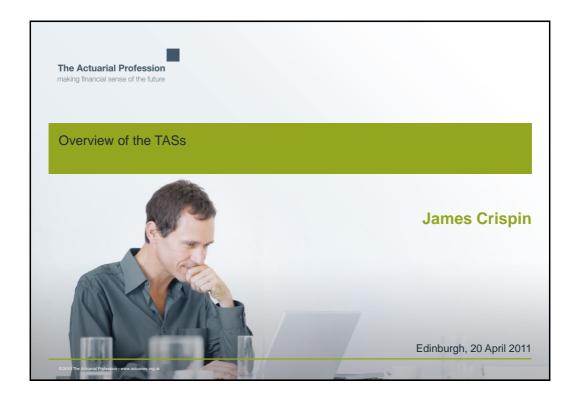


Contents	
4.25 – 4.30pm	Introduction
4.30 – 4.45pm	Overview of TAS R, M and D
4.45 – 5.00pm	Case Study 2: Longevity and Market Risk Assumptions
5.00 – 5.30pm	Case Study 3 (Delegate Workshop): Groups and Multinationals
5.30 – 5.45pm	Feedback and Discussion



1. Introduction

- TASs are a step forward in compliance linking with existing and emerging regulation:
 - FSA
 - Solvency II
- · Avoid being a tick-box exercise
- Principle of proportionality & materiality
- TASs are a minimum requirement

Scope - UK plus?

- The geographic scope of TASs is ... limited to work done in relation to the UK operations of entities and any overseas operations which report into the UK within the context of UK legislation or regulation.
- This definition of scope applies regardless of the location or domicile of the person carrying out the work.
- Strictly speaking though, the standards only apply to the members of the UK actuarial profession, although wider adoption is encouraged
- In particular need to consider compliance where non actuaries feed into work within scope

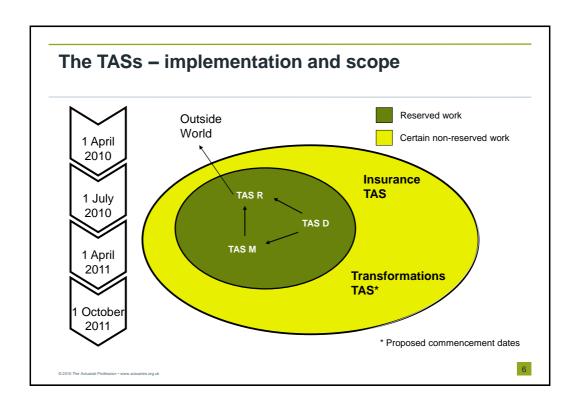
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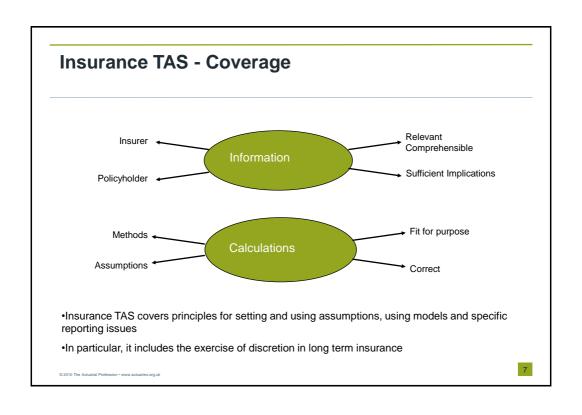
Spirit and Objective of the TASs

- The TASs are driven by the "Reliability Objective":
- "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"
- "The TASs are intended to assist in the achievement of the Reliability Objective. In applying TASs, it is important to be guided by the spirit and reasoning behind them, as well as following any detailed rules."

Scope & Authority, paragraph 20

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Insurance TAS - Applicability

- · Actuarial reports and supporting models and data for:
 - Accounts
 - FSA Returns
 - Tax returns
- Embedded Values
- · Exercise of Discretion
- Policyholder charges/benefits

- Pricing reports
- · Business transformation
- · Adequacy of Reinsurance under SII
- Reviewing Actuary
- · Mergers and Acquisitions
- · Effective 1 October 2011

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TAS R - coverage

Relevance

- ·Sufficient information
- ·State:
 - Purpose
 - •Who commissioned
 - •Who addressed to

TAS R deals with the interface between the Actuary and the user of the information

Complete

- ·All material matters
- •Nature / extent / significance of uncertainties, risk
- •Nature / objective / method for material calculations
- *Timing / Quantification of future cashflows
- Meaning of statistics and probabilities
- ·Changes to the report

Transparent

- ·Data / information used
- Source of data
- ·Any inaccuracies, uncertainties
- •Rationale behind assumptions /

Comprehensible

- •Report tailored to user style, structure, content
- Exclude non-material info if it clouds meaning
- Explain what results represent
- *Should include descriptions of terms such as "best estimate" "prudent" etc
- ·Clarification post-issue



TAS R - applicability

Actuarial Function

SUP

Advise the firm's management on the risks run by the firm

- · Monitor the risks
- Advice, perform and report on the methods and assumptions used for period actuarial investigations

Reports

- · Financial condition report
- · Persistency and data report
- Valuation report
- Part VII transfer report



- Advice the firms management on discretion applied to WP business
- Check assumptions are consistent with PPFM
- Once a year report to the governing body on key aspects of discretion applied to WP business
- · Produce a report to WP policyholders
- PPFM
- · Financial condition report
- Annual report to with-profits policyholder
- Part VII transfer reports (where WP Funds are part of the transfer)

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Note TAS I brings other reports into scope



TAS R - Key points

- TAS R was effective from 1 April 2010
- Concept of component and aggregate reports are introduced
 - Where there may be several preliminary reports which are combined into a final report, only the aggregate report needs to be compliant with the TASs
- Reports should consider Users' needs and should be understandable to users
- Descriptions of terms such as "best estimate" and "prudent" should be included in reports
- Care must be taken not to obscure material information by including immaterial information which reduces clarity
 - Judgement must be exercised as to what is and isn't material
- An indication must be provided about the uncertainty in the report
- Nature / significance of risks should be described
- An indication of cashflows should be included



TAS D

- Data is a fundamental part of insurance business and is entrenched in every decision e.g. day to day operation or strategic Board level decision
- The BAS has introduced TAS D to:
 - outline a quality standard
 - improve reliability of data
 - enable users to rely on actuarial judgement based on underlying data
- TAS D was effective from 1st July 2010.

The aim of TAS D is to ensure that data used is subject to sufficient scrutiny and checking, so that users can rely on the resulting actuarial information and any actions taken to mitigate inaccuracy or incompleteness of data increase the reliability of the resulting actuarial information.

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TAS D - Key points

- Existing documentation or checks that have already been performed and documented can contribute to compliance
- Generally this will mean improving the documentation of existing checks
- Data used in reports on reserved work after 1st July 2010 has to comply with TAS D
- However, wider scope will follow after the implementation of the Insurance TAS in October 2011
- It is important to document the purpose and limitation of the report
- Level of detail required in documentation and reporting is a matter of judgement



TAS M

- Models play a significant role in actuarial work for e.g. evaluating the solvency of insurance companies, part of the risk management process and in making strategic decisions.
- The BAS introduced TAS M to enhance reliability of actuarial models
- TAS M was effective from 1st April 2011.
- In addition, TAS R should ensure that users are aware of the limitations of the models and the results derived from them.

The aim of TAS M is to promote the reliability and usefulness of actuarial models and to improve the communication of actuarial information and advice. Compliance with TAS M will require models to be adequately documented and this will apply to both new implementation and existing models which are still being used once TAS M comes into force

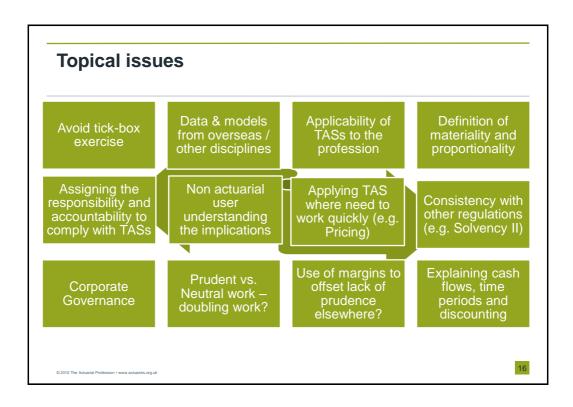
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TAS M - Key points

- TAS M will apply to models used in the preparation of aggregate reports completed on or after 1 April 2011
- TAS M will apply to models in existence before that date in so far as their results are used in reports after 1 April 2011
- If data ideally suited to the model is not available, alternative data can be used
- Where a number of data points are removed it is not necessary to document each point individually
- Externally produced models and documentation are within the scope of TAS M
- Existing complex model that can be justified can be used
- Users must be made aware of the limitations of models and the results derived from them







Case study 2: Longevity assumptions

BACKGROUND

In 2009 and 2010 the CMI published papers relating to the revised research
on longevity and the improvement in the longevity rate. The Actuarial
Profession has provided software to project longevity based on the CMI
investigations. The market intelligence you have been given is that the model
is complex and very sensitive to the inputs used.

TASK

 You have been asked to derive assumptions relating to longevity to be used for pricing/ financial reporting. Think about how changing longevity assumptions has wider affects, e.g. business strategy, model governance, back testing of assumptions etc.

CHALLENGE

Your Actuarial Function Holder (AFH) is very concerned that any work done around this assumption must be TAS compliant and says he will ask you to evidence compliance. You will be using the model provided by the Actuarial Profession. What needs to be done to pass the "show me" test and convince the AFH that the work is TAS compliant?

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Case study 2: Longevity assumptions Considerations (I)

SCOPE

Which TASs require consideration?

TAS I

 Comes under scope of TAS I as this will be an Actuarial Paper on Assumptions for Pricing and Financial Reporting to the Board

TAS M

- Confirmation of compliance of model from external supplier documentation of model, its limitations, inherent risks etc
- If model supplied before the TASs were effective what is the impact on the model and documentation in regards to TAS compliance
- CMI model needed TAS compliant documentation around work, need to be able to show you understand the model, sensitivity tests, results and validation
- Need to document why CMI model is relevant and appropriate Need to be able to state that "model is fit for purpose" – this would incorporate performing reasonableness tests on the model, identifying differences between old and new model and reasonableness on output checks



Case study 2 : Longevity assumptions Considerations (II)

TAS M (continued)

- · Developers of proprietary models need to demonstrate TAS-M compliance in the future
- · Checks applied that model being used correctly (comparisons with previous assumptions)

TAS R

- Justification of parameters and adjustments used explain and understand differences from current longevity assumptions
- Highlight uncertainty of assumptions for future improvements and possible cost of divergence from expected
- Definition of what is a neutral assumption
- · Who is going to give an answer to the TAS we are using?
- · Impacts of any commercial decisions

TAS D

- · Who validates that the data is accurate, complete and appropriate?
- · What checks are carried out on the data who owns these checks?
- · Have any adjustments been made to the data?





Case study 3a): Groups / Multinationals

BACKGROUND

 You lead the reporting function from an actuarial perspective for a UK insurer with a US-listed non-insurer parent, which has SOX controls in place.

TASK

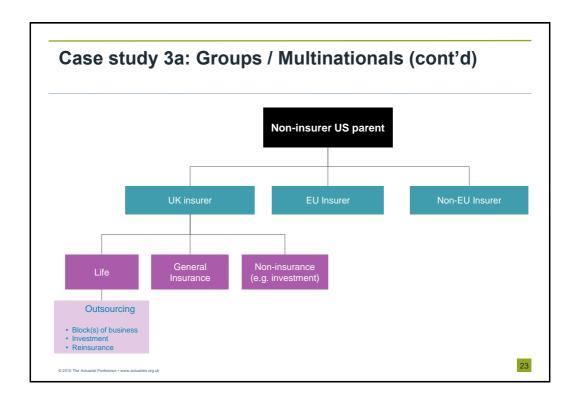
 The US parent has heard about the TASs and is concerned about the impact and cost of TAS compliance on the business having recently been through SOX compliance.

CHALLENGE

 Discuss the implications of TAS compliance for the UK company, coming up with at least one issue, how to approach it and associated risks for each TAS.

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Case study 3b): Groups / Multinationals

BACKGROUND

 You are an EEV reporting actuary working for a UK listed Group. Your responsibility is for the non-UK branch results.

TASK

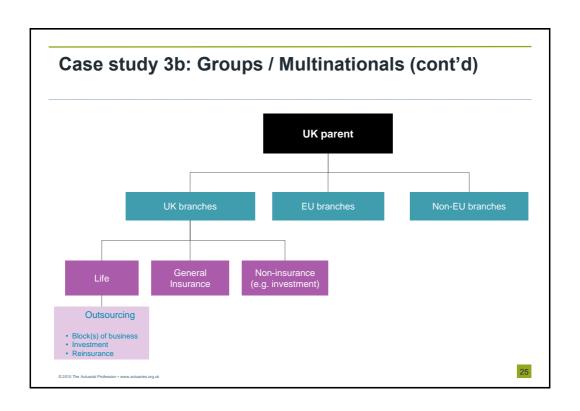
 The Group Compliance function are considering the scope of the TASs and whether Group results should state TAS compliance. They have asked you to attend an internal meeting to discuss the practicalities of TAS compliance for non-UK branches.

CHALLENGE

 Discuss the implications of Group TAS compliance for the non-UK subsidiaries, coming up with at least one issue, how to approach it and associated risks for each TAS.

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Case study 3c): Groups / Multinationals

BACKGROUND

 You lead the EEV Reporting team for a UK based group, with overall responsibility for the Group EEV results. You report into the CFO.

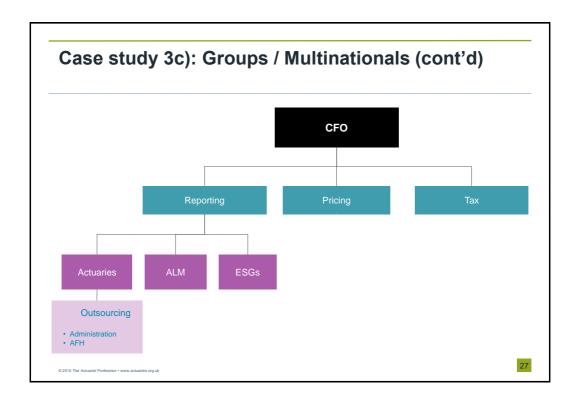
TASK

 Your CFO is an actuary who has heard about the TASs and wants to know whether the Group is TAS compliant. He has invited you to a meeting to discuss how the Reporting function will demonstrate TAS compliance and what the key issues and challenges are.

CHALLENGE

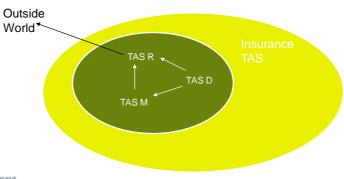
 Your CFO has stressed that he considers TAS compliance mandatory but that he does not want to incur significant cost to demonstrate this.
 Considering your own employer/experience come up with at least one issue for each TAS for the reporting function and highlight to the CFO the areas where you feel the Group is most exposed.





Case study 3: Groups / Multinationals

- Split into 6 groups (2 each for case study 3a), 3b) & 3c)
- Appoint a lead in each group
- 30 minutes to determine at least one issue approach risk for each of: _{Outside}



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Feedback and Discussion

All

Edinburgh, 20 April 2011

Case study 3: Groups/Multinationals Discussion Points/Learning

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Case study 3: Groups/Multinationals Discussion Points

TAS I

- Which TAS are relevant Financial Reporting is within scope of TASI
- Non UK Parent only UK part needs to demonstrate compliance? Is this considered internal report? How material is the UK business?
- Overseas results could be considered as Date so that only fall under TAS D
- Are global company standards in existence? Do they cover TAS as minimum?
- · Series of users How do individuals know they are complaint
- What are the additional costs of being compliant Will the risk governance process capture risk of non compliance?
- Assurance and validation audit/internal audit/ company standards
- Overall responsibility lies with actuary signing off to the board reliant on sign-off leading to the final report – managing cross functionality and non actuarial input – could result in multiple caveats
- Responsibility lies with each company to report to chief actuaries consider incorporating review process, template process, single sign off etc

TAS R

 Reports will have multiple users – Will need to consider how is info going to be used need to structure reports appropriately and define complaint reports



Case study 3: Groups/Multinationals Discussion Points

TAS D

- Different data systems, models and standards across entities. Documentation will be key and standard of which is likely to vary across entities. Documentation onerous – what level of guidance is there?
- Data issues reliance on work already done, allows greater proxies, different data owned by different groups e.g. asset data vs. assumption data
- · Reliant on non actuarial data how to get comfort over this?
- Could treat inputs from other entities as data (so different territories not needed to be TAS D compliant) apply TAS D to it e.g. comparators to last time, impact analysis etc.
- Materiality and Proportionality concept when considering where TAS D must apply

TAS M

- Legacy teams/models / Externally provided models Documentation and understanding of older models and external models is likely to be an issue
- · Limitations of the model which are material, how to communicate, aggregation issues
- Perceptions of inc scope/out scope decisions Quantifications of uncertainty
- Reports will have multiple users Will need to consider how is info going to be used need to structure reports appropriately and define complaint reports

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Concluding remarks

TAS compliance in practice

- The Insurance TAS is believed to present the most difficulties and most work, because of the number of actuaries impacted and that it brings in the other generic TAS's behind it
- The implementation of TAS-M and TAS-D complements work being done for Solvency II so this explains need to be taken into account and reduces the impact
- Much of the TASs were already previously being complied with but may need to formalise documentation

Benefits of being TASs compliant:

- · Good Business Practice
- Solvency II
- · Data and information flow
- Audit trail & documentation
- Facilitates stakeholders management
- Facilitates actuarial related processes pricing, financial reporting, MI
- Reduction in key man dependencies



