



HB 89—2012
Risk management – Guidelines
on risk assessment techniques



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Handbook

Risk management—Guidelines on risk assessment techniques

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PREFACE

This Handbook is based on international standard IEC 31010:2009, *Risk management—Risk assessment techniques* and incorporates material from AS/NZS 3931 *Risk analysis of technological systems—Application guide* (IEC 60300-3-9) (withdrawn). The objective of the Handbook is to provide guidance on good practice for assessing risk, as part of a risk management process and to assist in making decisions under conditions of uncertainty. It provides an overview of a range of risk assessment techniques, and guidance on their selection and implementation.

This Handbook was prepared under the direction of Standards Australia Committee QR-005, Dependability, with input from the Joint Standards Australia/Standards New Zealand Committee OB-007, Risk Management. It accompanies the standard for risk management AS/NZS ISO 31000:2009, *Risk management—Principles and guidelines*. This international standard, adopted by Standards Australia and Standards New Zealand, describes the fundamental principles of risk management, provides a framework for integrating risk management into an organization and describes a process for managing risk effectively. The Standard post-dates the development of many of the techniques described in this Handbook, so there may be some discrepancy between terminology traditionally used and that of AS/NZS ISO 31000 and ISO Guide 73:2009, *Risk management—Vocabulary*. However, the techniques remain valid and, over time, it is expected that terminology will become fully compatible with the new standards.

Many of the techniques described in this handbook were originally developed to consider risk in technological applications but increasingly they are being applied much more widely. However, techniques specifically developed for and used in the assessment of financial risks are not included here.

This Handbook strives to aid the process of ongoing development in the use of the techniques and a consistent terminology, aligned with the definitions in ISO Guide 73:2009 and AS/NZS ISO 31000:2009. Many of the techniques described have not traditionally included a requirement to explicitly link 'risk' to an organization's objectives or to consider the organizational context. However, that is not to suggest that such a link was not assumed or inferred, or is not valuable; a clearly stated link is essential to ensure the effective use of these techniques.

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