



International Actuarial Association
Association Actuarielle Internationale

IAA Risk Book Professional Standards

Insurance Regulation
Committee

May 2023





IAA Risk Book Professional Standards

**This Risk Book chapter has been developed and approved
by the Insurance Regulation Committee of the IAA**

1203-99 Metcalfe, Ottawa ON K1P 6L7 Canada

www.actuaries.org

Tel: +1-613-236-0886

Email: secretariat@actuaries.org



Comment and feedback

Comment and feedback on Risk Book chapters is welcomed.

To provide comments on chapters of the Risk Book or to report any problems with the website, please send an email to riskbookcomments@actuaries.org.

Version

Number	Date Approved	Author(s)	IAA Reviewer(s)
1.0	July 2015	Godfrey Perrott	
2.0	May 2023	Godfrey Perrott	IAA Professionalism Committee Task Force: Peter Withey, Malcolm Campbell, Maryellen Coggins and Hillevi Mannonen



Table of Contents

Introducing the IAA Risk Book.....	1
1 Executive Summary	2
2 Key Messages	2
3 Background.....	2
4 Benefits of Actuarial Standards	3
5 Standard-Setters and Regulators.....	4
6 Local and IAA Model Standards.....	5
6.1 Local Standards.....	5
6.2 IAA Model Standards	5
6.3 Content of Standards	6
7 Enforcement of Standards	6
8 Conclusion	7



Introducing the IAA Risk Book

The actuarial profession has contributed significantly to the development of risk management tools and processes, in insurance, pensions and related industries. Actuarial skills are also increasingly being applied in new and developing areas of knowledge.

Actuarial practice continues to improve the understanding, measurement and communication of risk and risk events and their implications through the development of tools and increasingly processes to manage the future uncertainty of risks in a sustainable and transparent way. These tools and processes trace, manage and mitigate the acceptance and transmission of the uncertain outcomes of risks.

The Risk Book is intended to provide high-quality reference materials to support a better understanding of the risks and inherently uncertain future outcomes that need to be managed when delivering financial services products – whether they involve insurance, investments or retirement incomes, or more broadly. The Risk Book is written to be accessible to a wide range of readers, many of whom may not be actuaries or experts in the areas discussed but may be decision-makers in those areas. Consequently, the Risk Book should provide insight into the ideas and concepts behind actuarial topics and concepts. It is therefore focused on being descriptive rather than being formal and mathematically precise.

All the Risk Book chapters are publicly available on the IAA website and are periodically updated. See www.actuaries.org and follow the path to *Publications* and then to *Risk Book*. A discussion of their structure and relationships is provided in the chapter *Introduction – Using the Risk Book*.

The Risk Book is intended to be a dynamic and evolving resource, updated over time, reflecting new areas where actuarial expertise can add value, experience and advances, and topics of current interest and importance. It is electronically distributed to support ongoing updates. Risk Book chapters will be reviewed periodically at least every five years, and more frequently if significant changes or developments occur.

The development and maintenance of the Risk Book is managed by the Risk Book Editorial Board of the IAA Insurance Regulation Committee.

Many people, mostly actuaries, have contributed to the Risk Book. Contributors are listed on the website.

To submit comments or questions about this Risk Book chapter, or to report any problems with the website, please email riskbookcomments@actuaries.org. To express interest in becoming involved with the Risk Book please go to the website and provide the requested information.

1 Executive Summary

Codes of professional conduct (codes) and professional standards of qualification and practice (standards) provide the context in which sound actuarial practice addresses the needs of those who rely on the profession. The codes established by actuarial organizations provide the frameworks within which standards and expectations for the ethical behaviour of members may be addressed. Actuaries are bound by their member association's code of professional conduct and may also be subject to the code and standards of the association of the country in which they practice.

2 Key Messages

1. Actuarial standards serve to assure the public that actuaries are professionally accountable. This gives the users of actuarial work confidence that the work has been performed appropriately. At the same time, standards provide practising actuaries with a basis for assuring their work will conform to appropriate practice.
2. Actuarial standards (including those applicable to the assessment of risk and solvency of insurance companies and pension plans) can be of significant value to regulators.
3. Full Member Associations (FMAs) of the International Actuarial Association (IAA) must have codes that contain a common core of general principles and ethical standards. One such principle is that their members comply with applicable actuarial qualification and practice standards.
4. Actuarial standards and regulations interact with each other. Actuarial standards guide actuarial work. They are usually principle-based, rather than prescriptive, and permit departures from the standard's guidance if they can be justified. Regulations, on the other hand, are usually more likely to be prescriptive and mandatory. Actuarial standards do not override regulation.
5. Actuarial standards are adopted to apply to actuaries practising in a particular jurisdiction by whatever authority/authorities in that jurisdiction is/are entitled to enact standards.
6. The scope of actuarial practice standards includes the process of setting assumptions, selecting methodologies and disclosing the purpose for which the calculations were made, who set the assumptions, the actuary's opinion on their suitability and the uncertainty associated with the actuary's estimates.

3 Background

Qualification standards are the requirements that actuaries need to satisfy to be considered by the profession to be qualified to perform the work in question (and in some jurisdictions to describe themselves as an actuary). These usually include initial educational requirements required to obtain sufficient knowledge to practice (broadly or in a particular practice area), continuing professional development (CPD) requirements, and experience requirements. In some jurisdictions qualification standards may have additional requirements for specific actuarial services such as practising certificates or heightened CPD requirements.

Actuarial standards of practice address how actuarial work should be performed, and usually apply to the individual actuaries doing the work (in contrast to accounting standards, for example, which apply to the entity that is reporting its financial results). These standards usually address specific types of actuarial work, although some apply to all actuarial work.

Both types of standards are generally promulgated by a local standard-setter, which may be a local actuarial association, a separate standard-setting authority or a local regulator. The applicable regulator in a jurisdiction can require such standards to be followed in that jurisdiction.

The requirement to comply with codes and standards is supported in each FMA by a discipline process that can admonish, reprimand, suspend or even expel a member found (after appropriate due process) to have materially violated applicable codes or standards.

The IAA Professionalism Committee addresses these topics in its Professional Guideline PG1 – Principles of Professionalism.¹ It discusses in detail the high-level principles of professionalism under the headings of:

1. Knowledge and expertise;
2. Value and behaviour; and
3. Professional accountability.

Material addressing professionalism aspects of cross-border actuarial services can be found in the IAA Professionalism Committee Professional Guideline PG2 – Governance of International Actuarial Work.²

4 Benefits of Actuarial Standards

A summary of the role and benefits of well-developed and well-managed standards of practice has been described by one standard-setter as follows:³

1. Standards of practice serve to assure the public that actuaries are professionally accountable. At the same time, standards provide practicing actuaries with a basis for assuring that their work will conform to appropriate practices. Standards protect the public by:
 - a. Indicating for various areas of actuarial practice the appropriate procedures, techniques, and approaches, thereby enhancing the public's trust in the credibility and completeness of the actuarial work product.
 - b. Providing a means by which the many separate elements that make up actuarial practice can be reviewed and updated on a regular basis, so that practice remains current.
 - c. Furnishing criteria for evaluating actuarial work products.
 - d. Providing a basis for discipline in those instances in which standards are not adhered to.
2. For individual actuaries, standards confer major benefits as well, by:
 - a. Providing guidance, particularly in practice areas that may be somewhat unfamiliar.

¹ PG1 – Principles of Professionalism, approved 7 October 2017, www.actuaries.org/ABOUT/Documents/PG1_Principles_Professionalism.pdf

² PG2 – Governance of International work, approved 18 November 2020, www.actuaries.org/ABOUT/Documents/PG2_Governance_International_Work.pdf

³ U.S. Actuarial Standards Board: www.actuarialstandardsboard.org/aboutasb.asp, referenced 14 April 2023.

- b. Giving strong evidence to any interested observer that the profession serves the public in an effective and responsible way.
 - c. Offering evidence of appropriate professional performance, which constitutes a defense in any civil or professional disciplinary action.
3. Standards of practice also serve to further assure regulatory authorities that they can depend on the actuarial profession to act effectively in the public interest. Written standards of practice, coupled with written provisions for disciplining members, show that a profession governs itself and takes an active interest in protecting the public.

The existence of effective standards enables a profession to describe appropriate practice, thereby narrowing the range of acceptable practice and discouraging poor practice. This is achieved by establishing expectations of professional practice and, through the code of conduct, expectations of professional behaviour. The potential threat of professional sanctions for non-compliance further supports conformance with appropriate practice, thus giving users of actuarial work confidence that this work has been performed appropriately.

Standard-setters promulgate practice standards to codify appropriate practice. They do not attempt to codify generally accepted practice, as such practice may become outdated or no longer be appropriate. Standards should remain up to date and relevant, and new standards may be required to address new regulatory needs and/or to guide work in developing areas of practice where accepted practice has not yet been established.

Periodic review of existing standards by practitioners also provides a feedback loop for working actuaries to comment on how the standards may be improved if modified, supplemented, amended or repealed.

Actuarial standards also provide support for actuaries doing appropriate work who are challenged by their principal with respect to their work.

5 Standard-Setters and Regulators

Standards of practice and regulations interact with each other. Standards of practice guide actuarial work. They are usually principle-based, rather than prescriptive. In some jurisdictions standards use the verb “must”, meaning their guidance has to be followed in all circumstances. Much more often, standards do not use “must”. Instead, they state what the actuary “should” consider, do and disclose when performing a particular type of assignment. This accommodates unforeseen situations, not contemplated in the standards, in which application of the standard would produce an inappropriate result. In such situations, it would be unprofessional to apply the standard. However, any such departure from the guidance of a standard should be identified and explained.

Regulations, on the other hand, are usually more likely to be prescriptive and mandatory. In the event of a conflict between actuarial standards and applicable law (including regulations), the law would govern.

Many standard-setters maintain a feedback loop with relevant local regulators. Periodic meetings allow regulators to bring issues that they have observed or concerns that have arisen in their review of practice to the standard-setters.

6 Local and IAA Model Standards

6.1 Local Standards

Local actuarial standards are promulgated by a local standard-setter, which may be a local actuarial association, a separate standard-setting authority or a local regulator. In the case of a separate standard-setter, it may be within the ambit of the local profession as a whole (e.g., in the USA practice standards are set by the Actuarial Standards Board and apply to members of all actuarial organizations in that country) or an entity separate from the profession (e.g., in the UK the Financial Reporting Council sets standards for actuaries, auditors and accountants).

Local standards under most codes are binding on any credentialed actuary performing actuarial services in the standard-setter's jurisdiction. In some jurisdictions, local standards could be based on an IAA model standard, as discussed below.

6.2 IAA Model Standards

In addition to local standards promulgated by standard-setters in a specific jurisdiction, the IAA has produced a number of "model standards" that are not binding in any specific jurisdiction, unless specified by a local standard-setting body, but can be used in several ways:⁴

1. An individual actuary may state compliance with one or more International Standards of Actuarial Practice (ISAPs) in his or her report (either of the actuary's volition, or because the client requires it), in which case the actuary is bound by those ISAPs.
2. A local standard-setter may create a new local standard by adopting an ISAP, making only the changes specified in the drafting instructions within the ISAP.
3. A local standard-setter may base a new local standard on an ISAP by making more extensive changes.
4. A local standard-setter may revise its existing standards to be substantially consistent with an ISAP.
5. A local standard-setter may conclude that one or more of its existing standards are substantially consistent with an ISAP.

The IAA is uniquely positioned to develop ISAPs as a contribution to stakeholders in the financial services sector worldwide and address matters that have widespread practical relevance to actuarial work. A standard of actuarial practice is a statement of behaviour expected of actuaries operating within a specified context. The intention of a standard of actuarial practice is to achieve greater consistency of approach to actuarial practice in a given situation, so as to increase the confidence of clients and the public in the actuarial work product, but without unnecessarily constraining the exercise of actuarial judgment or creativity. Standards address matters such as the methodology to be employed, the approach to be used in setting assumptions, the contents of the resulting report or opinion, and the way in which the report or opinion should be presented.

⁴ Even if a local standard-setter does not follow any of these actions, it may still benefit from the IAA model standard in the development and maintenance of its own standards.

6.3 Content of Standards

Actuarial standards cover actuarial work such as the process of setting assumptions, selecting methodologies and making disclosures. These disclosures include the purpose for which the calculations were made, who set the assumptions, the actuary's opinion on their suitability and the uncertainty associated with the actuary's estimates.

Although historically most actuarial standards of practice focused on the calculations actuaries make or the principles to be followed in making those calculations, they are increasingly focused on processes used by actuaries. Some examples of this process orientation are standards relating to enterprise risk management (ERM) in the USA, and parts of the European Standard of Actuarial Practice 2, Actuarial Function Report under Solvency II (revised 1 October 2021), in Europe. The U.S. ERM standards in particular address the appropriate processes and considerations needed to evaluate an ERM approach, rather than to produce a number. This is consistent with the recent focus of banking, insurance and pension regulators on governance structures and processes.

Actuarial standards that are binding on actuaries within the applicable jurisdiction are different from educational or research material that may be published by an actuarial organization. Such material is educational in nature; an actuary may use it or not, as the actuary deems appropriate. This fact is often stated prominently. Examples of this type of material include International Actuarial Notes (IANs) published by the IAA, monographs and research papers.

7 Enforcement of Standards

As stated at the beginning of this chapter, codes and standards are part of the professional context to ensure that sound actuarial practice addresses the needs of the public at large. This context also includes a discipline process to ensure that conduct follows the principles laid out in codes and complies with standards. The IAA has therefore established a set of criteria that a discipline process must satisfy as one of the accreditation requirements for FMAs. These criteria are:

1. A complaint process is accessible to anyone affected by an actuary's work and the actuary's professional peers.
2. Due process of defence is available to the actuary complained against, so that the actuary's rights are fully respected.
3. There is an objective formal appeal process independent of the body that has ruled at the prior level.
4. There are available sanctions appropriate to the seriousness of the violations committed, including termination of membership in the association.
5. Appropriate notice and information are given to the public of the results of the complaint process where any penalty is imposed.



The IAA paper Professionalism Committee Paper on Considerations in the Design of a Discipline Process⁵ provides information on the items to be addressed when instituting a formal discipline process.

One way the regulator can verify that standards have been followed is to require a review of an actuary's work by another qualified actuary. This should be an actuary who is qualified to provide the type of work that he or she is reviewing, and is typically an actuary who has not been involved in the work in question. It can be an independent actuary who does not work for the company or group.

8 Conclusion

Actuarial standards of practice benefit regulators, users of actuarial work and practising actuaries as each group carries out their different roles. Actuarial standards support the production of a professional, appropriate work product on which regulators and users may rely with confidence.

⁵ www.actuaries.org/CTTEES_ACCRED/Documents/Considerations_Design_Discipline_Process_EN.pdf, approved July 2008.



IAA Risk Book
Professional Standards

Website: See www.actuaries.org and follow the path to 'Publications' and then to 'Risk Book'

Feedback: Please send to riskbookcomments@actuaries.org