



BOARD FOR ACTUARIAL STANDARDS

**TECHNICAL ACTUARIAL STANDARD D:
DATA**

NOVEMBER 2009

DATA (TAS D)

Status

This standard (TAS D) is a Generic Technical Actuarial Standard (Generic TAS), as defined in the *Scope & Authority of Technical Standards (Scope & Authority)* of the Board for Actuarial Standards (BAS).

This standard should be read in the context of the *Scope & Authority*.

The *Scope & Authority* sets out circumstances in which material departures from this standard are permitted or required and the disclosures which are required in respect of them.

Scope

This standard, as a Generic TAS, applies to the work specified in the Schedule to the *Scope & Authority*. The scope of this standard will be affected by any amendments to the Schedule to the *Scope & Authority*.

Specific TASs may include provisions that include or exclude particular categories of work from the scope of this standard.

Wider adoption is encouraged.

Commencement

This standard applies to data used in the preparation of aggregate reports completed on or after 1 July 2010.

Earlier adoption is encouraged.

Relationship with other TASs and with Guidance Notes

This standard sets out principles to be adopted across the range of work to which it applies, as described above. Other Generic and Specific TASs may apply to work that is within the scope of this standard, setting out additional principles that should be adopted.

In the event of a conflict between this standard and a Guidance Note adopted by the BAS (as described in the *Scope & Authority*), this standard shall prevail.

CONTENTS

<i>Part</i>		<i>Page</i>
A	Purpose of TAS D	3
	A.1 Purpose	3
B	Interpretation	4
	B.1 Interpretation of the text	4
	B.2 Definitions	4
C	Data	6
	C.1 Introduction	6
	C.2 Application	6
	C.3 Reporting	6
	C.4 Documentation	7
	C.5 Data	7

A PURPOSE OF TAS D

A.1 PURPOSE

A.1.1 The BAS's Reliability Objective is 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.

A.1.2 The purpose of this standard is to assist the achievement of the Reliability Objective by ensuring that:

- **data**¹ used in work within its scope is subject to sufficient scrutiny and checking so that **users** can rely on the resulting actuarial information; and
- any actions taken because **data** is inaccurate or incomplete increase the reliability of the resulting actuarial information.

¹ Terms appearing in **bold** in the text are explained in the Definitions set out in Part B.

B INTERPRETATION

B.1 INTERPRETATION OF THE TEXT

- B.1.1 All text in this standard has equal status unless stated otherwise. Paragraphs setting out explicit principles are emphasised with boxes for convenience.
- B.1.2 The **Scope & Authority**² states that a failure to follow the principles in this standard need not be considered a departure if it does not have a **material** effect. The contents of this standard should be read in that context, even where the term **material** is not explicitly used or where the word “shall” is used.
- B.1.3 Nothing in this standard 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 be expected to obtain from the work.
- B.1.4 The form that is taken by any explanations, rationales, descriptions, indications or other analyses required by this standard will need to depend on the scope of the work being performed and the benefit to the **users**. The level of detail required is a matter for judgement. Unless stated otherwise, analyses may be quantitative or qualitative.
- B.1.5 Lists of examples are not intended to be exhaustive.
- B.1.6 This standard should be interpreted in the light of the purpose set out in Part A.

B.2 DEFINITIONS

- B.2.1 Terms appearing in **bold** in the text are used with the meanings set out below. Some of the definitions are taken from the **Scope & Authority**. The definitions are used consistently in the **Scope & Authority** and other BAS standards.

aggregate report	The set of all component reports relating to a piece of work within the scope of this standard. The aggregate report for a decision taken by a user in connection with work within the scope of this standard is the set of all component reports containing information material to that decision.
-------------------------	--

² Paragraph 23 of the **Scope & Authority**.

component report	A document given to a user in permanent form containing material information which relates to work within the scope of this standard. A component report may be given to the user in hard copy or electronically. Formal written reports, draft reports, emails and presentations are examples of component reports . Possible contents of component reports include tables, charts and other diagrammatic presentations as well as or instead of text. A component report may form part of one or more aggregate reports .
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.
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.
Generic TAS	A Technical Actuarial Standard which applies to all work specified in the Schedule to the Scope & Authority .
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 of reasonable judgement which requires consideration of the users and the context in which the work is performed and reported.
report	An aggregate report or a component report .
Scope & Authority	The BAS's <i>Scope & Authority of Technical Actuarial Standards</i> .
Specific TAS	A Technical Actuarial Standard that is not designated by the BAS as a Generic TAS . A Specific TAS is limited to a specific, defined context.
users	Those people whose decisions a report is intended (at the time of writing) to assist. Those to whom the report is addressed, regulators and third parties for whose benefit a report is written are examples of possible users .

C DATA

C.1 INTRODUCTION

- C.1.1 This Part contains principles that support the purpose of this standard set out in Part A. It should be interpreted as described in Part B.
- C.1.2 Work that is within the scope of this standard may also be within the scope of other BAS standards. In particular, the other **Generic TASs**, including those on *Reporting Actuarial Information* and *Modelling*, apply to all such work.
- C.1.3 Other principles concerning **data** may be contained in **Specific TASs**.
- C.1.4 Section C.2 describes how this standard should be applied.
- C.1.5 Sections C.3 to C.5 contain principles that contribute to the achievement of the purpose set out in Part A, covering matters that should be reported to **users** in respect of **data**, principles with which any **documentation** required by this standard should comply, and matters concerning **data** requirements, definitions, validation and incomplete or inadequate **data**.

C.2 APPLICATION

- C.2.1 This standard shall apply in respect of all **data** used in preparing actuarial information which is presented in a **report**.

Judgement

- C.2.2 Judgements concerning the application of this standard shall be exercised in a reasoned and justifiable manner.

- C.2.3 Examples of matters on which judgement might be needed include the nature of **data** checks and the course of action to be taken when **data** is incomplete.

C.3 REPORTING

- C.3.1 Principles for matters that should be reported to **users** in respect of **data** are contained in the **Generic TAS** on *Reporting Actuarial Information* (TAS R). They apply to all **data**, including **data** arising from adjustments or derived from supplementary sources.
- C.3.2 The principles in TAS R cover the need for a description of the **data** used, a statement of its source, a description of any uncertainty over the accuracy of the **data** and an explanation of the approach taken to the uncertainty in the calculations or in the results. Examples of approaches that might be taken to uncertainty include adjustments to assumptions or to results.

- C.3.3 Principles for matters that should be reported to **users** in respect of **data** may also be contained in **Specific TASs**.

C.4 DOCUMENTATION

C.4.1 All **documentation** required by this standard shall:

- a) contain enough detail for a technically competent person with no previous knowledge of the particular exercise for which the **data** is being used to understand the matters involved and assess the judgements made;
- b) include a statement of the purpose of the **documentation**; and
- c) be clear, unambiguous and complete for that purpose.

C.4.2 **Documentation** might take many forms, including separate physical or electronic documents or comments or headings in **data** files. **Documentation** might include documents prepared by others, such as policy documents, pension scheme deeds or booklets or documents provided by systems developers.

C.4.3 Principles regarding specific requirements for matters to be **documented** are contained in other sections of this standard.

C.5 DATA

Data requirements

C.5.1 Whenever work is undertaken an assessment shall be made of the **data** required in order to deliver the actuarial information needed by the **user**.

C.5.2 An assessment may take account of previous assessments made for similar exercises. An assessment might result in the conclusion that no additional **data** is required, or that none is available.

Data definitions

C.5.3 The definitions of all items of **data** shall be **documented**.

C.5.4 Examples of definitions include:

- unambiguous definitions of membership or policyholder **data** such as pensionable salary, age and status;
- unambiguous definitions of claims **data** such as accident or policy year and status; and
- clear definitions of the benefits provided by pension schemes.

C.5.5 Definitions may be **documented** in many ways, including **documentation** provided by those supplying the **data** or other third parties.

Validation

C.5.6 A set of checks shall be constructed and performed in order to determine the extent to which, taken overall, the **data** is sufficiently accurate, relevant and complete for **users** to rely on the resulting actuarial information.

C.5.7 The checks that have been performed shall be **documented**.

C.5.8 Paragraph C.5.6 does not create an audit requirement.

C.5.9 The extent of the checks to be carried out is a matter of judgement and will need to depend on matters such as:

- the source of the **data**;
- the terms of the engagement; and
- the extent and nature of checks known to have been carried out by other parties.

C.5.10 Examples of possible checks include:

- a comparison with **data** used for a previous exercise;
- checking that **data** values lie within reasonable limits;
- checking that the **data** is consistent with **data** from other sources; and
- spot checks.

Incomplete or inaccurate data

C.5.11 When **data** that is required is **materially** incomplete or inadequate, an assessment shall be made to determine whether the reliability of the **data** can be improved by adjusting or supplementing it.

C.5.12 The treatment of, or action taken for, incomplete or inaccurate **data** shall be **documented**.

C.5.13 An example of a way in which **data** might be adjusted is the substitution of average values for invalid or missing entries.

C.5.14 **Data** might be supplemented using additional sources of **data**, proxies or sampling methods. Any additional sources of **data** will need to be checked for relevance.

C.5.15 In some circumstances adjustments might be made to the assumptions used in models or calculations, or to their results, instead of or in addition to adjusting incomplete or inaccurate **data**. Any such adjustments will need to be **documented** and their effects identified.

Approved on 9 November 2009.

Version Effective from

1 1 July 2010



FINANCIAL REPORTING COUNCIL

5TH FLOOR

ALDWYCH HOUSE

71-91 ALDWYCH

LONDON WC2B 4HN

TEL: +44 (0)20 7492 2300

FAX: +44 (0)20 7492 2301

WEBSITE: www.frc.org.uk