

**AS/NZS ISO 31000:2009
- ISO/IEC 31010
& ISO Guide 73:2009
International Standards for the
Management of Risk**

Kevin W Knight AM;
CPRM; Hon FRMIA; FIRM (UK); LMRMIA.

**CHAIRMAN
ISO PROJECT COMMITTEE 262 - RISK MANAGEMENT**

**MEMBER
STANDARDS AUSTRALIA / STANDARDS NEW ZEALAND
JOINT TECHNICAL COMMITTEE OB/7 - RISK MANAGEMENT**

**P O BOX 226, NUNDAH Qld 4012, Australia
E-mail: kknight@bigpond.net.au**

Managing Risk

- **We all manage risk consciously or unconsciously**
 - **but rarely systematically**
- **Managing risk means forward thinking**
- **Managing risk means responsible thinking**
- **Managing risk means balanced thinking**
- **Managing risk is all about maximising opportunity and minimising threats**
- **The risk management process provides a framework to facilitate more effective decision making**

History of the ISO and Risk Management



- **Over 80 separate ISO and IEC Technical Committees are addressing aspects of risk management**
- **27th June 2002, ISO/IEC Guide 73, Risk Management - Vocabulary” published.**

- **2004 ISO Technical Management Board (TMB)**
 - **approached by Australia and Japan**
 - **AS/NZS 4360:2004 to be adopted by ISO.**

- **June 2005, TMB sets up Working Group (WG)**
- **15.11.2009 ISO 31000 & ISO Guide 73 published**
- **19.11.2009 AS/NZS ISO 31000:2009 replaces AS/NZS 4360.**
- **27.11.2009 ISO/IEC 31010 published.**

Terms of Reference as approved by Technical Management Board

- **The WG provides a document which provides principles and practical guidance to the risk management process.**
- **The document is applicable to all organizations, regardless of type, size, activities and location and should apply to all type of risk.**

Terms of Reference as approved by ISO TMB

(Continued)

The document should:

- **establish a common concept of a risk management process and related matters.**
- **provide practical guidelines to:**
 - **understand how to implement risk management**
 - **identify and treat all types of risk,**
 - **treat and manage the identified risks,**
 - **improve an organization's performance through the management of risk,**
 - **maximize opportunities and minimize losses in the organization;**
 - **raise awareness of the need to treat and manage risk in organizations.**

Terms of Reference as approved by TMB (Continued)

2. Type of deliverable

The standard to be developed is a Guideline document, *and is NOT to be used for the purpose of certification.*

ISO Guide 73:2009 - Scope

- **provides a basic vocabulary of the definitions of generic terms related to risk management**
- **aims to encourage a mutual and consistent understanding, a coherent approach to the description of activities relating to the management of risk, and use of risk management terminology in processes and frameworks dealing with the management of risk.**

Terms included in ISO Guide 73

in Alphabetical order

- COMMUNICATION & CONSULTATION
- CONSEQUENCE
- CONTROL
- ESTABLISHING THE CONTEXT
- EVENT
- *EXPOSURE*
- EXTERNAL CONTEXT
- *FREQUENCY*
- *HAZARD*
- INTERNAL CONTEXT
- LEVEL OF RISK
- LIKELIHOOD
- MONITORING
- *PROBABILITY*
- RESIDUAL RISK
- *RESILIENCE*
- REVIEW
- RISK
- *RISK ACCEPTANCE*
- *RISK AGGREGATION*
- RISK ANALYSIS
- *RISK APPETITE*
- RISK ASSESSMENT
- *RISK ATTITUDE*
- *RISK AVERSION*
- *RISK AVOIDANCE*
- RISK CRITERIA
- *RISK DESCRIPTION*
- RISK EVALUATION
- *RISK FINANCING*
- RISK IDENTIFICATION
- RISK MANAGEMENT
- *RISK MANAGEMENT AUDIT*
- RISK MANAGEMENT FRAMEWORK
- RISK MANAGEMENT PLAN
- RISK MANAGEMENT POLICY
- RISK MANAGEMENT PROCESS
- *RISK MATRIX*
- RISK OWNER
- *RISK PERCEPTION*
- RISK PROFILE
- *RISK REGISTER*
- *RISK REPORTING*
- *RISK RETENTION*
- *RISK SHARING*
- RISK SOURCE
- *RISK TOLERANCE*
- RISK TREATMENT
- STAKEHOLDER
- *VULNERABILITY*

The Pivotal Definition

risk

effect of uncertainty on objectives

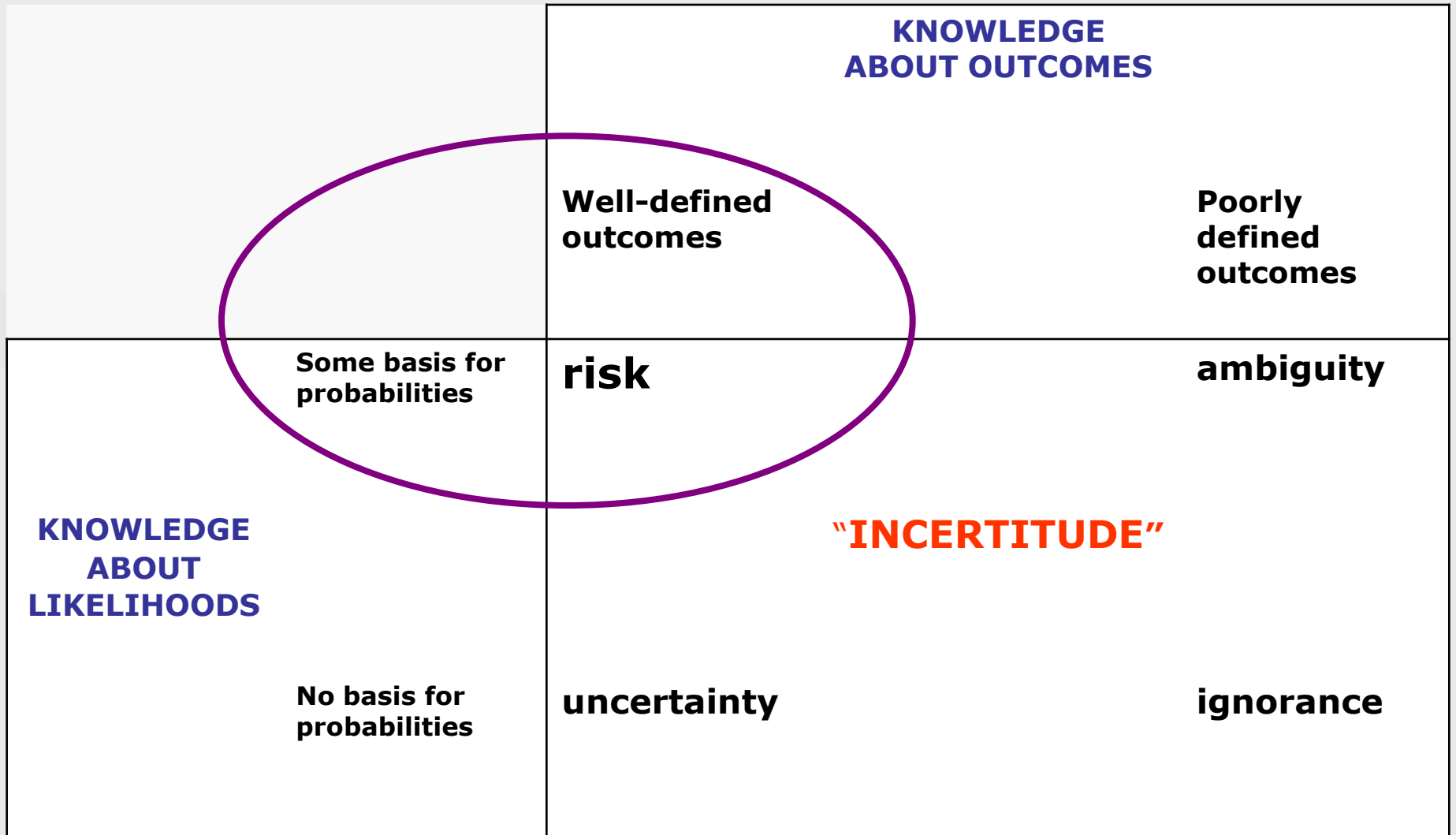
NOTE 1 An effect is a deviation from the expected — positive and/or negative.

NOTE 2 Objectives can have different aspects (such as financial, health and safety, and environmental goals) and can apply at different levels (such as strategic, organization-wide, project, product and process).

NOTE 3 Risk is often characterized by reference to potential events and consequences, or a combination of these.

NOTE 4 Risk is often expressed in terms of a combination of the consequences of an event (including changes in circumstances) and the associated likelihood of occurrence.

NOTE 5 Uncertainty is the state, even partial, of deficiency of information related to, understanding or knowledge of, an event, its consequence, or likelihood.



O’Riordan, T, and Cox, P. 2001. Science, Risk, Uncertainty and Precaution.

Senior Executive’s Seminar – HRH the Prince of Wales’s Business and the Environment Programme.

University of Cambridge.

risk owner

person or entity with the accountability and authority to manage a risk

control

measure that is modifying risk

NOTE 1 Controls include any process, policy, device, practice, or other actions which modify risk.

NOTE 2 Controls may not always exert the intended or assumed modifying effect.

Yet to be defined

Accountable Liability for the outcomes of actions or decisions

NOTE: Includes failure to act or make decisions

OR

being obligated to answer for a decision

OR

obligation to answer for an action.

Responsible Obligation to carry out duties or decisions, or control over others as directed

OR

having the obligation to act

OR

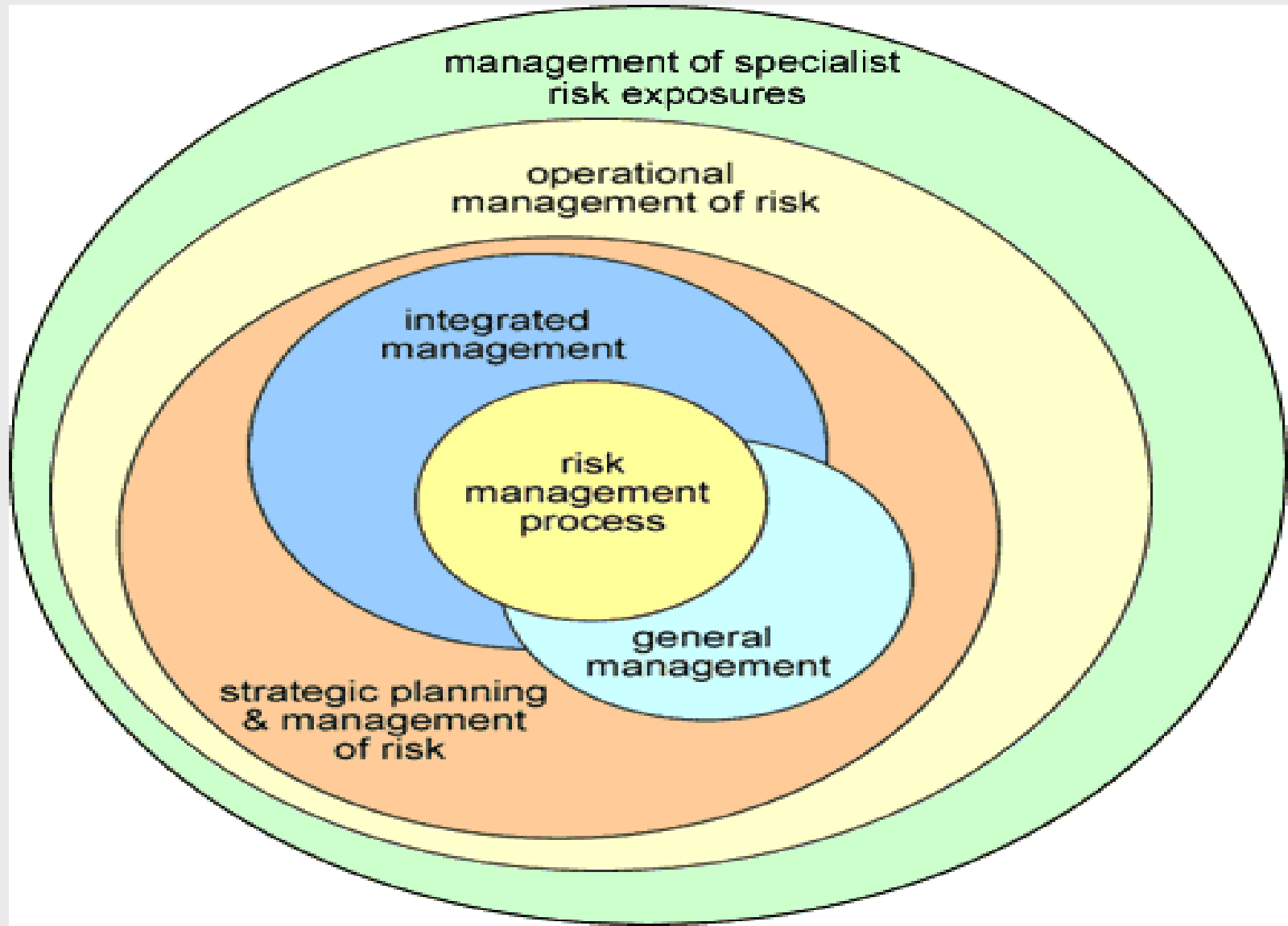
obligation to carry out instructions.

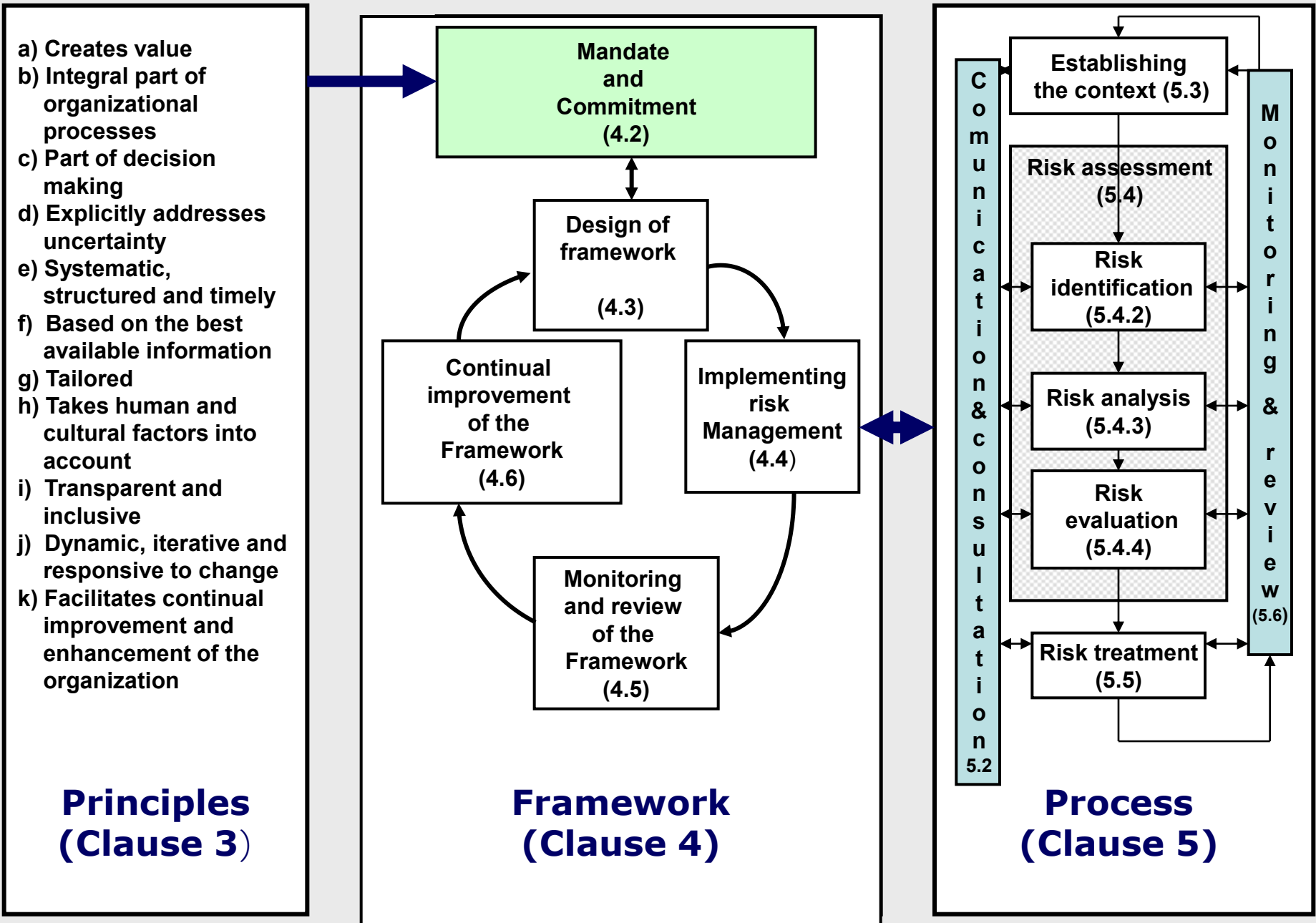
ISO 31000:2009 - Users

ISO 31000:2009 is intended to be used by a wide range of stakeholders including:

- those responsible for implementing risk management within their organization;**
- those who need to ensure that an organization manages risk;**
- those who need to manage risk for the organization as a whole or within a specific area or activity;**
- those needing to evaluate an organization's practices in managing risk; and**
- developers of standards, guides, procedures, and codes of practice that in whole or in part set out how risk is to be managed within the specific context of these documents.**

A Business Principles Approach to the Management of Risk





AS/NZS ISO 31000:2009 Figure 1 – Relationship between the principles, framework and process

Corporate Governance

The way in which an organisation is governed and controlled in order to achieve its objectives. The control environment makes an organisation reliable in achieving these objectives within a tolerable degree of risk.

It is the glue which holds the organisation together in pursuit of its objectives while risk management provides the resilience.

Corporate Governance

“The system by which entities are directed and controlled.”

“Corporate governance generally refers to the processes by which organisations are directed, controlled and held to account. It encompasses authority, accountability, stewardship, leadership, direction and control exercised in the organisation.”

ACCOUNTABILITY

SUPERVISION

GOVERNANCE

**Potential greater
future role of risk
management**



STRATEGIC

MANAGEMENT

**Traditional and current
risk management
application**



MANAGEMENT

EXECUTIVE

MANAGEMENT

DECISION & CONTROL

OPERATIONAL MANAGEMENT

Risk Management's Role in Corporate Governance

Business Principles Approach

AS/NZS ISO 31000:2009 Principles (Clause 3)

Risk management should....

- 1. Create value**
- 2. Be an integral part of organisational processes**
- 3. Be part of decision making**
- 4. Explicitly address uncertainty**
- 5. Be systematic and structured**
- 6. Be based on the best available information**
- 7. Be tailored**
- 8. Take into account human factors**
- 9. Be transparent and inclusive**
- 10. Be dynamic, iterative and responsive to change**
- 11. Be capable of continual improvement and enhancement**

Risk management should create value

- **RM contributes to the achievement of objectives.**
- **Protects value – minimise downside risk, protects people, systems and processes.**

Risk management should be an integral part of organizational processes

- **RM is not a stand-alone activity from the management system of the organisation.**
- **RM is part of the process - not an additional compliancetask.**

Risk management should be part of decision making

- **Risk management helps decision makers make informed choices, prioritize actions and distinguish among alternative courses of action.**
- **Helps allocate scarce resources.**

Risk management explicitly addresses uncertainty

- **Risk management explicitly takes account of uncertainty, the nature of that uncertainty, and how it can be addressed.**
- **RM addresses uncertainty, no matter the level of uncertainty.**

Risk management should be systematic and structured

- **A systematic, timely and structured approach to the management of risk contributes to efficiency and to consistent, comparable and reliable results.**
- **The more aligned – the more effective and efficient.**

Risk management should be based on the best available information

- The inputs to the process of managing risk are based on information sources such as historical data, experience, stakeholder feedback, observation, forecasts and expert judgement.**
- Information costs money. Perfect information is not always possible.**
- Start with resources/expertise you have or gain easily.**
- Increase information as the level of risk increases.**

Risk management should be tailored

- **Risk management is aligned with the organization's external and internal context and risk profile.**
- **Different risk appetites & different measurements.**
- **Context remains one of the most difficult areas.**

Risk management should take into account human factors

The management of risk recognizes the capabilities, perceptions and intentions of people that make every organisation different.

Risk management should be transparent and inclusive

- **Appropriate and timely involvement of stakeholders at all levels of the organization, ensures that the management of risk remains relevant and up-to-date.**
- **The management of risk must be clearly set out in job profiles/employment contracts and annual appraisals.**

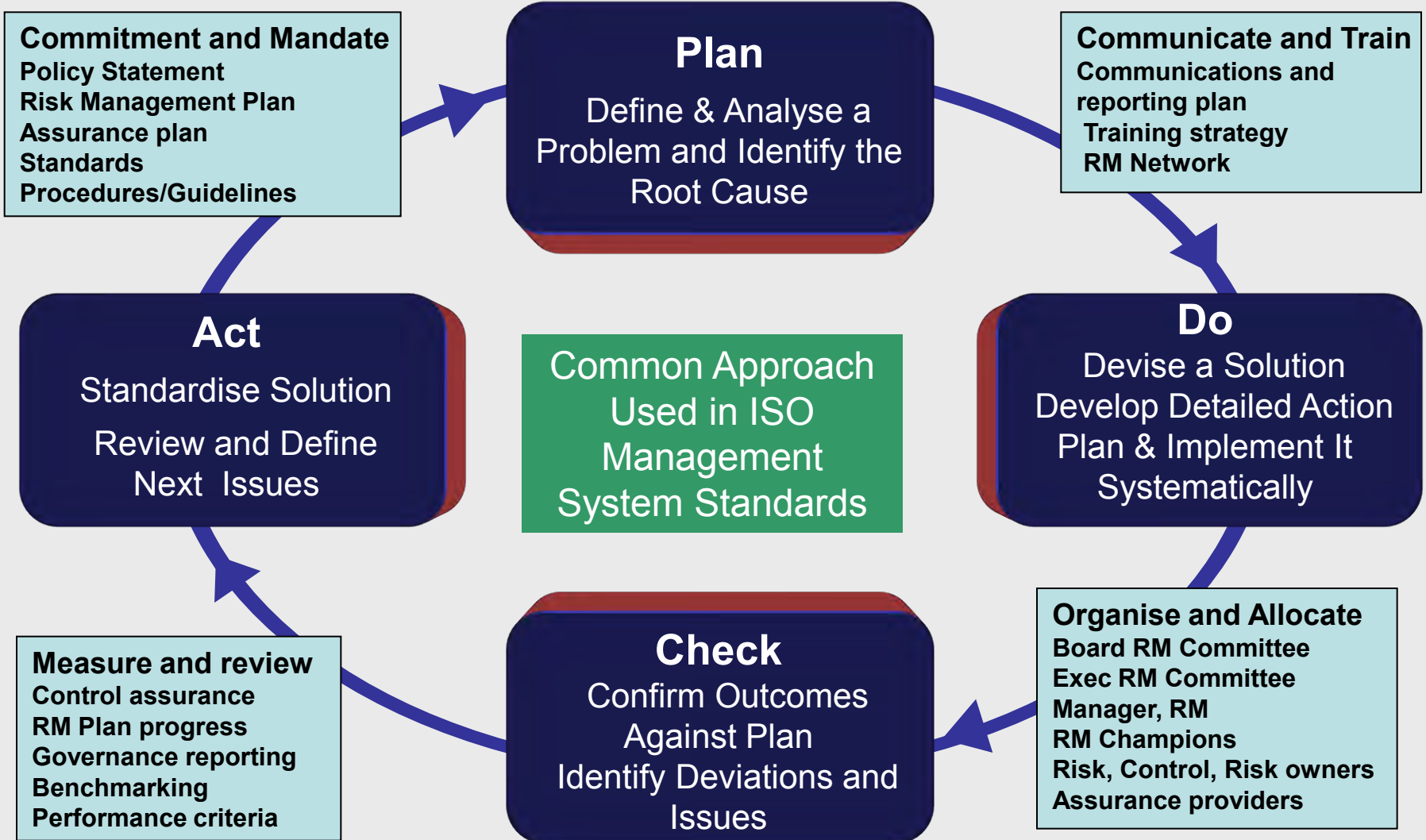
Risk management should be dynamic, iterative and responsive to change

- **External and internal events happen, context and knowledge change, monitoring and review take place, new risks emerge, some change, and others disappear.**
- **Must keep RM relevant and accurate so as to support decisions and strategies.**
- **Regular reviews of risk register and framework.**
- **Internal audit programme informed by corporate risk register.**

Risk management should be capable of continual improvement and enhancement

- Organizations should develop and implement strategies to improve the maturity of their management of risk alongside all other aspects of their management system.**
- RM maturity and improvement strategies should be included in the RM Plan.**

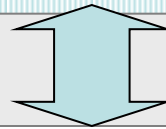
PDCA – the starting point of any management system



AS/NZS ISO 31000:2009 Risk management framework (Clause 4)

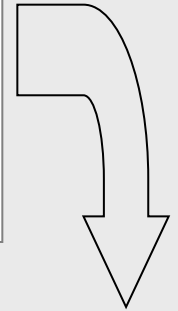
- The framework in Clause 4 of AS/NZS ISO 31000:2009 is not intended to describe a management system; but rather, it is to assist the organization to integrate risk management within its overall management system.**
- Therefore, organizations should adapt the components of the framework to their specific needs.**

Mandate and commitment (4.2)



4.3 Design of framework

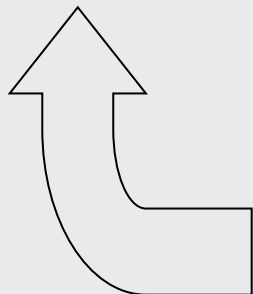
- 4.3.1 Understanding the organization and its context
- 4.3.2 Establishing risk management policy
- 4.3.3 Accountability
- 4.3.4 Integration into organizational processes
- 4.3.5 Resources
- 4.3.6 Establishing internal communication and reporting mechanisms
- 4.3.7 Establishing external communication and reporting mechanisms



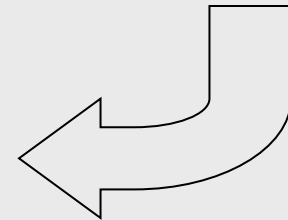
4.4 Implementing risk management

- 4.4.1 Implementing the framework for managing risk
- 4.4.2 Implementing the risk management process

4.6 Continual improvement of the framework



4.5 Monitoring and review of the framework



Understanding the organisation and its context

- **External Context**

- **Consider:**

- **Trends**
 - **Key drivers**
 - **Perceptions/values of key stakeholders**
 - **PESTLE: (Political, Economic, Social, Technological, Legal, Environmental factors)**

Understanding the organisation and its context

- **Internal Context**
 - **Governance Structures**
 - **Objectives, strategies and policies**
 - **Knowledge, skills and resources**
 - **Organisational culture**
 - **Contractual relationships**

Risk Management Policy

- **Must be simple, achievable, understandable and auditable with the clear mandate and commitment of top management**
- **aligned to the organisation's culture with the risk makers and the risk takers the risk owners.**
- **Document components**
 - **Rationale and policy links**
 - **Accountability and responsibility**
 - **Management of conflicts of interest**
 - **Measurement of RM performance**
 - **Reporting processes**
 - **Policy review process/cycle**

Accountability

- **All accountable risk owners are clearly identified and provided with authority & resources to manage risk**
- **Board accountability for framework implementation**
- **Accountability of risk owners at all levels of the organisation clearly identified**
- **Performance measurement processes in place**
- **Reporting and escalation processes clearly established**

Integration into organisational processes

- **The management of risk should be part of routine organisational processes**
 - Policy development
 - Business/strategic planning
 - Change management
 - Decision-making processes
- **Risk Management Plan**
 - Organisation-wide
 - Linked to or integrated in to other plans: strategic plans, implementation plans, operational plans etc

Resources

- **expenditure on the management of risk is an investment**
 - **Good RM will make an organisation more effective, but it requires dedicated resources**
- **Resources include:**
 - **People: skills, experience and competence**
 - **Time and funds: to execute the process**
 - **Defined processes, methods and tools**
 - **Information systems**
 - **Awareness, education and training programs**

Establishing internal & external communication and reporting mechanisms

- **Internal**

- Ongoing awareness, education and training
- Framework performance reporting and outcome reviews
- Information management
- Stakeholder engagement

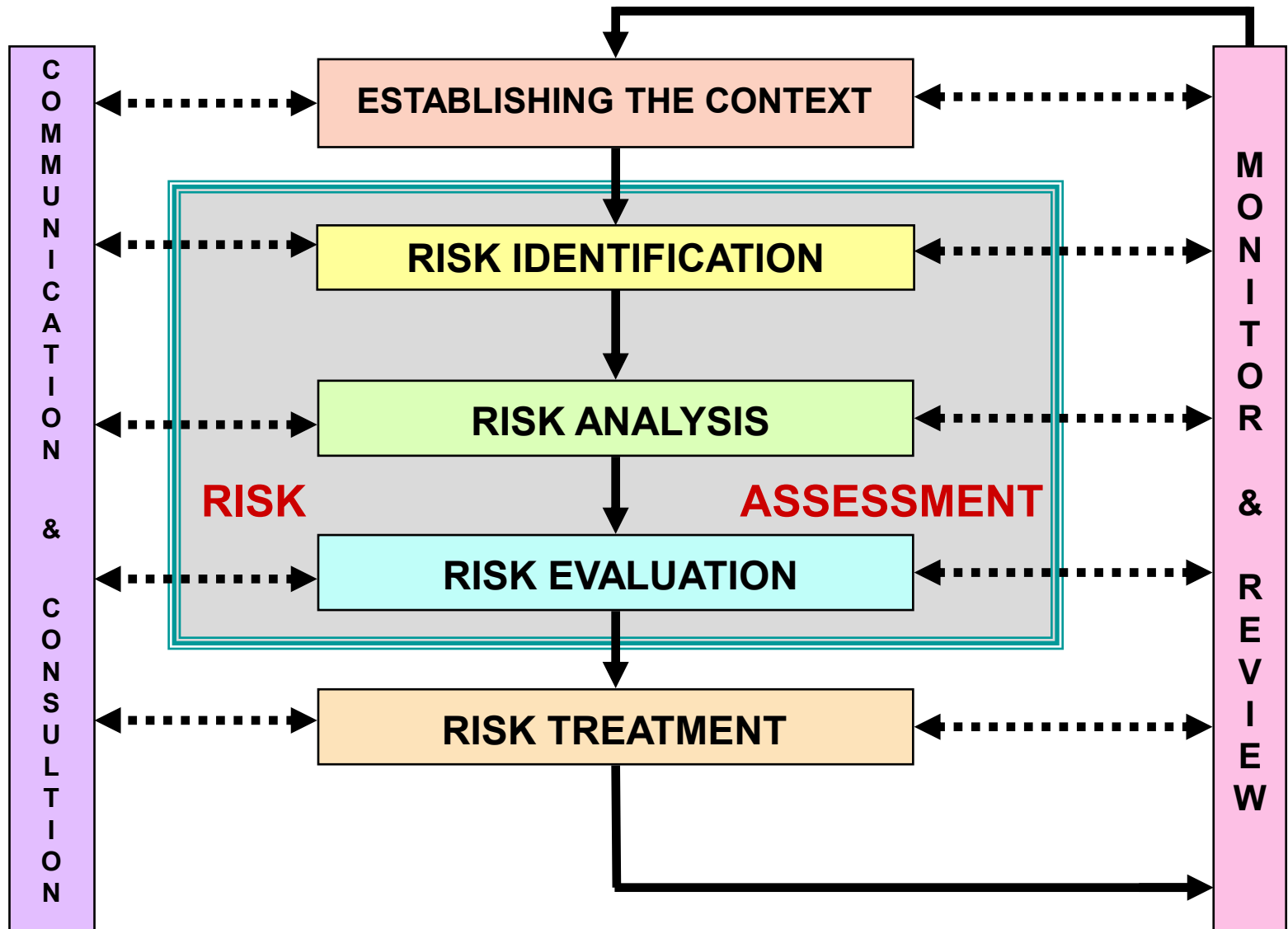
- **External**

- Stakeholder engagement
- Regulatory reporting requirements
- Use reporting to build confidence
- Business continuity (management of disruption related risk) communication

Implementing risk management

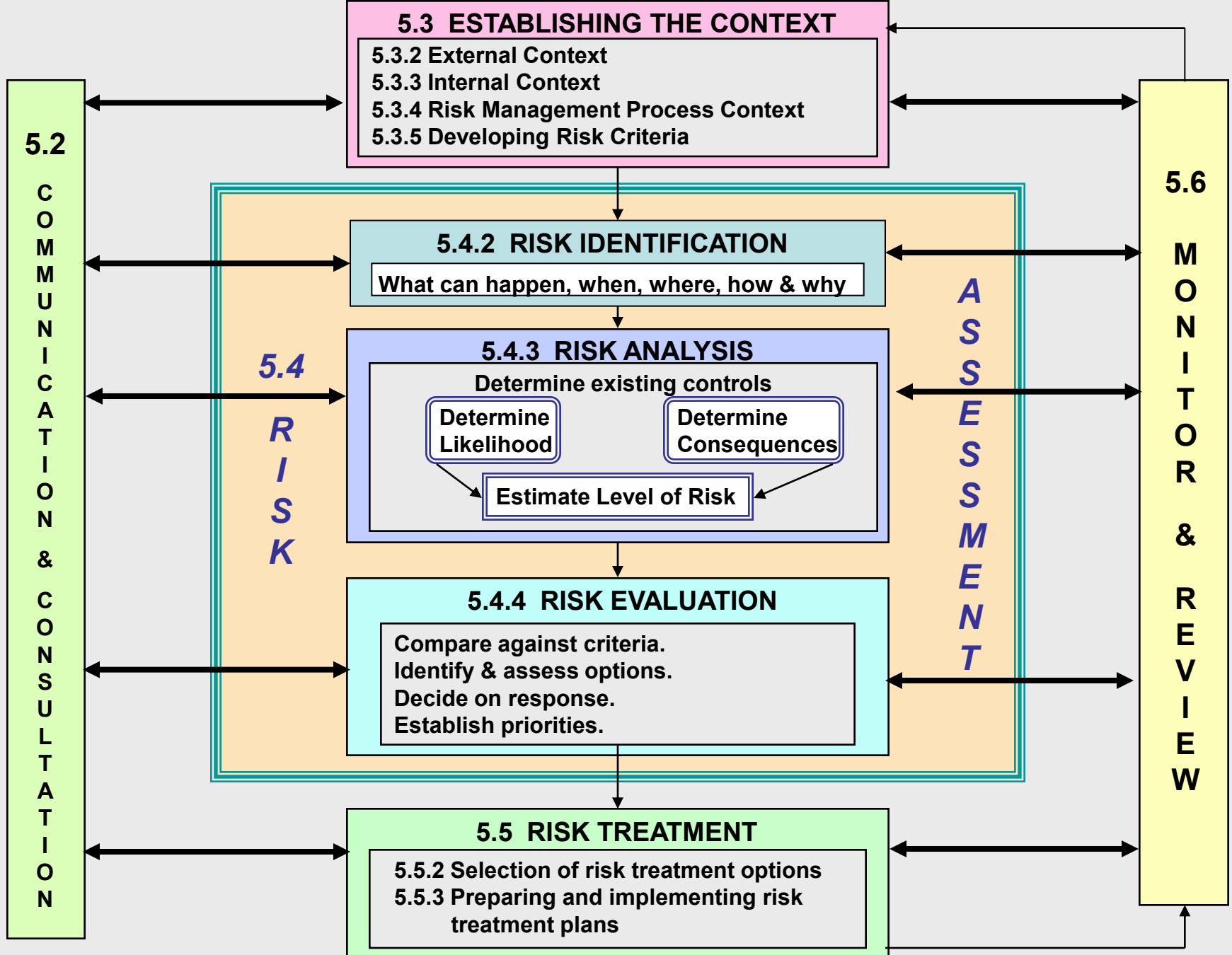
- **Implementing the framework**
 - **Ensure**
 - **Appropriate timing**
 - **Alignment with organisational strategy and processes**
 - **Compliance with regulation**
 - **Apply to organisational processes**
 - **Train and educate staff**
 - **Communicate and consult**
- **Implementing the risk management process**
 - **Define the process for the organisation**
 - **Implement at all levels (appropriate processes)**
 - **Establish a monitoring process**

AS/NZS ISO 31000:2009 Process Overview



AS/NZS ISO 31000:2009 Risk management process (Clause 5)

- should be an integral part of management, be embedded in culture and practices and tailored to the business processes of the organization.**
- includes five activities: communication and consultation; establishing the context; risk assessment; risk treatment; and monitoring and review.**



AS/NZS ISO 31000:2009 Risk management process in detail

ISO/IEC 31010:2009

Risk Management - Risk Assessment Techniques

Risk assessment attempts to answer the following fundamental questions:

- what can happen and why (by risk identification)?**
- what is the likelihood of their future occurrence?**
- what are the consequences?**
- are there any factors that reduce the likelihood of the risk or that mitigate the consequence of the risk?**

ISO/IEC 31010:2009

Risk Management - Risk Assessment Techniques

In particular, those carrying out risk assessments should be clear about

- the context and objectives of the organization,**
- the extent and type of risks that are tolerable, and how unacceptable risks are to be treated,**
- how risk assessment integrates into organizational processes,**
- methods and techniques to be used for risk assessment, and their contribution to the risk management process,**
- accountability, responsibility and authority for performing risk assessment,**
- resources available to carry out risk assessment,**
- how the risk assessment will be reported and reviewed.**

AS/NZS ISO 31000:2009

Annex A

(Informative)

Attributes of enhanced risk management

1. A pronounced *emphasis on continuous improvement* in risk management through the *setting of organizational performance goals*, measurement, review and the subsequent modification of *processes, systems, resources and capability/skills*.
2. *Comprehensive, fully defined and fully accepted accountability for risks, controls and treatment tasks*. Named individuals fully accept, are appropriately skilled and have adequate resources to check controls, monitor risks, improve controls and communicate effectively about risks and their management to interested parties.

AS/NZS ISO 31000:2009

Annex A

(Informative)

Attributes of enhanced risk management

- 3. All decision making within the organization, whatever the level of importance and significance, involves the explicit consideration of risks and the application of the risk management process to some appropriate degree.*
- 4. Continual communications and highly visible, comprehensive and frequent reporting of risk management performance to all — interested parties” as part of a governance process.*

AS/NZS ISO 31000:2009

Annex A

(Informative)

Attributes of enhanced risk management

- 5. Risk management is always viewed as a core organizational process where risks are considered in terms of sources of uncertainty that can be treated to maximize the chance of gain while minimizing the chance of loss. Critically, effective risk management is regarded by senior managers as essential for the achievement of the organization's objectives. The organization's governance structure and process are founded on the risk management process.***

AS/NZS ISO 31000:2009

– Reducing the Risk in Risk Management

- **Avoids organisations re-inventing the wheel**
- **Allows all to benefit from proven best practice**
- **Provides a universal benchmark**
- **Reduces barriers to trade**
- **Advises exactly what you need to do and how you need to do it – no wasted effort and no false starts**
- **Scalable – works for all sizes of organisation**
- **Risk management = making optimal decisions in the face of uncertainty**

And Finally!!

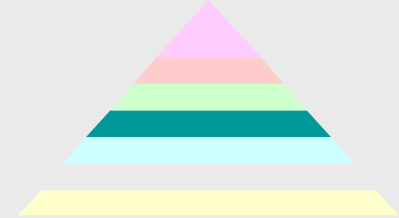
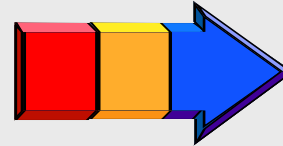
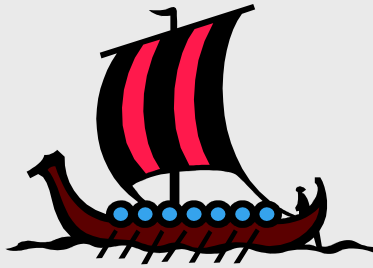
- **AS/NZS ISO 31000:2009 is the natural successor to AS/NZS 4360:2004**
- **It will fit ERM requirements, but will also allow silo/project risk management**
- **Following AS/NZS ISO 31000:2009 will provide a low cost, high chance of success approach to ERM**
- **AS/NZS ISO 31000:2009 will add value and reduce risk in risk management**
- **Managing risk is about creating value out of uncertainty**

YOU DO NOT HAVE TO MANAGE RISK!!

**SURVIVAL IS NOT
COMPULSORY**

**The greatest risk of all
is to take no risk at all!**

The Journey Continues

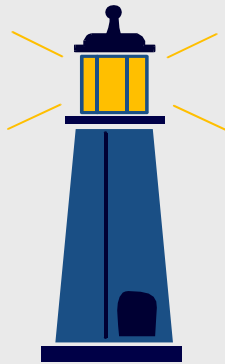


A journey A race

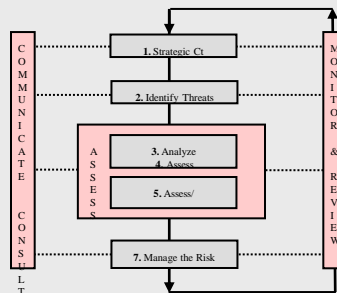
In pursuit of performance Building Value

AS/NZS ISO 31000, ISO/IEC 31010 and ISO Guide 73

provide generic guidance on how to embrace the management of risk in order to maximise the opportunities and minimise the threats to the achievement of your objectives.



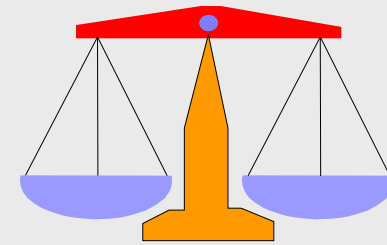
Structure Direction



Processes



Culture Communication



Opportunities

Risks

The following documents are available online from:

<http://infostore.saiglobal.com/store/>

AS/NZS ISO 31000:2009 Risk management — Principles and guidelines

ISO Guide 73:2009 Risk management — Vocabulary

ISO/IEC 31010:2009 Ed. 1.0: Risk Management - Risk Assessment Techniques

AS/NZS 5050:2010 Business continuity—Managing disruption related risk

SAA HB 141 (Rev):2011 Risk Financing Guidelines, *Standards Australia*, 06.05.2011

SAA HB 158 (Rev):2010 Delivering assurance based on ISO 31000:2009 Risk Management, *Standards Australia*, 16 November 2010

SAA/NZS HB 203:201X Environmental risk management – Principals and process, *Standards Australia/Standards New Zealand*.

SAA/NZS HB 246 (Rev):2010 Guidelines for Managing Risk in Sport and Recreation, *Standards Australia/Standards New Zealand*, 18 August 2010

SAA HB 266:2010 Guide for managing risk in Not-For-Profit organisations, *Standards Australia*, 13 August 2010

SAA/NZS HB 327:2010 Communicating and consulting about risk, *Standards Australia /Standards New Zealand*, ISBN 978-0-7337-9346-2, *Standards Australia*, 2010

The following Handbooks are currently being revised to bring them into harmonisation with AS/NZS ISO 31000:2009: -

SAA HB 205-201X OHS Risk Management Handbook,
Standards Australia.

SAA HB 254-2005 Governance, risk management and control assurance,
Standards Australia.

SAA HB 436-201X Risk Management Guidelines – A Companion to AS/NZS ISO 31000:2009, Standards Australia/Standards New Zealand. (NOTE: This HB may be absorbed into ISO 31004:201X currently under development by ISO/PC 262 – Risk Management))

The following Handbooks based on the superseded AS/NZS 4360:2004 require revision to bring them into harmonisation with AS/NZS ISO 31000:2009: -

HB 167:2006 - Security risk management, *Standards Australia/Standards New Zealand.*

SAA HB 231:2004 Information Security Risk Management Guidelines, *Standards Australia.*

SAA HB 240-2004 Guidelines for Managing Risk in Outsourcing using the AS/NZS 4360:2004 Process, *Standards Australia.*

SAA/NZS 221:2004 Business Continuity Management, *Standards Australia/Standards New Zealand.*

SAA HB 292:2006 A Practitioners Guide to Business Continuity Management *Standards Australia (2006)*

SAA HB 293:2006 An Executive Guide to Business Continuity Management *Standards Australia (2006)*

(NOTE: HB's 221, 292 & 293 have been superseded by AS/NZS 5050:2010. A new HB may be developed as a companion to AS/NZS 5050:2010)

SA HB 296:2007 Legal Risk Management, *Standards Australia (2007), ISBN 0 7337 8295 7.*