



The risk management toolbox

by Maria Lazarte and Sandrine Tranchard

Organizations can now benefit from a well-stocked toolbox for risk management featuring:

- ISO 31000:2009, *Risk management – Principles and guidelines*
- ISO Guide 73:2009, *Risk management vocabulary*
- ISO/IEC 31010:2009, *Risk management – Risk assessment techniques*.

Tackling uncertainty

Risks affecting organizations may have consequences in terms of societal, environmental, technological, safety and security outcomes; commercial, financial and economic results, as well as social, cultural and political reputation impacts. ISO 31000:2009 will help organizations of all types and sizes to manage risk effectively.

ISO 31000 provides principles, a framework and a process for managing any form of risk in a transparent, systematic and credible manner within any scope or context. It recommends that organizations develop, implement and continuously improve a risk management framework as an integral component of their management system.

Kevin W. Knight AM¹⁾, Chair of the ISO working group that developed the standard explains, “ISO 31000 is a practical document that seeks to assist organizations in developing their own approach to the management of risk. But this is not a standard that organizations can seek certification to. By implementing ISO 31000, organizations can compare their risk management practices with an internationally recognized benchmark, providing sound principles for effective management.”

ISO Guide 73:2009, *Risk management vocabulary*, complements ISO 31000 by providing a collection of terms and definitions relating to the management of risk.

ISO 31000 is designed to help organizations:

- Increase the likelihood of achieving objectives
- Encourage proactive management
- Be aware of the need to identify and treat risk throughout the organization
- Improve the identification of opportunities and threats

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- Comply with relevant legal and regulatory requirements and international norms
- Improve financial reporting
- Improve governance
- Improve stakeholder confidence and trust
- Establish a reliable basis for decision making and planning
- Improve controls
- Effectively allocate and use resources for risk treatment
- Improve operational effectiveness and efficiency
- Enhance health and safety performance, as well as environmental protection
- Improve loss prevention and incident management
- Minimize losses
- Improve organizational learning
- Improve organizational resilience.

“Risk is inherent in all activities. And it can be argued that the global financial crisis resulted from the failure of boards and executive management to effectively manage risk. ISO 31000 is expected to help industry and commerce, public and private, to confidently emerge from the crisis,” said Mr. Knight.

Risk assessment

When risks occur, organizations always have to ask the question: “Is the level of risk tolerable or acceptable, and does it require further treatment?”

Risk assessment is an integral part of risk management which provides a structured process for organizations to identify how objectives may be affected. It is used to analyse risk in terms of consequences and their probabilities, before the organization decides on further treatment, if required.

The third standard, ISO/IEC 31010:2009, *Risk management – Risk assessment techniques*, has been developed jointly by ISO and its partner IEC (International Electrotechnical Commission).

Risk assessment provides decision-makers and responsible parties with an improved understanding of risks that could affect achievement of objectives, as well as of the adequacy and effectiveness of controls already in place. The standard provides a basis for decision

about the most appropriate approach to treat particular risks and select between options.

ISO/IEC 31010 will assist organizations in implementing the risk management principles and guidelines provided in ISO 31000.

ISO/IEC 31010 reflects current good practice and answers the following questions:

- What can happen and why?
- What are the consequences?
- What is the probability of their future occurrence?
- Are there any factors that mitigate the consequences of the risk or that reduce the probability of the risk?

The application of a range of techniques is introduced, with specific references to

ards, developed with a view to providing a ‘best practice’ approach.”

To be used by all

ISO 31000, ISO Guide 73, ISO/IEC 31010 can be applied to any public, private or community enterprise, association, group or individual. The documents will be useful to:

- Those responsible for implementing risk management within their organizations
- Those who need to ensure that an organization manages risk
- Those needing to evaluate an organization’s practices in managing risk
- Developers of standards, guides procedures and codes of practice relating to the management of risk.



other relevant International Standards. Risk assessment is not a stand-alone activity and should be fully integrated into the other components in the risk management process.

Eric Mahy, Project leader of the standard comments, “ISO/IEC 31010 has been developed for application by both the risk management novice and the seasoned risk professional. It forms part of an integrated risk management structure of stand-

ISO 31000 and ISO Guide 73 were developed by the ISO Working Group on Risk Management while, ISO/IEC 31010:2009 was prepared by IEC technical committee 56, *Dependability*, together with the ISO Working Group on Risk Management.

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Tackling environmental challenges with the ISO 14000 family

by Roger Frost

ISO has published a new, updated brochure providing a basic introduction, as its title indicates, to *Environmental management – The ISO 14000 family of International Standards*.

The 12-page, colour brochure is the latest edition of a successful publication first released in 1998, two years after the launching of the first standards in the ISO 14000 family. Since then, the ISO 14000 standards have achieved a worldwide impact and the brochure gives a concise idea of how the family has evolved to provide comprehensive solutions to the range of environmental challenges facing business, government and society today.

The brochure was authored by experts from ISO technical committee ISO/TC 207, *Environmental management*, which is responsible for the ISO 14000 family. They point out that the ISO 14000 standards not only provide environmental benefits, but also significant tangible economic benefits, including the following:

- Reduced raw material/resource use
- Reduced energy consumption
- Improved process efficiency
- Reduced waste generation and disposal costs
- Utilization of recoverable resources.

The brochure includes an overview of the standards making up the ISO 14000 family. The best known standard is ISO 14001:2004. By the end of December 2008, the standard was being used by organizations in 155 countries as a framework for environmental management systems (EMS) to manage better the impact of their activities on the environment and to demonstrate sound environmental management. Other published standards, which can be used independently or in combination with ISO 14001 and with each other, address the following topics:

- Environmental performance
- Environmental labels and declarations
- Life-cycle assessment
- Greenhouse gas (GHG) accounting, verification and accreditation



- Environmental communication
- Environmental aspects in product standards.

Further documents now under development provide tools for the following activities:

- Eco-efficiency assessment

- Material flow cost accounting
- Carbon footprint of products (and its calculation)
- Phased implementation of an EMS
- Eco-design
- Quantitative environmental evaluation
- Competence requirements for GHG validators and verifiers.

The ISO 14000 family is designed to be implemented according to the same Plan-Do-Check-Act (PDCA) cycle underlying all ISO management systems standards. A table in the brochure classifies the ISO 14000 standards according to their optimal place in the PDCA cycle. Other sections cover the following aspects:

- ISO's overall contribution to the environment, which goes beyond the work ISO/TC 207
- Environmental management and sustainability
 - An introduction to ISO/TC 207, including its origins and the global participation in its work.

Because the work of ISO/TC 207 is constantly evolving, the committee's section on the ISO Web site should be consulted for the latest information on its work programme and membership. However, the new edition of the ISO 14000 brochure answers a need for a basic, but comprehensive introduction for distribution at conferences, or requested by potential users of the standards, and by students.

Environmental management – The ISO 14000 family of International Standards, which is published in English and French paper editions, is available free of charge (fee for postage and handling of bulk orders) from the ISO Central Secretariat through the ISO Store or by contacting the Marketing, Communication and Information department (sales@iso.org). It can also be obtained from ISO national member institutes. The brochure is also available as a PDF file on the ISO Web site (www.iso.org).

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