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# **EUROPEAN STANDARD OF ACTUARIAL PRACTICE 1 (ESAP1)**

## **GENERAL ACTUARIAL PRACTICE**

**Approved as a model standard  
by the General Assembly of the Actuarial Association of Europe  
on 3 October 2014**

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## Preface

*[Drafting Notes - When an actuarial standard-setting organisation adopts this standard it should:*

1. *Replace “ESAP1” throughout the document with the local standard name;*
2. *Choose the appropriate phrase and date in paragraph 1.8;*
3. *Choose the appropriate phrase in sub-paragraph 3.1.2a;*
4. *Review for, and resolve, any conflicts with the local [law](#) and code of professional conduct; and*
5. *Delete this preface (including these drafting notes).]*

This EUROPEAN STANDARD OF ACTUARIAL PRACTICE (ESAP) is a model standard for member associations and other actuarial standard-setting bodies in Europe to consider. It is substantively identical in content to International Standard of Actuarial Practice 1 (ISAP1) issued as a model standard by the International Actuarial Association in November 2012. ESAP1 is not binding upon an [actuary](#) unless the [actuary](#) states that some or all of the [work](#) has been performed in compliance with this ESAP.

1. The ACTUARIAL ASSOCIATION OF EUROPE ([AAE](#)) encourages relevant actuarial standard-setting bodies in Europe to consider taking one of the following courses of action, if it has been determined that this ESAP1 is relevant for [actuaries](#) in their jurisdiction:
  - Adopting ESAP1 as a standard with or without modification, where items covered in ESAP1 are not currently contained in existing actuarial standards, or where such portions of existing standards are to be withdrawn;
  - Endorsing ESAP1 as a standard as an alternative to existing standards;
  - Modifying existing standards to obtain substantial consistency with ESAP1;
  - Confirming that ISAP1 has already been adopted; or
  - Confirming that existing standards are already substantially consistent with ESAP1.

For the avoidance of doubt, it is confirmed that:

- a) Whilst ESAP1 and ISAP1 are model standards, individual [actuaries](#) may elect, or be required by a relevant actuarial regulator, to use ESAP1 or ISAP1, or one or more standards which are equivalent to ESAP1 or ISAP1. In such situations compliance with ISAP1 should be treated, by the individual or actuarial regulator, as ‘deemed compliance’ with ESAP1 (and vice versa).
- b) Where a member association of the [AAE](#) adopts or endorses either ISAP1 or ESAP1 this can be assumed to imply adoption or endorsement of the other.
- c) Member associations which have declared that their own standards are substantially consistent with ISAP1 will, without further action, be reasonably be considered to have done so also in respect of ESAP1 (and vice versa).

2. Such an adopted standard (rather than this ESAP) applies to those [actuaries](#) who are subject to such body's standards, except as otherwise directed by such body (for example with respect to cross-border [work](#)).
3. When this ESAP is translated, the adopting body should select three verbs that embody the concepts of “must”, “should” and “may”, as described in 1.6 (Language), even if such verbs are not the literal translation of “must”, “should” and “may”.
4. ESAP1 was adopted by the General Assembly of the Actuarial Association of Europe on 3 October 2014.

## Section 1. General

- 1.1 Purpose** – This ESAP provides guidance to [actuaries](#) when performing [actuarial services](#) to give [intended users](#) confidence that
- [actuarial services](#) are carried out professionally and with due care;
  - the results are relevant to their needs, are presented clearly and understandably, and are complete; and
  - the assumptions and methodology (including, but not limited to, models and modelling techniques) used are disclosed appropriately.
- 1.2 Scope**
- 1.2.1 This ESAP is a general standard. It applies to all [actuarial services](#) performed by an [actuary](#) unless an element of guidance is explicitly superseded by another standard such as a practice-specific standard or by [law](#).
- 1.2.2 Usually, the intent of a practice-specific standard is to narrow the range of practice considered acceptable under the general standards. In exceptional cases, however, the intent of a practice-specific standard is to define as acceptable a practice which would not be acceptable under the general standards, in which case that intent is specifically noted by words in a practice-specific standard like: “Notwithstanding the general standards, the [actuary](#) should . . .”, followed by a description of the exception.
- 1.3 Compliance** – There are situations where an [actuary](#) may deviate from the guidance of this ESAP but still comply with the ESAP:
- 1.3.1 [Law](#) may impose obligations upon an [actuary](#). Compliance with requirements of [law](#) that conflict with this ESAP is not a deviation from the ESAP.
- 1.3.2 The actuarial code of professional conduct applicable to the [work](#) may conflict with this ESAP. Compliance with requirements of the code that conflict with this ESAP is not a deviation from the ESAP.
- 1.3.3 The [actuary](#) may depart from the guidance in this ESAP while still complying with the ESAP if the [actuary](#) provides, in any [report](#), an appropriate statement with respect to the nature, rationale and effect of any such departure.
- 1.4 Applicability** – This ESAP applies to [actuaries](#) when performing [actuarial services](#). An [actuary](#) who is performing these [actuarial services](#) may be acting in one of several capacities such as an employee, management, director, external adviser, auditor or supervisory authority of the [entity](#).
- 1.4.1 The application of this ESAP is clear when a single consulting [actuary](#) is performing [actuarial services](#) for a client who is not affiliated with the [actuary](#).
- 1.4.2 There are at least two general cases which do not meet the criterion stated in 1.4.1:
- a. A team of [actuaries](#) is performing [actuarial services](#); or
  - b. An [actuary](#) is performing [actuarial services](#) for an affiliated party (such as the [actuary](#)’s employer or affiliated [entities](#) within a group under common control).

- 1.4.3 When a team is performing [actuarial services](#), most paragraphs of this ESAP apply to every [actuary](#) on the team. However, requirements in some paragraphs need not be met by every [actuary](#) on the team personally (e.g. 3.1.1). In the case of such paragraphs, each [actuary](#) on the team should identify, if relevant to that [actuary](#)'s [work](#), which member of the team is responsible for complying with such requirements and be satisfied that the other team member accepts that responsibility.
- 1.4.4 If an [actuary](#) is performing [actuarial services](#) for an affiliated party, the [actuary](#) should interpret this ESAP in the context of practices that apply normally within or in relation to the affiliated party, except that, if there are substantive inconsistencies between these practices and this ESAP, the [actuary](#) should endeavour to observe the spirit and intent of this ESAP as fully as possible.
- a. The [actuary](#) should consider the expectations of the [principal](#). These expectations might suggest that it may be appropriate to omit some of the otherwise required content in the [report](#). However, limiting the content of a [report](#) may not be appropriate if that [report](#) or the findings in that [report](#) may receive broad distribution.
  - b. If the [actuary](#) believes circumstances are such that including certain content in the [report](#) is not necessary or appropriate, the [actuary](#) should be prepared (if challenged by a professional actuarial body with jurisdiction over the [actuarial services](#)) to describe these circumstances and provide the rationale for limiting the content of the [report](#).

**1.5 Reasonable Judgement** – The [actuary](#) should exercise reasonable judgement in applying this ESAP.

- 1.5.1 A judgement is reasonable if it takes into account:
- a. the spirit and intent of the ESAP;
  - b. the type of assignment; and
  - c. appropriate constraints on time and resources.
- 1.5.2 Nothing in this ESAP should be interpreted as requiring [work](#) to be performed that is not proportionate to the scope of the decision or the assignment to which it relates and the benefit that [intended users](#) would be expected to obtain from the [work](#).
- 1.5.3 Any judgement required by the ESAP (including implicit judgement) is intended to be the [actuary](#)'s [professional judgement](#) unless otherwise stated.

**1.6 Language**

- 1.6.1 Some of the language used in all ESAPs is intended to be interpreted in a very specific way in the context of a decision of the [actuary](#). In particular, the following verbs are to be understood to convey the actions or reactions indicated:
- a. “must” means that the indicated action is mandatory and failure to follow the indicated action will constitute a departure from this ESAP;
  - b. “should” (or “shall”) means that, under normal circumstances, the [actuary](#) is expected to follow the indicated action, unless to do so would produce a result that would be inappropriate or would potentially mislead the [intended users](#) of the [actuarial services](#). If the indicated action is not followed, the [actuary](#) should disclose that fact and provide the reason for not following the indicated action;
  - c. “may” means that the indicated action is not required, nor even necessarily expected,

but in certain circumstances is an appropriate activity, possibly among other alternatives. Note that “might” is not used as a synonym for “may”, but rather with its normal meaning.

- 1.6.2 This document uses various expressions, the precise meaning of which is defined in section 2. These expressions are highlighted in the text in blue. [with a dashed underscore and in blue, *which is also a hyperlink to the definition* (e.g. [actuary](#)).]
- 1.7 Cross-references** – When this ESAP refers to the content of another document, the reference relates to the referenced document as it is effective on the [adoption date](#) as shown on the cover page of this ESAP. The referenced document may be amended, restated, revoked or replaced after the [adoption date](#). In such a case, the [actuary](#) should consider the extent the modification is applicable and appropriate to the guidance in this ESAP.
- 1.8 Effective Date** – This ESAP is effective for {[actuarial services](#) performed/[actuarial services](#) commenced/[actuarial services](#) performed relevant to an event}<sup>1</sup> on or after [Date].

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<sup>1</sup> Phrase to be selected and date to be inserted by standard-setter adopting or endorsing this ESAP.

## Section 2. Definitions

The terms below are defined for use in this ESAP.

- 2.1 AAE** – Actuarial Association of Europe
- 2.2 Accepted Actuarial Practice** – A practice or practices that are generally recognised within the actuarial profession as appropriate to use in performing [actuarial services](#) within the scope of an ESAP or the applicable professional standards of practice.
- 2.3 Actuarial Services** – Services, based upon actuarial considerations, provided to [intended users](#) that may include the rendering of advice, recommendations, findings or opinions.
- 2.4 Actuary** – An individual member of one of the member associations of the [AAE](#).
- 2.5 Adoption Date** – The date on which this ESAP was adopted as a final document by the General Assembly of the [AAE](#).
- 2.6 Communication** – Any statement (including oral statements) issued or made by an [actuary](#) with respect to [actuarial services](#).
- 2.7 Entity** – The subject, in whole or in part, of the [actuarial services](#), including an enterprise, an insurer, a pensions or benefits plan, a social security scheme, an individual, a government department or agency, a group, etc.
- 2.8 Intended User** – Any legal or natural person (usually including the [principal](#)) whom the [actuary](#) intends at the time the [actuary](#) performs the [actuarial services](#) to use the [report](#).
- 2.9 Law** – Applicable acts, statutes, regulations or any other binding authority (such as accounting standards and any regulatory guidance that is effectively binding).
- 2.10 Principal** – The party who engages the provider of [actuarial services](#). The [principal](#) will usually be the client or the employer of the [actuary](#).
- 2.11 Professional Judgement** – The judgement of the [actuary](#) based on actuarial training and experience.
- 2.12 Report** – The [actuary](#)'s [communication](#)(s) presenting some or all results of [actuarial services](#) to an [intended user](#) in any recorded form, including but not limited to paper, word processing or spreadsheet files, e-mail, website, slide presentations or audio or video recordings.
- 2.13 Subsequent Event** – An event of which the [actuary](#) becomes aware after the valuation date (or date to which the [actuarial services](#) refer) but before the [actuary](#)'s [communication](#) on the results of these [actuarial services](#) is delivered.
- 2.14 Work** – All actuarial activities performed by an [actuary](#) related to [actuarial services](#). It usually includes acquisition of knowledge of the circumstances of the assignment, obtaining sufficient and reliable data, selection of assumptions and methodology, calculations and examination of the reasonableness of their result, use of other persons' [work](#), formulation of opinion and advice, documentation, reporting and all other [communication](#).



## Section 3. Appropriate Practices

### 3.1 Acceptance of Assignment

- 3.1.1 When providing [actuarial services](#), the [actuary](#) should confirm with the [principal](#) the nature and scope of [actuarial services](#) to be provided, including:
- the role of the [principal](#);
  - any limitations or constraints on the [actuary](#);
  - any requirements that the [actuary](#) is required to satisfy;
  - identification of the schedule and expected cost or resources needed (especially if they are substantial); and
  - the information needed to be communicated to and by the [actuary](#), especially if it is sensitive or confidential.
- 3.1.2 In accepting an assignment for [actuarial services](#), the [actuary](#) shall:
- {If adopting standard-setter has a standard on qualifications}* be qualified under *[name of standard]* to perform the services, or become qualified before the services are delivered;  
*{If adopting standard-setter does not have a standard on qualifications}* be competent and appropriately experienced to perform the services<sup>2</sup>;
  - be satisfied that the assignment can be performed under the applicable code of professional conduct; and
  - have reasonable assurance of time, resources, access to relevant employees and other relevant parties, access to documentation and information and the right of the [actuary](#) to communicate information, as may be necessary for the [work](#).

**3.2 Knowledge of Relevant Circumstances** – The [actuary](#) should have or obtain sufficient knowledge and understanding of the data and information available, including the relevant history, processes, nature of the business operations, [law](#) and business environment of the [entity](#), to be appropriately prepared to perform the [actuarial services](#) required by the assignment.

**3.3 Reliance on Others** – The [actuary](#) may use information prepared by another party such as data, relevant contracts, insurance contract or pension plan provisions, opinions of other professionals, projections and supporting analyses (but excluding assumptions or methodology). The [actuary](#) may select the party and information on which to rely, or may be given the information by the [principal](#). The [actuary](#) may take responsibility for such information or the [actuary](#) may state that reliance has been placed upon the source of this information and disclaim responsibility.

- 3.3.1 If the [actuary](#) selects the party on whom to rely, the [actuary](#) should consider the following:
- The other party's qualifications;
  - The other party's competence, integrity and objectivity;
  - The other party's awareness of how the information is expected to be used;
  - Discussions and correspondence between the [actuary](#) and the other party regarding any

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<sup>2</sup> Adopting standard-setter to choose one of these two phrases as appropriate, insert the name of qualification standard if applicable, and delete material between the { }.

facts known to the [actuary](#) that are likely to have a material effect upon the information used; and

e. The need to review the other party's supporting documentation.

3.3.2 If the [actuary](#) uses information prepared by another party without disclaiming responsibility for that information, the [actuary](#):

a. should determine that the use of that information conforms to [accepted actuarial practice](#) in the jurisdiction(s) of the [actuary](#)'s services;

b. should establish appropriate procedures for the management and review of the information that the [actuary](#) intends to use; and

c. does not need to disclose the source of the information.

3.3.3. If the [actuary](#) states reliance on the information prepared by another party and disclaims responsibility for it, the [actuary](#) should:

a. disclose that fact (including identifying the other party) in any [report](#) or other appropriate [communication](#);

b. disclose the nature and extent of such reliance;

c. examine the information for evident shortcomings;

d. when practicable, review the information for reasonableness and consistency; and

e. report the steps, if any, that the [actuary](#) took to determine whether it was appropriate to rely on the information.

3.3.4 If the information was prepared by the other party under a different jurisdiction, the [actuary](#) should consider any differences in the [law](#) or [accepted actuarial practice](#) between the two jurisdictions and how that might affect the [actuary](#)'s use of the information.

**3.4 Materiality** – In case of omissions, understatements or overstatements, the [actuary](#) should assess whether or not the effect is material. The threshold of materiality under which the [work](#) is being conducted should be determined by the [actuary](#) unless it is imposed by another party such as an auditor or the [principal](#). When determining the threshold of materiality, the [actuary](#) should:

3.4.1 assess materiality from the point of view of the [intended user](#)(s), recognising the purpose of the [actuarial services](#); thus, an omission, understatement or overstatement is material if the [actuary](#) expects it to affect significantly either the [intended user](#)'s decision-making or the [intended user](#)'s reasonable expectations;

3.4.2 consider the [actuarial services](#) and the [entity](#) that is the subject of those [actuarial services](#); and

3.4.3 consult with the [principal](#) if necessary.

### **3.5 Data Quality**

3.5.1 Sufficient and Reliable Data – The [actuary](#) should consider whether sufficient and reliable data are available to perform the [actuarial services](#). Data are sufficient if they include the appropriate information for the [work](#). Data are reliable if that information is materially accurate.

- 3.5.2 **Validation** – The [actuary](#) should take reasonable steps to review the consistency, completeness and accuracy of the data used. These might include:
- a. undertaking reconciliations against audited financial statements, trial balances or other relevant records, if these are available;
  - b. testing the data for reasonableness against external or independent data;
  - c. testing the data for internal consistency; and
  - d. comparing the data to that for a prior period or periods.

The [actuary](#) should describe this review in the [report](#).

- 3.5.3 **Sources of Data for Entity-Specific Assumptions** – To the extent possible and appropriate when setting [entity](#)-specific assumptions, the [actuary](#) should consider using data specific to the [entity](#) for which the assumptions are being made. Where such data are not available, relevant or credible, the [actuary](#) should consider industry data, data from other comparable sources, population data or other published data, adjusted as appropriate. The data used, and the adjustments made, should be described in the [report](#).

- 3.5.4 **Data Deficiencies** – The [actuary](#) should consider the possible effect of any data deficiencies (such as inadequacy, inconsistency, incompleteness, inaccuracy and unreasonableness) on the results of the [work](#). If such deficiencies in the data are not likely to materially affect the results, then the deficiencies need not be considered further. If the [actuary](#) cannot find a satisfactory way to resolve the deficiencies, then the [actuary](#) should consider whether to:
- a. decline to undertake or continue to perform the [actuarial services](#);
  - b. work with the [principal](#) to modify the [actuarial services](#) or obtain appropriate additional data; or
  - c. subject to compliance with the [actuary](#)'s code of professional conduct, perform the [actuarial services](#) as well as possible and disclose the data deficiencies in the [report](#) (including an indication of the potential impact of those data deficiencies).

### **3.6 Assumptions and Methodology**

- 3.6.1 The assumptions and methodology may be
- a. set by the [actuary](#) (3.7);
  - b. prescribed by the [principal](#) or another party (3.8); or
  - c. mandated by [law](#) (3.9).

- 3.6.2 Where the [report](#) is silent about who set an assumption or methodology, the [actuary](#) who authored the [report](#) will be assumed to have taken responsibility for such assumption or methodology.

- 3.7 Assumptions and Methodology Set by Actuary** – Where the [actuary](#) sets the assumptions and methodology, or the [principal](#) or another party sets an assumption or methodology that the [actuary](#) is willing to support:

- 3.7.1 **Selection of Assumptions and Methodology** – The [actuary](#) should select the assumptions and methodology that are appropriate for the [work](#). The [actuary](#) should consider the needs of the [intended users](#) and the purpose of the [actuarial services](#). In selecting assumptions and methodology, the [actuary](#) should consider the circumstances of the [entity](#) and the assignment, as well as relevant industry and professional practices. The [actuary](#) should consider to what extent it is appropriate to adjust assumptions or methodology to

compensate for known deficiencies in the available data.

- 3.7.2 Appropriateness of Assumptions – The [actuary](#) should consider the appropriateness of the assumptions underlying each component of the methodology used. Assumptions generally involve significant [professional judgement](#) as to the appropriateness of the methodology used and the parameters underlying the application of such methodology. Assumptions may (if permitted in the circumstances) be implicit or explicit and may involve interpreting past data or projecting future trends. The [actuary](#) should consider to what extent it is appropriate to use assumptions that have a known significant bias to underestimation or overestimation of the result.
- 3.7.3 Margins for Adverse Deviations – In cases where unbiased calculations are not required, the [actuary](#) should consider to what extent it is appropriate to adjust the assumptions or methodology with margins for adverse deviations in order to allow for uncertainty in the underlying data, assumptions or methodology. The [actuary](#) should disclose any incorporation of margins for adverse deviations in assumptions or methodology.
- 3.7.4 Discontinuities – The [actuary](#) should consider the effect of any discontinuities in experience on assumptions or methodology. Discontinuities could result from:
- a. internal circumstances regarding the [entity](#) such as changes in an insurer’s claims processing or changes in the mix of business; or
  - b. external circumstances impacting the [entity](#) such as changes in the legal, economic, legislative, regulatory, supervisory, demographic, technological and social environments.
- 3.7.5 Individual Assumptions and Aggregate Assumptions – The [actuary](#) should assess whether an assumption set is reasonable in the aggregate. While assumptions might be justifiable individually, it is possible that prudence or optimism in multiple assumptions will result in an aggregate assumption set that is no longer valid. If not valid, the [actuary](#) should make appropriate adjustments to achieve a reasonable assumption set and final result.
- 3.7.6 Internal Consistency of Assumptions – The [actuary](#) should determine if the assumptions used for different components of the [work](#) are materially consistent, and that any significant interdependencies are modelled appropriately. The [actuary](#) should disclose any material inconsistency in the [report](#).
- 3.7.7 Alternative Assumptions and Sensitivity Testing - The [actuary](#) should consider and address the sensitivity of the methodology to the effect of variations in key assumptions, when appropriate. In determining whether sensitivity has been appropriately addressed, the [actuary](#) should take into account the purpose of the [actuarial services](#) and whether the results of the sensitivity tests reflect a reasonable range of variation in the key assumptions, consistent with that purpose.
- 3.8 Assumptions and Methodology Prescribed** – Where the assumptions or methodology are prescribed by the [principal](#) or another party:
- 3.8.1 If the [actuary](#) is willing to support the prescribed assumption or methodology (following paragraph 3.7 as applicable), the [actuary](#) may disclose the party who prescribed the assumption or methodology and the [actuary](#)’s support.
- 3.8.2 If the [actuary](#) is unwilling to support the prescribed assumption or methodology because:
- a. it significantly conflicts with what would be appropriate for the purpose of the [actuarial](#)

[services](#), the [actuary](#) should disclose in the [report](#) that fact, the party who prescribed the assumption or methodology, and the reason why this party, rather than the [actuary](#), set the assumption or methodology; or

- b. the [actuary](#) has been unable to judge the appropriateness of the prescribed assumption or methodology without performing a substantial amount of additional [work](#) beyond the scope of the assignment, or the [actuary](#) was not qualified to judge the appropriateness of the assumption, the [actuary](#) should disclose in the [report](#) that fact, the party who prescribed the assumption or methodology, and the reason why this party, rather than the [actuary](#), set the assumption or methodology.

3.8.3 When the [principal](#) requests an additional calculation using an assumption set which the [actuary](#) does not judge to be reasonable for the purpose of the [actuarial services](#), the [actuary](#) may provide the [principal](#) with the results based on such assumptions. If those results are communicated to any party other than the [principal](#), the [actuary](#) should disclose the source of those assumptions and the [actuary](#)'s opinion of their appropriateness.

**3.9 Assumptions and Methodology Mandated by Law** – When an assumption or methodology is mandated by [law](#), the [actuary](#) should disclose in the [report](#) that the assumption or methodology was mandated by [law](#) and that the [report](#) should not be used for other purposes where the assumptions and methodology used are not appropriate (unless appropriately adjusted).

### **3.10 Process Management**

3.10.1 **Process Controls** – The [actuary](#) should consider to what extent, if any, the procedures used to carry out the [work](#) should be controlled, and if so, how.

3.10.2 **Reasonableness Checks** – The [actuary](#) should review the results produced by the selected assumptions and methodology for overall reasonableness.

**3.11 Peer Review** – The [actuary](#) should consider to what extent, if at all, it is appropriate for the [report](#) to be independently reviewed, in totality or by component, before the final [report](#) is delivered to the [principal](#) or distributed to the [intended users](#). The purpose of peer review is to ensure the quality of the [report](#), with the process tailored to the complexity of the [work](#) and the specific environment in which the [actuary](#) works. If a peer review is deemed to be appropriate:

3.11.1 The [actuary](#) should select a reviewer who is independent of involvement with the specific component(s) reviewed and is knowledgeable and experienced in the practice area of the [actuarial services](#).

3.11.2 If the reviewer is an [actuary](#), the reviewer should comply with the guidance of this ESAP, as applicable, in performing the review.

**3.12 Treatment of Subsequent Events** – The [actuary](#) should consider any [subsequent event](#) that has the potential of materially changing the results of the [actuarial services](#) if the event had been reflected in the [work](#) and disclose such an event in the [actuary](#)'s [communication](#).

### **3.13 Retention of Documentation**

3.13.1 The [actuary](#) should retain, for a reasonable period of time, sufficient documentation for purposes such as:

- a. peer review, regulatory review and audit;
  - b. compliance with [law](#); and
  - c. assumption of any recurring assignment by another [actuary](#).
- 3.13.2 Documentation is sufficient when it contains enough detail for another [actuary](#) qualified in the same practice area to understand the [work](#) and assess the judgements made.
- 3.13.3 Nothing in this ESAP is intended to give any person access to material beyond the access that they are already authorised to have.

## Section 4. Communication

- 4.1 General Principles** – Any communication should be appropriate to the particular circumstances and take the skills, understanding, levels of relevant technical expertise and needs of the intended user into consideration to allow the intended user to understand the implications of the actuary's communication.
- 4.1.1 Form and Content – The actuary should determine the form, structure, style, level of detail and content of each communication to be appropriate to the particular circumstances, taking into account the intended users.
- 4.1.2 Clarity – The actuary should word each communication to be clear and use language appropriate to the particular circumstances, taking into account the intended users.
- 4.1.3 Timing of Communication – The actuary should issue each communication within a reasonable time period. The timing of the communication should reflect any arrangements that have been made with the principal. The actuary should consider the needs of the intended users in setting the timing.
- 4.1.4 Identification of the Actuary – A communication shall clearly identify the issuing actuary. When two or more individuals jointly issue a communication, at least some of which is actuarial in nature, the communication shall identify all responsible actuaries, unless the actuaries judge it inappropriate to do so. The name of an organisation with which each actuary is affiliated also may be included in the communication, but the actuary's responsibilities are not affected by such identification. Unless the actuary judges it inappropriate, any communication shall also indicate to what extent and how supplementary information and explanation can be obtained from the actuary or another party.
- 4.2 Report** – The actuary should complete a report unless any intended users will otherwise be adequately informed about the results of actuarial services (including access to the supporting information which is necessary to understand these results). The actuary should present all information with sufficient detail that another actuary qualified in the same practice area could make an objective appraisal of the reasonableness of the actuary's work.
- 4.2.1 Content – In the report, the actuary should include, if applicable:
- the scope and intended use of the report;
  - the results of actuarial services, including the potential variability of these results;
  - the methodology, assumptions and data used;
  - any restrictions on distribution;
  - the date of the report; and
  - information on the authorship of the report.
- 4.2.2 Disclosures – In the report, the actuary issuing the report should disclose, if applicable:
- any material deviation from the guidance in this ESAP (1.3);
  - any reliance on information prepared by another party for which the actuary disclaims responsibility (3.3.3);
  - any data modification, validation and deficiencies (3.5);

- d. the [actuary](#)'s assessment of the uncertainty inherent in the information used by the [actuary](#) (3.5.4.c);
- e. any material inconsistency in the assumptions used (3.7.6);
- f. where the [report](#) contains the results of an additional calculation using an assumption set requested by the [principal](#) which the [actuary](#) does not judge to be reasonable for the purpose of the assignment (3.8.3);
- g. assumptions and methodology that have been prescribed by another party (3.8);
- h. assumptions and methodology that are mandated by [law](#) (3.9); and
- i. any material [subsequent event](#) (3.12).

4.2.3 Authorship – The [actuary](#) issuing the [report](#) should include in the [report](#):

- a. the [actuary](#)'s name;
- b. if applicable, the name of the organisation on behalf of which the [actuary](#) is issuing the [report](#), and the [actuary](#)'s position held;
- c. the capacity in which the [actuary](#) serves;
- d. the [actuary](#)'s qualifications;
- e. the code of professional conduct and actuarial standards under which the [work](#) was performed, if there is any possible ambiguity; and
- f. if applicable, attestations and reliances.

4.2.4 Form – A [report](#) may comprise one or several document(s) that may exist in several different formats. Where a [report](#) comprises multiple documents, the [actuary](#) should communicate to all [intended users](#) which documents comprise the [report](#). The [actuary](#) should ensure that [report](#) components (especially those in electronic media) are such that they can be reliably reproduced for a reasonable period of time.

4.2.5 Constraints – The content of a [report](#) may be constrained by circumstances such as legal, legislative, regulatory or supervisory proceedings. Constraints could also include other standards such as financial reporting standards or an [entity](#)'s accounting policy. The [actuary](#) should follow the guidance of this ESAP to the extent reasonably possible within such constraints.