HB 254-2005

Governance, Risk Management and Control Assurance

This Australian Standard was prepared by Committee , Risk Management. It was approved on behalf of the Council of Standards Australia on 11 August 2005.
This Standard was published on 10 October 2005.

The following are represented on Committee :

Australian and New Zealand Institute of Insurance & Finance
Australian Computer Society
Business Continuity Institute
CSIRO Atmospheric Research
Department of Defence (Australia)
Department of Finance & Administration (Federal)
Emergency Management Australia
Engineers Australia
Environmental Risk Management Authority New Zealand
Institution of Professional Engineers New Zealand
Local Government New Zealand
Massey University
Minerals Council of Australia
Ministry of Agriculture and Forestry New Zealand
Ministry of Economic Development (New Zealand)
New Zealand Society for Risk Management
NSW Treasury Managed Fund
Property Council of Australia
Risk Management Institution of Australasia
Safety Institute of Australia (Incorporated)
Securities Institute of Australia
The University of New South Wales
Victorian WorkCover Authority

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Web Shop at www.standards.com.au and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Global Standard*, has a full listing of revisions and amendments published each month.

Australian Standards™ and other products and services developed by Standards Australia are published and distributed under contract by SAI Global, which operates the Standards Web Shop.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.org.au, or write to the Chief Executive, Standards Australia, GPO Box 476, Sydney, NSW 2001.

HB 254—2005

Handbook

Governance, risk management and control assurance

Originated as HB 254—2003.
Second edition 2004.
Third edition 2005.

Published by Standards Australia, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 6892 X

Preface

This Handbook was prepared by the Corporate Governance Working Group under the Joint Standards Australia/Standards New Zealand Technical Committee OB-007, Risk Management, and forms part of the series of publications based on AS/NZS 4360, *Risk management*. It supersedes HB 254—2004, *Guide to Controls Assurance and Risk Management.*

It was prepared to—

- provide guidance on the benefits to Boards from implementing an enterprise-wide risk management framework in their organisation; and
- outline the methodologies involved in implementing risk management and control assurance frameworks in support of sound governance.

Dr Ted Dahms, representing the Risk Management Institution of Australasia is the principal author of this Handbook.

Other key contributors, from Standards Australia's Joint Technical Committee on Risk Management, include—

- Dr Dale Cooper, representing the Securities Institute of Australia
- Mr Kevin Knight, representing the Risk Management Institution of Australasia
- Mr Grant Purdy, representing the Minerals Council of Australia.

Standards Australia would like to give particular acknowledgement to the contributions of the following organisations in the development of the Handbook—

- Australian National Audit Office
- Australian Stock Exchange
- Institute of Internal Auditors
- Queensland Audit Office

Contents

Page

Executive summary 4

1 Introduction

1.1 Corporate Governance 12

1.2 Governance Frameworks and Management Practices 14

1.3 Governance, Risk Management and Control 15

1.4 Definitions 17

2 Key benefits to the board 20

3 Risk management and the risk management process

3.1 What is Risk? 22

3.2 What is Risk Management? 23

3.3 The Risk Management Process 23

3.4 Implementing a risk management framework 28

4 Control assurance plan

4.1 General 32

4.2 Assurance control elements 34

4.3 Control criteria 36

4.4 Inherent control assurance 39

5 Implementation–How effective control can provide assurance to the board

5.1 Application of the Control Criteria 42

5.2 Medium to Small Organisations 52

6 Managing change 54

Executive summary

Introduction

Traditional governance internal control and risk management guides are systems-based with a strong focus on legislative and regulatory compliance. Recent spectacular company failures however, indicate that compliance alone does not guarantee sound corporate governance. This Handbook outlines a Controls Assurance Plan for Boards and senior managers that refines and aligns current management practices to complement the more traditional compliance-based guides. It aims to promote amongst Directors, senior managers and employees—

- a sense of organisational and personal purpose; and
- capability and commitment in relation to the organisation's corporate objectives.

The philosophical foundation of the Controls Assurance Plan is the alignment of the risk management process with corporate governance by the—

- application of risk management process to objective setting at all levels of the organisation to develop controls that are at the same time strategies; and
- building of an underlying value system in the form of a self-sustaining system of inherent controls with a reduction in the reliance on formal compliance control.

The proposed system of inherent controls is developed by refining and aligning current management practices. This means that the Plan can be implemented within existing resources and without additional infrastructure. The leadership skill for the Board and senior managers is to achieve an effective balance between inherent and formal control appropriate for their organisation's level of control/risk maturity.

Although the Handbook is primarily designed with the private sector in mind, its concepts and frameworks are independent of legislative or regulatory constraints and can be applied with minimal modification in any jurisdiction, across all sectors including not-for-profits and to organisations of any size. Smaller organisations should keep their procedures simple and within the bounds of existing resources. The aim is to sharpen up, rather than add, resources to the risk management and control activities[1.]

Where organisations do not have the resources to adequately fund an internal audit unit they need to implement alternative

[1] *Implementing Turnbull.* Institute of Chartered Accountants, England and Wales, 1999: p10.

procedures to provide control assurance to the Board. A methodology for providing Independent control assurance in smaller organisations is outlined in Clause 5.2 at the end of this Handbook.

Implementation of the Control Assurance Plan is facilitated by an appreciation of the relationship between governance frameworks and management practices together with an understanding of the linkages between governance, risk management and control.

Governance frameworks and management Practices

Essentially corporate governance is a guidance system composed of standard management practices operating within a governance framework designed to suit the organisation.

The Practices are essentially common management tools drawn together into a logical, interrelated system focused on achieving results. They can be universally applied to any organisation irrespective of their size, or statutory and regulatory environments.

Governance frameworks provide the structure within which the management practices operate. Parts of this structure are mandatory and set by legislation, regulation or listing rules in different jurisdictions, or by policy directives for public-sector organisations. Others are discretionary and set by Boards and senior management to address the management practices and can vary from organisation to organisation even within the same statutory environment. For this reason there is no one governance framework that suits all organisations, i.e. one size does not fit all.

Standard management practices are Control Activities for ensuring—

- corporate and operational objectives are developed and integrated throughout the organisation;
- competencies match objectives;
- clarity of roles and responsibilities;
- authority matches assigned responsibilities;
- high standards of ethical behaviour;
- effective monitoring and reporting systems; and
- effective and timely information flow throughout the organisation.

Goals and objectives–The focus

An understanding of the relationship between corporate governance, risk management, controls and strategies is fundamental to the successful implementation of the proposed Controls Assurance Plan. This relationship may be summarised as follows:

- Corporate governance is a guidance system for the achievement of planned objectives–it is an objectives-focused concept.
- Management of risk is part of each objective at all levels of the organisation.
- Risk management develops risk treatment plans that are at the same time the controls and strategies associated with achieving each objective.
- The meaning of control is broader than internal financial control and is expanded to include all planning and strategies put in place after the corporate objectives have been set. Transparency and probity are part of this control environment.
- The control environment provides reasonable assurance to Boards and senior managers that the organisational objectives will be achieved within an acceptable degree of residual risk.
- Corporate governance is an organisation's strategic response to risk[2].
- Reporting against performance measures for each objective is also a report on the effectiveness of strategies, controls and the risk management process for that objective. Risk management reporting is therefore part of performance reporting and not a separate exercise.

Effective risk management is therefore the cornerstone of sound governance and the Handbook provides an overview of the risk management process in line with AS/NZS 4360:2004, Risk management together with an implementation plan (Control Assurance Plan).

Benefits for the Board

The implementation of effective risk and control assurance frameworks provides a number of important outcomes in the corporate governance context, including:

- More effective strategic and operational planning with established linkages.
- Greater confidence in achieving planned operational and strategic objectives.
- Enhanced organisational resilience that reduces the time lost on 'fighting fires', and improves the organisation's potential to exploit opportunities.
- Greater confidence in the decision-making process.

[2] David McNamee and Georges Selim. *Changing the Paradigm* 2000. www.mc2consulting.com/riskart8.htm

- Improved stakeholder confidence leading to enhanced capital raising.
- Director protection.

Implementation

General

The principles underpinning an effective risk and control assurance framework are in essence standard management practices. Implementation, therefore, does not involve abandoning everything that is currently in place, but rather entails refining and aligning current practices.

The establishment of a risk and control assurance framework without an underlying value system encourages compliance rather than commitment. A compliance culture is neither responsive to change nor focused on innovation and performance improvement.

An underlying value system is set by inherent control, a central concept in the Control Assurance Plan, that has a different focus to formal control as follows:

- Inherent controls are proactive promoting purpose, capability and commitment throughout the organisation, including the Board, and are reliant on sound HR practices, ethics and communication. They occur continuously and consistently throughout the organisation as part of normal business practice and are to a large extent self sustaining. Elements that contribute to an inherent control system include systems thinking, developing a learning organisation, motivating trust and relationships, and matching competencies with objectives.
- Formal control involves assigning, monitoring, reviewing and reporting that are traditional command-control style processes based upon an organisational hierarchy.

The leadership skill for the Board, CEO and senior managers is to develop an effective balance between the two assurance processes. By increasing assurance through inherent controls, formal control can concentrate on areas of critical risk, the organisational focus becomes one of performance rather than compliance and the governance style is based upon an innovation–results model rather than command–control model.

An effective risk management framework

Framework

Risk management touches all of the organisation’s activities. It is the foundation of the control environment and sound corporate governance. For this reason the implementation of an effective enterprise-wide risk management framework requires careful planning.

The risk management implementation plan proposed in the Handbook involves two phases as follows:

- An initial phase wherein the risk management implementation plan is developed and Board and senior management support is generated through processes such as policy development, information sessions and assigning risk management responsibilities to co-ordinators.
- An ongoing phase by which the risk management framework is—
  - embedded throughout the organisation as part of normal business practice; and
  - maintained through monitoring and reviewing risks, controls, and changes in the internal and external environments.

The Control Assurance Plan

The benefits to the Board from implementing an enterprise-wide risk management framework can be further improved by increasing the focus on inherent or in–built control and reducing the reliance on formal control. The Handbook outlines a Control Assurance Plan that provides a methodology for implementing Inherent control.

The focus of the Plan is five control elements (Figure 3) linked by an information system. These are:

- Planning (setting and communicating the purpose for the organisation).
- Board (shareholder representatives accountable for organisational performance to key stakeholders—sets organisational direction, develops broad policy and supervises management).
- Organisation (CEO, senior managers and employees—responsible for the delivery of organisation outputs in line with the Board's strategic objectives).
- Independent Assurance (provides risk management and control assurance to the Board independent of management—supports the Board's accountability).
- Management Assurance (management's risk and control assurance to the Board—supports management's accountability).

The Plan operates by addressing the control criteria of purpose, capability, commitment, monitoring and learning, and information in each Control Element according to the control assurance focus in each. The various aspects of the control criteria are addressed by applying standard management practices to each Control Element. The management practices are in essence Control Activities.

Control Activities address the Criteria in different ways in each Element depending upon the Element's control assurance focus. A high level methodology for aligning Control Activities with the

Criteria in each Element is set out in Section 4 in the form of a Control Assurance Plan.

Purpose

The Board is directly responsible for setting the organisation’s strategic direction. It achieves this by developing the mission and vision from which are developed the corporate objectives. The Board is indirectly responsible through the CEO for ensuring that these objectives cascade throughout the organisation by translation into integrated and aligned operational, business, team and individual objectives. In association with this responsibility the Board and senior management have a duty to ensure that the significant internal and external risks associated with these objectives are identified and assessed.

Capability and Commitment

Capable and committed employees, teams and committees are the key to providing reasonable assurance that the organisation’s objectives will be met within an acceptable degree of residual risk. Capability and Commitment are facilitated through communication and human resource strategies aligned to the corporate objectives. An important issue is the development of an awareness by all members of the organisation that they share the responsibility for the effectiveness of its risk management and control frameworks.

Monitoring and Learning

Effective monitoring and reporting processes maintain a watch over the achievement of objectives at all levels and ensure compliance within the organisation’s statutory and policy environments. A key element in this area is ensuring the continuing effectiveness of the organisation’s risk management and control frameworks. Learning is achieved through identification of non-compliance, post-event analysis, variances from planned targets and the identification of opportunities.

Information

Information plays a vital role in supporting the criteria of Purpose, Capability and Commitment that form the basis of inherent control. Similarly, information is the vital link in formal control through its support of effective decision-making, and monitoring and reporting against targets and critical risks.

The Handbook

The Handbook contains six Sections—

Section 1—examines the relationship of risk management, control and corporate governance.

Section 2—outlines the key benefits to the Board from ensuring that an appropriate system of risk management is in place.

Section 3—defines risk management, outlines the risk management process and provides an implementation plan for an enterprise-wide risk management framework.

Section 4—outlines a control assurance plan for Boards and senior managers, and introduces the concepts of inherent and formal control.

Section 5—contains advice on the practical implementation of a Control Assurance Plan.

Section 6—provides brief advice on managing change in order to achieve successful Control Assurance Plans.

The key messages in the Handbook are that—

- risk management is an essential tool underpinning all of the Board's functions, as well as assisting the Board to discharge its obligations;
- enterprise-wide risk management develops the organisation's control environment and strategies that support sound corporate governance;
- increasing reliance on inherent control over formal control reduces compliance costs and allows an increased focus on performance; and
- risk and opportunity for gain are partners, thus broadening the risk management process to opportunity identification and assessment.

1 Introduction

The Handbook sets out the close relationship between governance, control and risk management and indicates how this relationship underpins sound governance.

The conceptual foundation of the Handbook is the linkage of risk management to objectives at all levels to develop controls that are also strategies.

Further advantages are to had by Boards and senior managers through the separation of control into inherent and formal control where inherent controls are self sustaining and allow greater focus on performance.

Inherent controls are developed by Control Activities (standard management practices) that address the Control Criteria of purpose, capability, commitment, monitoring and learning, and effective information flow throughout the organisation, including the Board, and are reliant on sound HR, ethics and communication.

Formal control processes involve assigning, monitoring, reviewing and reporting (command-control style based upon a hierarchy).

The Handbook employs the above conceptual view of risk management to formulate a Control Assurance Plan based on five Control Elements (Fig 3), each with its own Assurance Focus, as follows—

Planning (the core control element setting the purpose for the organisation in the form of linked corporate plans, operational plans and risk management).

Board (shareholder representatives accountable for organisational performance to key stakeholders—sets organisational direction, develops broad policy and supervises management).

Organisation (CEO, senior managers and employees—responsible for the delivery of organisation outputs in line with the Board's corporate objectives).

Independent Assurance (provides risk management and control assurance to the Board independent of management—supports the Board's accountability).

Management Assurance (management's performance reporting, including the associated risk and control assurance to the Board—supports management's accountability).

The control elements are linked by an information framework that promotes—

- effective decision-making;
- clarity of roles, responsibilities and authorities; and
- the performance processes of monitoring, reviewing and reporting.

Control assurance is achieved in each Element by applying Control Activities to each Element according to its Assurance Focus.

The aim of the Control Assurance Plan is to achieve a balance between the two assurance processes whereby there is increased reliance on inherent control assurance and formal control assurance is limited to compliance matters.

The Plan provides a number of benefits including:

- Development of an underlying value system that complements compliance-based guides focused on the mandatory governance frameworks set by legislation and regulation.
- Implementation is achieved within existing resources and infrastructure through the refinement and alignment of current management practices.
- Wide application to any statutory environment including not-for-profits, any jurisdiction and to organisations of any size.

Implementation of the Control Assurance Plan is facilitated by—

- a clear conceptual understanding of corporate governance;
- an appreciation of the relationship between governance frameworks and management practices; and
- an understanding of the linkages between governance, risk management and control.

1.1 Corporate Governance

There are a number of definitions of corporate governance each with a slightly different emphasis. For the purposes of the Handbook, the definition and framework for corporate governance outlined in AS 8000, *Corporate governance—Good governance principles* has been adopted as follows—

> *'The system by which entities are directed and controlled.'*

The Standard also refers to the following relevant statements about corporate governance—

> *'Corporate Governance is concerned with improving the performance of companies for the benefit of shareholders, stakeholders and economic growth. It focuses on the conduct of, and relationships between, the Board of directors, managers and the company shareholders.'*
>
> *'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.'*

The Australian Stock Exchange Corporate Governance Council has articulated ten core principles that underlie sound corporate governance[3], including—

- laying solid foundations for management and oversight;
- structuring the Board to add value; and
- recognising and managing risk.

The Control Assurance Plan addresses all of the above through its control activities and control criteria for—

- direction (purpose, leadership);
- control (inherent and formal control systems);
- accountability (monitoring and learning);
- authority (delegations);
- stewardship (capability, commitment, and ethics);
- structuring the Board to add value (purpose, capability and commitment);
- management oversight (purpose, capability and commitment); and
- recognising and managing risk (the Plan's integrated risk management framework linked to objectives)

All of the above are part of the Plan's control environment. In addition, the Plan is formulated to promote—

- functional relationships between the Board, senior managers and employees; and
- reasonable assurance in relation to performance through its promotion of an effective balance between formal and inherent control in favour of the latter.

[3] *Principles of Good Corporate Governance and Best Practice Recommendations,* ASX Corporate Governance Council, April 2003.

1.2 Governance Frameworks and Management Practices

Essentially corporate governance is a guidance system composed of standard management practices operating within a governance framework designed to suit the organisation.

The distinction between management practices and governance frameworks is fundamental to an understanding of governance. The practices are essentially common management tools drawn together into a logical, interrelated system focused on achieving results. They can be universally applied to any organisation irrespective of its size, or statutory and regulatory environments.

Governance frameworks provide the structure within which the management practices operate. Parts of this structure are mandatory and set by legislation, regulation or listing rules in different jurisdictions, or by policy directives for public-sector organisations. Others are discretionary and set by Boards and senior management to address the management practices and can vary from organisation to organisation even within the same statutory environment. For this reason there is no one governance framework that suits all organisations, i.e. one size does not fit all.

Once the corporate objectives are set and the organisational structure is established, the management practices applied involve:

- Developing corporate objectives and integrating these throughout the organisation as operational, divisional, project and individual plans.
- Ensuring competencies match the organisation’s strategic and operational objectives through effective strategic and operational HR planning.
- Clearly setting out and communicating roles and responsibilities to ensure that all members of the organisation, committees and teams understand their roles and how they contribute to the achievement of organisational objectives. Instruments include job descriptions, inductions, policies, procedures, terms of reference, charters, and performance planning and review programs.
- Providing authority to match responsibilities through delegations.
- Communicating the standard of behaviour expected of all members of the organisation through a code of conduct. This principle is directed at fraud prevention, probity, client service and creating a culture which fosters trust and builds relationships.
- Developing, monitoring and reporting processes to ensure—
    - conformance with laws, policies, procedures, and the code of conduct;

    - performance against the corporate and operational objectives;
    - timely responses to changes in the external and internal environments;
    - accountability through effective internal and external reporting processes; and
    - learning is achieved through identification of non-compliance, post-event analysis, variances from planned targets and the identification of opportunities.
- Developing an information framework that provides—
    - quality information to all members of the organisation, committees and teams in a timely manner to promote effective decision-making;
    - information including roles, responsibilities, authority, and senior management decisions necessary for members of the organisation in the discharge of their responsibilities; and
    - an environment of open communication to foster continuous improvement and innovation.

Management practices are the Control Activities in the Control Assurance Plan.

1.3 Governance, Risk Management and Control

The Handbook adopts a broad concept of control underpinned by the view that the control environment provides reasonable assurance to Boards and senior management that the organisation's objectives will be reached within an acceptable degree of residual risk. Further, it is the examination of strategic and operational objectives, and the application of the risk management process to these objectives that develops strategies and controls. In essence, strategies, controls and risk treatment plans are one and the same. In this way risk management is effectively integrated throughout the organisation.

The concepts of internal control and risk management had very different origins, but they have now become inseparable. To understand the relationships between these two concepts it is necessary to examine their origins and the subsequent shifts in perceptions.

Internal control had its origin with the accounting profession and understandably its focus was financial controls and legal compliance. Risk management arose from engineering practice and was taken up by the insurance industry as an essential methodology with a focus on managing hazards.

The definition of control has been expanded[4] to cover the efficiency and effectiveness of all of an organisation's operations, and the associated processes and risks that impact on the achievement of its objectives.

In this view, internal control is a process effected by an organisation's Board of Directors, Chief Executive Officer, senior management and other members of the organisation, designed to provide reasonable assurance regarding the achievement of the organisation's objectives.

Control is seen to comprise those elements of an organisation (including resources, systems, processes, culture, structure and tasks) that, taken together, support people in the achievement of the organisation's objectives.[5]

Risk is defined as 'the chance of something happening that will have an impact upon objectives' (AS/NZS 4360). Impacts may be positive or negative.

From these definitions it is clear that the coverage of both concepts have expanded to include all of an organisation's activities. The relationship between risk and control can be revealed by examining the risk management processes of establishing the context followed by the identification, analysis, evaluation, monitoring and control of risks (see first dot point below and Section 3). In essence, controls are the treatment plans and monitoring procedures developed to manage identified and evaluated risks and opportunities.

The key issues that arise from these definitions of control and risk are that—

- control involves all aspects of an organisation's operations– its focus is no longer restricted to financial matters;
- the word 'internal' has been dropped in front of control in recognition of external as well as internal environmental issues and changes;
- the risk management process develops the control environment;
- the focus of control and governance are one and the same– the achievement of organisational objectives;
- although the responsibility for the organisation's control environment rests with the Board, there is a delegated responsibility to everyone in relation to their assigned responsibilities; and

[4] *Risk Management and Internal Control.* A Step by Step Approach to Managing Risks More Effectively. New South Wales Treasury, September 1997: 4 Volumes

[5] *Control and Governance No. 1.* Guidance on Control. Canadian Institute of Chartered Accountants, Ontario, Canada, November 1999. 32pp.

- risk management not only provides a strategy for treating risks which might prevent an organisation from achieving its objectives, but also provides the flexibility for the organisation to respond to unexpected threats and take advantage of opportunities. Risk management therefore provides organisational resilience as well as control.

Previously, control only involved bureaucratic processes such as second party authorisation and segregation of duties. This is typical of a command/control environment founded on what the Handbook refers to as formal control.

Modern control frameworks and models now recognise the essential contribution of what are referred to as 'soft controls'[6] that include leadership, teamwork, culture, values, communication, accountability, anticipation, flexibility and capability. These controls are crucial for gaining commitment when implementing and maintaining an effective governance system. In the Handbook, they are considered important aspects of inherent control.

1.4 Definitions

For the purpose of this Standard, the definitions below apply.

1.4.1 Assurance

Assurance relates to the likelihood that planned objectives will be achieved within an acceptable degree of residual risk i.e. it seeks to ensure that an acceptable level of accountability will be realised by those assigned responsibility and authority for the achievement of an objective. Assurance is sought by the person or body assigning the responsibility and authority.

The level of assurance is reliant on the effectiveness of the systems and culture put in place by those persons or bodies responsible for implementing and maintaining the control environment. It follows that the persons or bodies assigning responsibility and authority, as well as seeking assurance, are responsible for the implementation of systems that provide and enhance that assurance.

1.4.2 Assurance focus

Control assurance responsibility assigned by legislation, regulation, listing rules or by an organisation's governance system. It may apply to individuals or parts of the organisation including the Board.

[6] LEITHHEAD, B. S. *Control Self Assessment's Contribution to Corporate Governance.* Institute of Internal Auditors Conference, Gold Coast, Queensland, 1998: 14 pp.

1.4.3 Control

Control comprises those elements of an organisation (including its resources, systems, processes, culture, structure and tasks) that, taken together, support people in the achievement of the organisation's objectives.

Once the strategic direction of the organisation is determined everything that follows is part of the control environment.

1.4.4 Control activities

Routines established to provide assurance that processes operate as designed and meet the requirements of the organisation's policies. (Management practices or principles)

1.4.5 Control criteria

Criteria that are the basis for understanding control in an organisation and for making judgements about the effectiveness of control.

1.4.6 Control elements

Any part of an organisation, or the relationship between parts of an organisation, that contributes to reliable achievement of its objectives.

1.4.7 Formal control

Control processes of assigning, monitoring, reviewing and reporting (command–control style based upon a hierarchy).

1.4.8 Inherent control

Control activities that promote purpose, capability, commitment, monitoring and learning, and information throughout the organisation, including the Board, and are reliant on sound HR, ethics and communication.

They occur continuously and consistently throughout the organisation, are embedded as normal management practices, and are to a large extent self sustaining.

1.4.9 Organisation

A group of people working together to achieve objectives. This includes the entity and its governing body.

1.4.10 Organisational objectives

The long-term results, with appropriate key performance indicators, set by the organisation.

1.4.11 Risk management

The culture, processes and structures that are directed towards realising potential opportunities whilst managing adverse events.

NOTE: After *Control and Governance, No. 1—-Guidance on Control*. Canadian Institute of Chartered Accountants, 1995 and AS/NZS 4360:2004

2 Key benefits to the board

The integration of a risk management process into an organisation’s corporate governance framework has the following advantages:

- **More effective strategic and operational planning**

By applying the risk management process to objective setting at all levels of the organisation it becomes effectively integrated as an enterprise-wide process. In addition, controls and strategies are integrated and linked with the organisational objectives as the unifying focus.

Risk management therefore ensures that the risks associated with an organisation’s strategic and operational objectives are identified and addressed by appropriate controls that also function as strategies.

- **Greater confidence in achieving planned operational and strategic objectives**

Risk management applied to the planning process provides confidence regarding performance in two ways.

The application of the formula, strategies = objectives + risk management, develops strategies that provide reasonable assurance that an organisation will achieve its objectives within an acceptable degree of residual risk.

An additional benefit is derived through the development of a enterprise-wide risk management culture that engenders capability and commitment with respect to the management of risks and therefore to the achievement objectives.

- **Enhanced organisational resilience**

Risk management develops a framework for anticipating and professionally managing risks thus reducing the time and energy spent in crisis management. This advantage is further enhanced by incorporating risk management throughout the workforce as part of normal business practice to facilitate rapid organisational response to unexpected threats and to take advantage of opportunities.

- **Greater confidence in the decision-making process**

The risk management methodology outlined in AS/NZS 4360 applies rigour to the decision-making process reducing the probability and/or consequences of unforseen events.

In addition, risk management plays a multiple role in evaluating opportunities. The decision-making process involves the following questions:

- What are the risks of not taking up the opportunity?
- How are these risks balanced by those associated with taking up the opportunity?
- Once the decision has been made to take up the opportunity, what are the risks involved in managing the opportunity effectively?

These processes assist in strategic decision-making processes such as major investments or mergers and acquisitions.

In an organisation focused on performance the overall question should be, ‘are we taking enough risks?’

An additional advantage of an effective risk management process is that it documents the decision-making process thereby enhancing accountability and traceability of decisions.

- **Greater stakeholder confidence and enhanced capital raising**

Demonstration of a sound risk management framework applied throughout the organisation as part of normal business practice engenders confidence in investors, lenders and insurers facilitating capital raising and protection.

- **Director protection**

Implementing an enterprise-wide risk management framework and developing capability and commitment in this regard amongst all members of the organisation enhances the quality of information contained in reports. This is complemented by the development of an effective organisational information framework promoting clarity of roles, responsibilities and accountabilities. Such frameworks can provide Directors with confidence in the information they receive for their decision-making purposes and that their due diligence responsibilities have been effectively discharged.

3 Risk management and the risk management process

3.1 What is Risk?

Risk is defined in AS/NZS 4360:2004, as ‘the chance of something happening that will have an impact upon objectives’. Risk arises out of uncertainty and is the exposure to the possibility of such things as financial loss or gain, physical damage, injury or delay as a consequence of pursuing or not pursuing a particular course of action. It is measured in terms of a combination of the probability of an event and its consequence.

Enterprise has been defined as the undertaking of risk for return[7] and underpins all activities of an organisation at all levels. Whilst the Board has ultimate responsibility for the integrity of an organisation’s risk management framework everyone who has responsibility for an objective has responsibility for the risks and controls associated with achieving that objective. Notwithstanding this, the Board has its own portfolio of risks that it will deal with directly and these risks may be related to—

- share value;
- corporate reputation;
- brand value;
- compliance;
- availability of funding; and
- the management of critical incidents.

[7] KING, M. : *The King Report on Corporate Governance* (King I), Institute of Directors in Southern Africa, November 1994.

3.2 What is Risk Management?

Risk management is about identifying potential variations from what is planned or desired and managing these to maximize opportunity, minimize loss and improve decisions and outcomes. It underpins sound management practices that are the foundation of sound governance.

The process is iterative, consisting of steps that, when undertaken in sequence, enable continuous improvement in decision-making that facilitates continuous improvement in business practices.

The risk management process involves—

- establishing an appropriate infrastructure and culture;
- understanding the organisation, and the context and environment in which it operates; and then
- identifying, analysing, evaluating, treating, monitoring and communicating risks associated with any activity, function or process in a way that will enable organisations to minimise losses and maximise gains.

Risk management is as much about identifying opportunities for gain and improvement as it is about avoiding or mitigating losses.

3.3 The Risk Management Process

3.3.1 General

The Australian and New Zealand Risk Management Standard (AS/NZS 4360:2004) provides a generic risk management process that can be applied to any organisation of any size and in any jurisdiction. The following summary has been taken from AS/NZS 4360:2004, but developed further to suit the Handbook's conceptual view through the—

- addition of a 'Key Outcomes' section following each step;
- linking of risk management with objectives at all levels to provide a truly integrated risk management system; and
- inclusion of a methodology for implementing an integrated risk management system.

The risk management process is illustrated in Figure 1, which is reproduced from AS/NZS 4360:2004. The main elements of the process are discussed in 3.3.2 to 3.3.8.

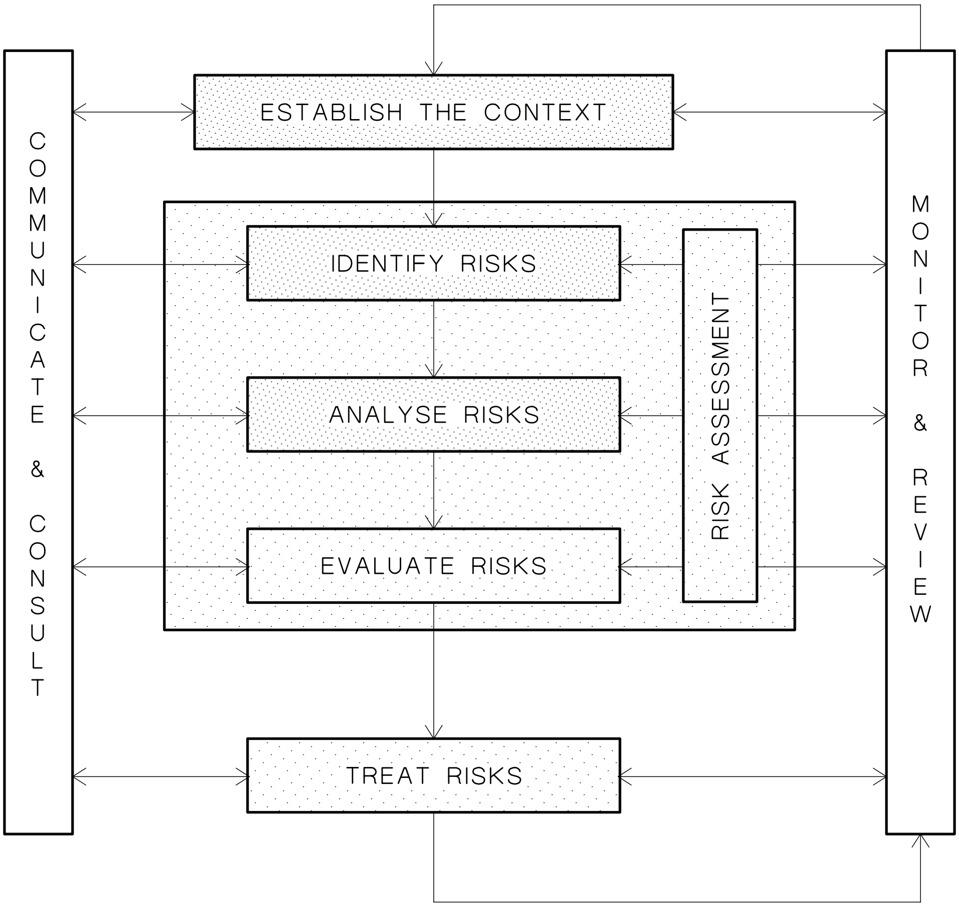


FIGURE 1 THE RISK MANAGEMENT PROCESS

3.3.2 Communicate and consult

Communication and consultation are important adjuncts to each step of the process. For this reason it is important that a communication plan be developed at the outset for consulting with internal and external stakeholders in regard to the overall process and at each stage of the process as appropriate.

A consultative approach is useful to—

- help appropriately define the context;
- ensure risks are identified effectively;
- bring different areas of expertise together in analysing risks;
- ensure that different views are appropriately considered in evaluating risks and appropriate change management occurs during risk treatment; and
- promote the ‘ownership’ of risk by managers and facilitate the engagement of stakeholders allowing them to appreciate the benefits of particular controls and the need to endorse and support a treatment plan.

Key outcomes

- All key stakeholders have been consulted and involved as appropriate.
- Stakeholder perceptions of risk have been addressed.
- Where necessary, a communication plan has been developed.
- Ownership of risk and controls by all members of the organisation.

3.3.3 Establish the context

The next step in the risk management process is to understand the internal and external context in which the rest of the risk management process will take place. Criteria against which risk will be evaluated should be established and the structure of the analysis defined.

The process occurs within the framework of an organisation's strategic, organisational and risk management context. Establishment of the context is required to define the basic parameters within which risks must be examined and managed, and to provide guidance for decisions within more detailed risk management studies. The context sets the scope for the rest of the risk management process.

Key outcomes

An understanding of the organisation's—

- external context (including the relationship between the organisation and its environment, and the organisation's strengths, weaknesses, opportunities and threats);
- internal context (including the organisation's capabilities, the organisation's goals and objectives and the strategies that are in place to achieve them);
- risk management context (including the goals, objectives, strategies, scope and parameters of the risk management process, or the part of the organisation to which the risk management process is being applied); and
- criteria for deciding when risk is tolerable.

3.3.4 Identify risks

The organisation must identify the risks to be managed. Comprehensive identification using a well-structured systematic process is critical, because a potential risk not identified at this stage is excluded from further analysis. Identification should include all risks whether or not they are under the influence of the organisation.

The risks that relate to the organisation's context and objectives must be identified.

Key outcomes

- Risk identification will be integrated as a part of the planning process including strategic, operational, project and individual plans by linking the process to objectives.
- The organisation will have an ongoing, comprehensive and systematic process for identifying risks.
- The staff involved in risk identification will be knowledgeable about the process or activity being reviewed and about the risks that must be managed as a part of that activity.
- More effective decision-making process.

3.3.5 Analyse risks

The organisation must identify the existing controls and analyse risks in terms of consequences and probability in the context of those controls. The analysis should consider the probability of the risk occurring and the potential consequences in terms of their severity should they occur. Probability and consequences may be combined to produce an estimated level of risk.

The objective of analysis is to provide data to assist in the evaluation and treatment of risks. Risk analysis involves consideration of the sources of risk, their consequences and the probability of those risks occurring. Factors which affect consequences and probability may be identified.

Risk is analysed in the context of existing controls and the level of risk therefore will depend in part on the effectiveness of existing controls. If these controls are critical in terms of the management of risk, then Boards and senior managers should seek appropriate assurance that the controls have been implemented, are effective and remain in place. This concept is discussed in more detail in Section 5.

Key outcomes

- Existing management and technical systems and procedures used to control risks have been identified, assessed and remain in place.
- Critical controls have been identified.
- Estimates of consequences and probability are based on the most appropriate information available.

3.3.6 Evaluate risks

The estimated level of risk should be compared with pre-established criteria and ranked to identify management priorities. If the level of risk established is low, then the risk may be tolerable and additional treatment may not be required.

The output of a risk evaluation generally consists of a prioritised list of risks for further action. The objectives of the organisation and the potential benefits and costs of taking the risks should be considered.

Key outcomes

- Risk will have been evaluated and prioritised using a consistent process.
- The organisation will have established the need for treatment plans for the higher priority risks, taking account of benefits and costs.

3.3.7 Treat risks

Risk treatment involves identifying the range of options (controls) for treating risk, assessing those options, preparing risk treatment plans and implementing them.

Risk treatment plans may involve a range of options (controls) directed towards the following:

- Avoiding the risk by deciding not to proceed with the activity likely to create risk (where this is practicable).
- Changing the probability of the occurrence, to enhance the probability of beneficial outcomes and reduce the probability of losses.
- Changing the consequences of the risk, to increase the size of the gains and reduce the size of the losses.
- Sharing the risk.
- Retaining the risk and making appropriate provisions for dealing with the consequences should they arise.

Once risks have been prioritised through the evaluation process, plans need to be developed. Risk treatment plans may involve the re-design of existing controls, the introduction of new controls or monitoring of existing controls. Low impact risks require only periodic monitoring while major risks are likely to require more intense management focus.

A cost/benefit analysis of a range of treatment plans (controls) is essential to the decision-making process.

Similar processes should be used for the analysis and evaluation of opportunities.

Key outcomes

- There is a risk treatment plan (control) for each major risk.
- Risk treatment plans include considerations of resourcing and timing.
- The application of risk management to objectives at all levels of the organisation facilitates planning and develops controls that are also strategies. It follows that performance measures for each objective are also measures of the effectiveness of the controls and strategies for each objective. In addition, risk management reporting is integrated and linked to performance reporting against objectives.

3.3.8 Monitor and review risks

Risk has a dynamic context resulting from the constantly changing external and internal environments. For this reason the organisation should monitor and review the performance of its risk management process and changes in the internal and external environments that might affect it.

In this process it is necessary to monitor not only the risks, but also the effectiveness of the associated risk treatment plans and the management processes for controlling their implementation.

These three levels of assurance activity are essential components of both effective risk management and sound corporate governance.

Key outcomes

- There is regular review and monitoring of the risk management process including—
  - the risks and opportunities the organisation faces, and their priorities; and
  - the implementation and effectiveness of risk treatment plans (controls, strategies).
- The organisation's risk management processes have been applied systematically to objectives at the corporate, business unit and project levels.

3.4 Implementing a risk management framework

3.4.1 General

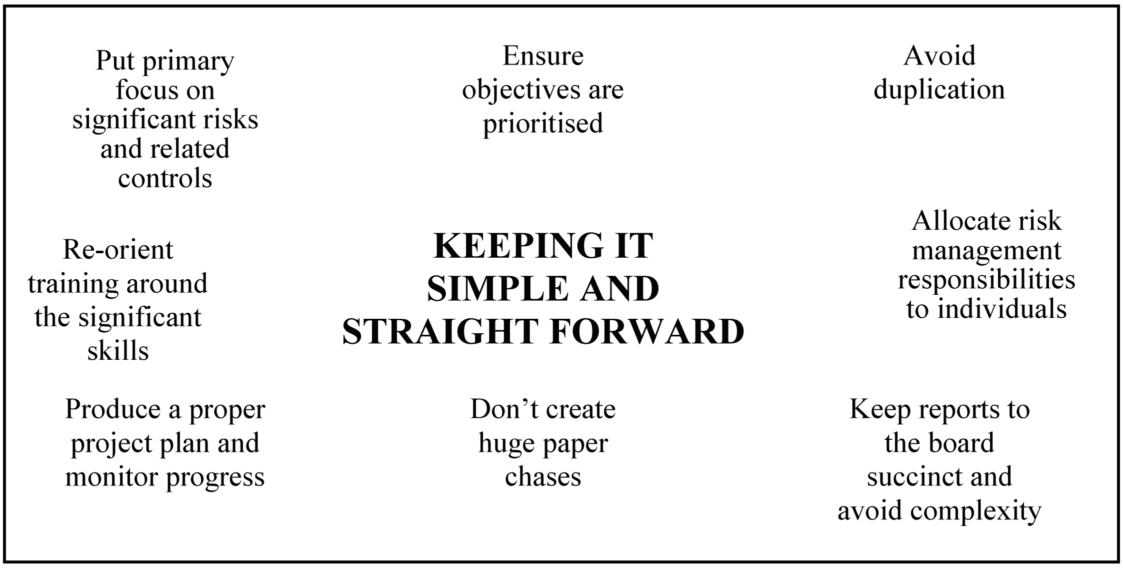
Risk management is the foundation of the control environment and sound corporate governance, and touches all of the organisation's activities. For this reason the implementation of an effective enterprise-wide risk management framework requires careful planning.

A common issue for both large and small organisations is a constraint on available resources for risk management and control activities. It is therefore sensible to keep these procedures as simple and straightforward as possible. Also, there is no business sense in maintaining procedures where costs outweigh the benefits to the business. Figure 2 sets out some useful principles to bear in mind in keeping costs down. The aim is to sharpen up, rather than add, resources to the risk management and control activities.[8]

For any organisation of any size however, the Handbook offers a way of reducing costs. An integrated risk management system

[8] *Implementing Turnbull.* Institute of Chartered Accountants, England and Wales 1999, p 10.

does away with the concept of risk management as a separate business process with its own planning and reporting process. The linking of risk management to objectives fully integrates risk management as part of normal business practice thereby reducing resources requirements and costs.



Put primary focus on significant risks and related controls

Ensure objectives are prioritised

Avoid duplication

Re-orient training around the significant skills

KEEPING IT SIMPLE AND STRAIGHT FORWARD

Allocate risk management responsibilities to individuals

Produce a proper project plan and monitor progress

Don’t create huge paper chases

Keep reports to the board succinct and avoid complexity

FIGURE 2 AVOIDING UNNECESSARY COMPLEXITY AND COST (AFTER 'IMPLEMENTING TURNBULL')[9]

Implementation is best undertaken in two phases[10] as follows—

- An initial phase wherein the implementation plan is developed and Board and senior management support is generated.
- An ongoing phase by which the framework is—
  - embedded throughout the organisation; and
  - maintained through monitoring and reviewing risks, controls and changes to the internal and external environments.

3.4.2 Initial implementation phase

The initial planning phase assists Boards and senior managers in discharging their responsibility for the development of an organisation-wide risk management culture. Supporting processes include the—

- generation and communication of an implementation plan;

[9] *Implementing Turnbull*. Institute of Chartered Accountants, England and Wales 1999, p 11.

[10] *Implementing Turnbull*. Institute of Chartered Accountants, England and Wales 1999, p 11.

- development and dissemination of a Risk Management Policy;
- provision of information sessions to all employees in relation to risk management and its pervasive role in the organisation; and
- designation of risk management co-ordinators at appropriate positions throughout the organisation.

Risk management policy

The development of a policy clearly identifying the organisation’s approach and attitude to risk management and the expected roles and responsibilities of all parties is a key governance tool. The Risk Management Policy should clearly address issues such as—

- objectives of the policy and the rationale for managing risk;
- the scope and coverage of the policy;
- the links between risk management and the organisation’s goals, objectives and the nature of its business;
- who is responsible for managing risks and who has responsibility for risk management co-ordination;
- risk methodology to be used;
- guidance on what might be regarded as acceptable risks;
- sources for support and guidance in relation to risk management;
- the reporting protocols and the level of documentation required;
- a plan for reviewing the organisation’s performance in relation to the policy and the policy itself; and
- the need for business continuity plans, disaster recovery plans and the regularity of testing of these plans.

Risk management co-ordinators

The appointment of risk management co-ordinators in key positions throughout the organisation provides a group of risk management champions to assist in implementing an enterprise-wide risk management framework. The tasks of risk co-ordinators include—

- monitoring the implementation of risk management in the parts of the organisation in which they work;
- reporting on risks, and on risk management implementation, as required;
- promoting the acceptance of risk management techniques;
- increasing awareness of the benefits of risk management;
- providing advice and support; and
- facilitating risk assessments and risk management activities.

The appointment of risk co-ordinators does not remove the responsibility from all employees to manage risks and controls. Co-ordinators are just that—co-ordinators—and risk management remains a line management responsibility.

3.4.3 Ongoing implementation phase

This phase involves embedding a risk management culture throughout the organisation as part of normal business practice to support the risk management policy. The aim is to promote an understanding of purpose, develop capability and generate commitment to the management of risk by—

- incorporating risk management as part of the planning process at all levels of the organisation and linking these to monitoring and reporting on risks;
- incorporating risk management processes into day-to-day business processes and systems to provide for the dynamic and continuous management of change and to ensure that there is always an effective and appropriate control environment;
- assigning risk co-ordinating and reporting responsibilities to managers of divisions and cascading these responsibilities throughout the organisation;
- training co-ordinators in their assigned responsibilities;
- providing information sessions on risk management and its benefits to the organisation's business to all members of the organisation and to new employees through the induction process;
- incorporating risk management responsibilities as part of job descriptions and performance evaluation;
- continually monitoring the internal and external environment for changes that may affect the organisation's risks and controls, and developing corrective action as necessary; and
- continually developing and monitoring corrective actions.

4 Control assurance plan

4.1 General

Risk management develops the control environment and, as outlined in Section 2, provides significant benefits to the Board. It is possible to provide further benefits for the Board by separating control into inherent and formal control[11]. This is achieved by integrating the underlying value system of a learning organisation[12] with a traditional systems/compliance view of governance.[13]

This Section outlines a Control Assurance Plan based upon increasing the focus on inherent control and reducing the reliance on formal control. In so doing, the Plan provides a framework for moving the organisation towards self-management at the operational level in support of a learning Board free to concentrate on its key tasks of policy formulation, strategic thinking, supervising management and accountability[14]. Self management relies upon developing an understanding of purpose, and building trust, capability and commitment throughout the organisation.

The foundation of the plan is five Control Elements linked by an information system. A set of Control Criteria[15] operate in each Control Element and the criteria are addressed through the application of Control Activities (standard management practices) (Table 1).

[11] DAHMS, T. Inherent Control, a concept for effective corporate governance. Keeping good companies, Feb 2003, vol. 55, no 1 p. 26-29, Chartered Secretaries Australia.

[12] QUEENSLAND AUDIT OFFICE, 2002. *Corporate Governance and Risk Management Assessment Program for Departments*, General Publications. http://www.qao.qld.gov.au/

[13] DAHMS, T. Systems and commitment in corporate governance. Keeping good companies, 2002, vol.55, no. 1 p. 26-29. Chartered Secretaries Australia.

[14] GARRETT, B. *The Fish Rots From the Head.* Harper Collins, 225 pp, 1997.

[15] *Control and Governance* No. 1. Guidance on Control. Canadian Institute of Chartered Accountants, Ontario, Canada, November 1995.

The Control Elements, Control Criteria and Control Activities are summarised in Table 1.

TABLE 1
CONCEPTS UNDERPINNING A CONTROL ASSURANCE FRAMEWORK

CONTROL ELEMENTS	CONTROL CRITERIA	CONTROL ACTIVITIES (Management practices)
Planning	Purpose	Integrated planning
		Competency development
Board	Capability & commitment	Matching authority
		Expected standards of behaviour (ethics)
	Commitment	Clarity of roles & responsibilities
Organisation	Monitoring & learning	
		Monitoring, review and reporting
Management assurance	Information	Information framework
Independent assurance		

The Plan is supported by the following premises:

- The purpose or focus of an organisation is defined by its corporate objectives and by their translation into operational objectives throughout the organisation.
- Strategies are developed by applying the risk management process to the process for defining and setting corporate and operational objectives, i.e. the risk management process develops the risk treatment plans that are at the same time the controls and strategies associated with each objective.
- Control is broader than internal financial control and is expanded to include all planning and strategies put in place after the corporate objectives have been set.
- The control environment provides the Board with reasonable assurance that the organisation will achieve its objectives within an acceptable degree of residual risk.
- Governance therefore may be considered as an organisation's strategic response to risk.[16]
- Reporting is simplified because reporting on risks and their management is linked to performance reporting. Key Performance Indicators (KPIs) associated with each objective are in essence measures of the effectiveness of their

[16] David McNamee and Georges Selim. *Changing the Paradigm* 2000. www.mc2consulting.com/riskart8.htm

associated strategies and at the same time measures of the effectiveness of controls.

- Risk Management not only provides a strategy for treating risks that might prevent an organisation from achieving its objectives, but also provides the flexibility for the organisation to respond to unexpected threats and take advantage of opportunities. Risk management therefore provides organisational resilience as well as control.
- Transparency and probity are part of this control environment.
- Control assurance is a balance of two aspects—
    - inherent control that is based upon soft controls occurring continuously and consistently throughout the organisation, is embedded in normal business practice, and to a large extent self sustaining; and
    - formal control processes of assigning, monitoring, reviewing and reporting (command–control style based upon a hierarchy).
- Although the Board has overall responsibility for the control environment, everyone who has responsibility for an objective has responsibility for the risks associated with that objective and the controls to manage those risks.

4.2 Assurance control elements

The Board is responsible for the organisation's overall control framework that complements the strategic and operational planning process. This responsibility is discharged by setting appropriate risk and control policies, and by seeking regular assurance regarding the effectiveness of the control environment. Control assurance operates through the five key Control Elements (Figure 3) as follows —

- Planning
- Board
- Organisation
- Management assurance
- Independent assurance

The **Planning** Control Element is the focal point of the organisation in which the corporate and operational objectives are developed, linked and integrated. Activity in this Control Element provides organisational purpose and direction that translates into operational purpose for committees, teams and members of the organisation.

Theoretically, it is the Board's responsibility to develop policy (mission and vision) and strategy, and management's responsibility to transfer this to operational plans. In practice, there is a merging of responsibilities between the Board and management in this Control Element. The Board brings to the process its high level view of the organisation's external operating environment (mission and vision) and senior management a view of the organisation's internal and external environments from an operational perspective. The two combine to provide strategies that meet the mission and vision of the organisation with a balance of effectiveness and efficiency.

Encircling the Planning Control Element are four structural Control Elements connected by the Information framework.

- The Board as the shareholder representative has responsibility and accountability for organisational performance to key stakeholders. As well as its role in setting policy (mission and vision) and strategy as discussed above under Planning it has a tactical role in maintaining a watching brief over the external and internal environments and CEO performance, and obtaining balanced assurance over the control environment from management and independent sources.
- The Organisation includes the CEO, senior managers and employees, and delivers organisational outputs in line with the planned corporate outcomes. This Control Element provides the opportunity to exercise a high degree of inherent control through sound HR and ethical practices in an environment of open communication. Monitoring and performance review in this Control Element make significant contributions to the Board's strategy-setting responsibilities in the Planning Control Element.
- Management Assurance provides the Board with assurance through management monitoring, reviewing and reporting of organisational performance against stated objectives and compliance against laws, regulations, policies, procedures, etc. Management teams or committees may be established to assist in this process. This Control Element also makes significant contributions to the Board's responsibilities in the Planning Control Element.
- Independent Assurance presents the Board with objective information on the control environment through independent bodies such as external and internal audit, and audit committees. This Control Element provides a check and balance for the outputs of the Management Assurance Control Element. When the Board receives positive feedback on the control environment from these independent bodies it can have confidence in the assurance received from management.

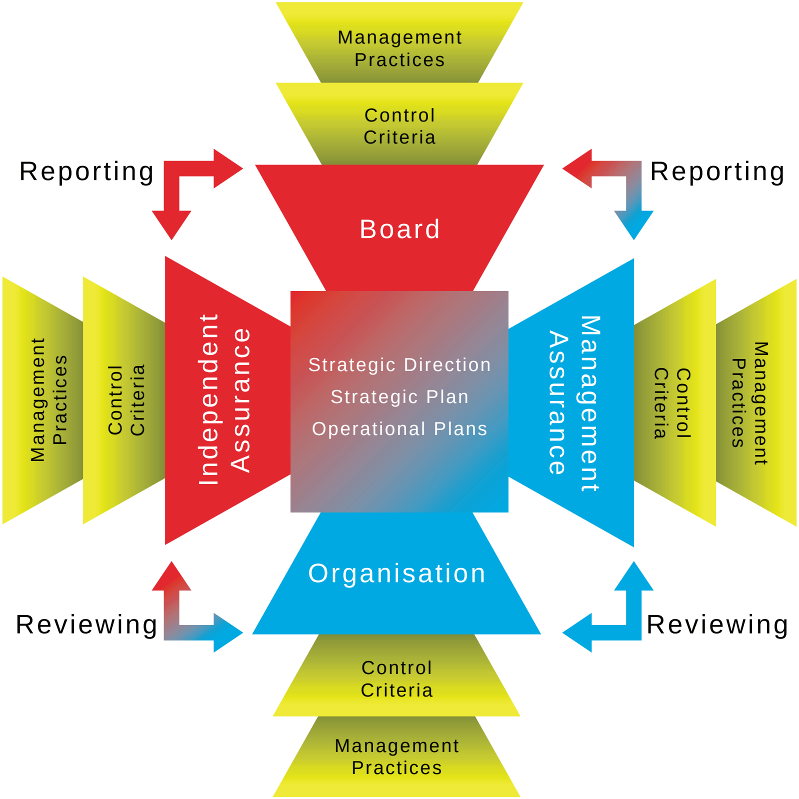


FIGURE 3 COMPONENTS OF CONTROL ASSURANCE

4.3 Control criteria

4.3.1 General

Assurance is based upon application of control criteria[17] in the Board, Organisation, Management Assurance and Independent Assurance Control Elements (see Table 1). The proposed control criteria[18] are Purpose, Capability, Commitment and Monitoring and Learning. Information operates across all criteria, but because of its pervasive influence it is discussed separately as a fifth control criterion. The five criteria and their relationship within the control environment are discussed in 4.3.2 to 4.3.5.

4.3.2 Criterion 1–Purpose

The Board, with the assistance of senior management, is responsible for setting the organisation’s strategic direction. It achieves this by developing the organisation’s mission and vision

[17] The control criteria are the basis for understanding control in an organisation and for making judgements about the effectiveness of control.

[18] *Control and Governance No. 1. Guidance on Control.* Canadian Institute of Chartered Accountants, Ontario, Canada, November 1995.

from which are developed the corporate objectives. The Board is indirectly responsible through the CEO for ensuring that these corporate objectives cascade throughout the organisation by translation into integrated and aligned operational, business, team and individual objectives.

The leadership challenge for the Board, CEO and senior managers is in promoting an understanding throughout the organisation that its sub-units and their objectives are part of an interconnected whole with the corporate objectives as the unifying force. The setting of objectives, development of measurable performance targets and communication of these aspects throughout the organisation provides the purpose for the Board and the organisation.

In developing organisational objectives the Board and senior management should ensure that the significant internal and external risks associated with those objectives are identified and assessed.

Cascading the corporate objectives throughout the organisation and ensuring that all members of the organisation understand how their role contributes to the organisational objectives provides an important measure of inherent control. The objectives themselves provide targets against which organisational performance can be measured and this along with compliance reviews is the basis of formal control.

4.3.3 Criteria 2 & 3–Capability & Commitment

Capable and committed employees, teams and committees are the key to the development of a learning organisation focused on innovation, continuous improvement and results. They are key elements of inherent control and assist in providing reasonable assurance that—

- the organisation’s objectives will be met within an acceptable degree of residual risk; and
- opportunities will be recognised and assessed in a timely manner.

Capability and Commitment are facilitated through human resource and communication strategies aligned to the corporate objectives to ensure—

- a direct link between objectives and competencies is established, communicated throughout the organisation and maintained;
- new competencies are anticipated and developed for emerging opportunities;
- clarity of roles, responsibilities with matching authority amongst all employees, committees and teams through clear position descriptions, terms of reference, polices and delegations;

- a culture of ethical behaviour including respect for others is developed and maintained by adoption of a code of conduct;
- risk management and control activities are incorporated as part of normal business practice and systems; and
- implementation of an effective and efficient information system that promotes an understanding of purpose, provides for effective decision-making and facilitates open communication.

4.3.4 Criterion 4–Monitoring and Learning

A measure of inherent control is provided through the system of individual performance and compliance review at the individual employee level and through self-evaluation of teams and committees. These systems also provide opportunities for learning and continuous improvement.

Board and management monitoring systems in the Independent Assurance and Management Assurance Control Elements perform a number of essential functions in providing formal assurance in respect of the control environment and the achievement of objectives. The following apply:

- Performance against corporate and business objectives requires regular monitoring by management and the Board to ensure objectives are being met. Suitable adjustments to plans should be undertaken as identified.
- Compliance with the required laws, policies, standards, procedures and guidelines both external and internal should be reviewed regularly.
- The continuing effectiveness of the organisation’s planning, information, risk management and control frameworks should be reviewed and tested regularly.
- The external and internal environments are dynamic and constantly changing as are the risks and the controls to mitigate them. Opportunities add a further dynamic and all require constant monitoring and assessment. As part of this monitoring aspect the Board and management should regularly test or question the underlying assumptions underpinning the organisation’s strategic direction. This aspect includes interaction with the Planning Control Element.
- As business objectives are met or timelines pass, lessons may be learnt from analyses of the root causes of both successes and failures.

All of the above address the Monitoring control criterion. In doing so, they provide information for the organisation to make decisions on modifications to address variances from expected performance or compliance, and to take advantage of opportunities. These aspects address the control criterion of Learning.

4.3.5 Criterion 5–Information

Effective information systems are essential learning and control mechanisms for assurance. Information should provide or facilitate—

- timely and effective decision-making;
- clarity of roles, responsibilities, authority and expected standards of behaviour at all levels of the organisation;
- timely relay of action items arising out of Board, Board committee and management meetings to the appropriate committee, team or employee;
- monitoring of the timely completion of action items;
- reports on periodical assessments of risks and controls;
- timely reporting in relation to organisational performance and conformance; and
- communication and alignment of innovations (opportunities) and continuous improvement.

Elements of useful information include—

- quality—matched to the purpose for which it is intended;
- quantity—just the right amount to provide clarity, neither too brief nor too much; and
- timeliness—delivered at a time when required for decisions or for communication purposes.

Consequently the Board and management should develop an information framework for their organisation addressing the above elements. Information plays a vital role in supporting the criteria of Purpose, Capability and Commitment that form the basis of inherent control. Similarly information is the vital link in formal control through its support of effective decision-making, and monitoring and reporting against critical risks.

4.4 Inherent control assurance

4.4.1 General

Inherent controls are those that promote purpose, capability and commitment throughout the organisation, including the Board, and are reliant on sound HR, ethics and communication. Implementation of a governance system without attention to inherent controls encourages compliance rather than commitment and will not guarantee an effective control environment.

Elements that contribute to an inherent control system include systems thinking, developing a learning organisation, motivating trust and relationships, and matching competencies with objectives[19]. These elements, underpinned by Management Principles, support the Control Criteria of Purpose, Capability and Commitment and operate in all of the assurance Control Elements proposed in this Handbook.

4.4.2 Systems thinking

Organisations are complex systems. The traditional method of dealing with complexity is to break it down into component parts and examine each part in isolation. This process is followed in designing an organisational structure and assigning roles and responsibilities throughout the structure. The very act of assigning roles and responsibilities predisposes the organisation to fragmentary or silo behaviour where individual parts concentrate on their assigned tasks and function independently rather than as an integrated whole focused on organisational goals. Where fragmentary behaviour develops, a compliance mentality follows and the worthy concepts of continuous improvement and innovation fall by the wayside. Performance is diminished and opportunities are lost.

Systems thinking takes a holistic view of an organisation based upon the observation that autonomy is never absolute and that all parts of the organisation are interdependent. Decisions are never taken in isolation.

Additionally, organisations do not operate as closed isolated systems but in a world that is both dynamic and complex. The internal and external environments are constantly changing thus creating situations that lead to competition and collaboration both of which present opportunities and threats which must be managed. Organisations are therefore continuously adapting to change and are co-evolving with others.

In applying this concept to organisations the leadership skill is in promoting an understanding that all divisions of the organisation are part of an interconnected whole with the corporate objectives as the unifying force. This aspect is facilitated in the planning Control Element by integrating corporate, operational, team and personal objectives.

4.4.3 Learning organisation

Learning organisations have cultures, which predispose them to innovation and the early recognition of opportunities. The factors that facilitate the change from a controlling to a learning organisation include the development of a shared vision which in turn relies upon open communication in a climate of commitment and trust. New ideas are able to be shared allowing alignment of ideas to give a common direction and this facilitates team learning. In this environment risk taking is encouraged (are we

[19] DAHMS, T. Systems and commitment in corporate governance. Keeping Good Companies, 2002, Vol.55 no.1 p. 26-29 Chartered Secretaries Australia,.

taking enough risk?), learning is shared and the focus of all members is on organisational performance not conformance.

4.4.4 Trust and relationships

Where interdependent agents, both internal and external, wish to co-ordinate their behaviours they must invest in creating, building and maintaining trustful relationships. Without trust both parties descend into non-communicative and defensive behaviour. Innovation and synergy do not flourish and the opportunity is lost for two to achieve more than they could by operating separately.

The more effort invested on building trust and relationships within an organisation the lesser the need to retain command/control structures founded on compliance. Where members of an organisation, or co-operating organisations, are willing to accept accountability and perceive that they are operating in an environment of trust and synergy the reliance on compliance is reduced. A greater focus on performance results. Complementing the aspect of trust is the development and maintaining a match of competencies with assigned responsibilities.

4.4.5 Competencies

An organisation must align the competencies of its employees with its objectives if it is to be successful. This alignment is facilitated by sound HR practices involving job design with matched position descriptions, recruitment and selection, professional development, performance planning, staff retention and succession planning.

Because of rapid external environmental changes currently occurring these practices must be continually reviewed to ensure the organisation maintains its core competencies and builds new competencies to take advantage of opportunities. Senior managers must view the organisation as a portfolio of competencies, of underlying strengths and not just a portfolio of business units. In short, strategic and operational HR planning are fundamental tools for success and should not be neglected.

5 Implementation–How effective control can provide assurance to the board

5.1 Application of the Control Criteria

5.1.1 General

Control assurance is a balance between inherent and formal control with inherent control assurance occurring seamlessly throughout the organisation as part of normal business practice. Formal control assurance is provided by the processes of assigning tasks and monitoring and reporting on their progress/completion. It has a compliance or command–control focus.

The leadership skill required by the Board, CEO and senior managers is to develop an effective balance between the two assurance processes. By increasing assurance through inherent control, formal control can concentrate on areas of critical risk, the organisational focus becomes one of performance rather than compliance and the governance style is based upon an innovation–results model rather than command–control model[20].

Control assurance is based upon the application of the Control Criteria across all of the Control Elements that are linked by an Information System. These criteria are addressed in different ways in each by varying the underlying Management Principles according to the Control Element's assurance focus as outlined in the following discussion.

[20] DAHMS, T. Implementing inherent control, improving performance, reducing compliance. Keeping good companies, 2003, vol.55, no 2 p 78-82, Chartered Secretaries Australia.

5.1.2 Control Element 1–The Board

The Board is responsible for the strategic direction of the organisation and its relationship with stakeholders.

Control Assurance focus

It is the Board's responsibility to ensure—

- the capability and commitment of directors in relation to the effective discharge of the Board's responsibility;
- the organisation has an effective strategic direction;
- the implementation and maintenance of a control environment that supports this strategic direction;
- the organisation operates within its legal and regulatory obligations;
- the organisation can continue to function in the face of major disruptions;
- the implementation of an information system that supports effective decision-making and open communication;
- an effective linkage is developed between the Board and the organisation through the CEO; and
- development of a capable and committed workforce that has a clear understanding of the organisation's purpose.

In short, the Board's role is to promote the vitality of the organisation thereby providing reasonable assurance as to its viability.

Control Activities —

Control Assurance is facilitated by the following:

- Development of a Board operating manual setting out its responsibilities, authority, operating procedures, and relationships to the CEO and management.
- A Board code of conduct setting out expected ethical behaviour and leading by example.
- An appropriate recruitment and selection policy and procedures for directors that includes provisions for succession planning.
- Induction procedures for new directors outlining the—
  - nature of the organisation's business and operating environment; and
  - Board responsibilities and accountabilities.
- Ongoing professional development to maintain and develop new competencies amongst directors.
- Meetings and well maintained meeting papers that—
  - are clearly laid out and circulated in advance of a meeting to allow directors time to examine the issues;

  - provide an indication of the outcome against each agenda item;
  - have an executive summary accompanying detailed reports and submissions and where necessary executive briefings at the meeting; and
  - contain all the necessary reports and information for directors to make informed decisions;

- Regular review of information provided to the Board to ensure its continuing support of Board decision-making.
- Regular self-evaluation of the Board, individual director performance and operating charter.
- Recruitment and selection of a capable and committed CEO, regular CEO performance reviews and CEO succession planning.

5.1.3 Control Element 2–Organisation

Assurance in this Control Element is provided by the development of capable and committed employees who have a clear understanding of organisational and operational purpose. These attributes can be facilitated by the CEO and management through a number of processes that promote such understanding.

The CEO has a pivotal role as the organisation's representative to the Board and the Board's representative to the organisation. In this role the CEO makes a significant contribution to control assurance for the Board in a number of ways.

Control Assurance focus (CEO–Board relationship)

In this Control Element the CEO is responsible for inherent control as follows:

- Providing purpose by ensuring the translation of corporate objectives throughout the organisation in the form of operational, business, team and individual plans.
- Designing and implementing the necessary HR and other policies to ensure capability and commitment of employees with respect to the objectives of the organisation.
- Providing assurance to the Board that effective inherent controls have been implemented and are being appropriately monitored.
- Developing risk management systems and strategies to minimise negative outcomes, and identify, assess and develop opportunities.

Control Activities (CEO–Board relationship)

In the Management Assurance Control Element the CEO ensures that appropriate formal controls are implemented over management functions and that these controls form the basis of effective monitoring and reporting systems to provide assurance for the Board.

For this reason, Boards must have the highest confidence in the CEO's ability and ethics. CEO recruitment, selection, performance review and succession planning are primary inherent controls exercised by the Board.

Inherent control assurance in this Control Element is provided to the Board through periodic reports on systems implemented by the CEO and senior managers to address Purpose, Capability and Commitment as follows:

- Planning and communication of objectives.
- Integrity and operation in relation to critical strategic and operational HR systems involving policies such as recruitment and selection, inductions, performance planning and review, succession planning and reward systems.
- Periodic review of the organisation's competency requirements linked to professional development.
- Integrity of the organisation's information systems.

Control Assurance Focus (Organisation)

The CEO, senior managers and employees should—

- be capable of performing their roles, and managing associated risks and controls;
- understand the internal and external environments in which their organisation operates;
- be committed to the mission and vision of the organisation with an understanding of how their role contributes to the achievement of the corporate mission and vision;
- have a clear understanding of their roles, responsibilities, authority and expected standards of behaviour;
- readily accept accountability for their responsibilities (objectives);
- support ethical behaviour through their actions, relationships and dedication to duties, and through the endorsement of principles such as those in AS 8002, Corporate governance—Organizational codes of conduct; and
- have access to all the necessary information to discharge their responsibilities and accountabilities, and to facilitate innovation and continuous improvement (open communication and ethical environment).

Control activities (Organisation)

Assurance is facilitated by—

- ensuring recruitment and selection processes are supported by effective skills analysis and job design to ensure alignment of competencies with corporate objectives;

- ensuring competencies in risk management and control issues are part of the selection criteria for recruitment and selection processes;
- undertake and monitor corporate and work area inductions to promote understanding of objectives, risk and control associated with the organisation, work area and position;
- position descriptions, organisational and workplace inductions, policies, procedures, delegations and codes of conduct that provide clarity of roles, responsibilities, authority, accountabilities and expected standards of behaviour;
- effective communication and professional development in regard to risk and control issues, and their linkages to the organisation's business objectives;
- performance planning and review systems to monitor results and identify personal development needs;
- regular job skills analysis to focus professional development on the maintenance and development of competencies as required;
- control self assessment programs;
- an information system to promote clarity of roles, responsibilities and authorities and open communication (supporting performance of duties and innovation); and
- senior management leading by example.

5.1.4 Control Element 3–Management Assurance

Assurance in this Control Element seeks to ensure that the control environment is appropriate to risk, that the organisation is performing against objectives and is complying with relevant laws, regulations, policies and procedures.

This requires competencies in planning, risk management and control, and the establishment and effective functioning of committees and teams. The comments made under Independent Assurance regarding the establishment and focused functioning of committees applies here. These aspects are elements of inherent control assurance with the outputs from these bodies contributing to formal control assurance.

Formal control assurance is provided in two ways—firstly, by the activities of bodies such as executive committees and teams, and secondly, by internal reporting mechanisms that provide assurance about compliance and the achievement of objectives at all levels of the organisation.

The effective implementation and functioning of these assurance mechanisms are key CEO responsibilities.

Control Assurance Focus (Employees)

Purpose, capability and commitment in this Control Element are related to monitoring, review and reporting as follows—

- appropriate skills and experience in planning, risk management and accountability;
- knowledge of the organisation’s operational objectives, and their integration and linkage to the organisational objectives;
- knowledge of the organisation’s control environment and its relationship to organisational and operational objectives and risks;
- clarity of roles, responsibilities and authorities in respect of monitoring, reviewing and reporting;
- maintenance and development of new competencies as necessary;
- commitment to ethical issues including conflicts of interest and confidentiality of information.
- ready access to relevant information and reports.

Control activities (Employees)

Assurance is facilitated by the following—

- recruitment and selection processes that include the requirements for competencies in governance, planning, monitoring, reviewing and reporting;
- position descriptions, policies, procedures and delegations that provide clarity of assurance roles, risk management responsibilities and authorities;
- organisational and workplace inductions that include explanations of assurance responsibilities and authorities, and promote understanding of the organisation’s business environment, risk profile and expected standards of ethical behaviour;
- promotion of ethical behaviour in relation to respect for the system of law, respect for persons, integrity including potential conflicts of interest, diligence and economy and efficiency (includes leading by example);
- performance review in respect of assurance and ethical behaviour;
- ongoing professional development programs to maintain and develop new competencies in respect of governance and the assurance function; and
- developing and maintaining information systems that provide orderly pathways for timely and effective monitoring and reporting, and facilitate innovation and continuous improvement.

Control Assurance Focus (Committees/Teams)

Committees and Teams require—

- the necessary mix of skills and experience (competencies);
- clarity of roles, responsibilities and authority;

- understanding of the business environment of the organisation and operational area;
- maintenance or development of new competencies ;
- commitment to ethical issues such as potential conflicts of interest and confidentiality of information;
- monitoring and assessment of performance;
- an information system that supports their monitoring, review and reporting responsibilities.

Control activities (Committees/Teams)

Assurance is facilitated by—

- selection process to provide a mix of competencies relevant to the committee/team's area of responsibility;
- clear terms of reference setting out the roles, responsibilities, powers and operational procedures of the committee/team;
- induction into the roles, responsibilities and powers of the committee/team, its role in the governance of the organisation, expected standards of behaviour and the business environment of the organisation and operational area;
- skills needs identification and ongoing personal development programs to maintain and develop new competencies as necessary;
- implementation of effective meeting procedures to ensure active participation and informed decision-making by members;
- development and maintenance of quality records to ensure decisions are accurately recorded, and that action items are noted and followed up;
- development and periodical review of reporting protocols to ensure the committee/team provides and receives the appropriate quality and quantity of the required information, and in a timely manner;
- self-assessment against the terms of reference and annual program set by the committee/team to gauge whether the body is functioning as required and that its terms of reference remain valid; and
- a management performance review of the committee/team to ensure the body's functions continue to add value to the governance of the organisation.

5.1.5 Control Element 4–Independent Assurance

Assurance in this Control Element is provided through bodies such as internal audit, external audit and audit committees. The key characteristics of this Control Element are its objectivity and independence from management.

Small organisations, due to resource constraints, may decide not to develop an internal audit unit. Alternative arrangements are discussed at the end of this section.

Internal Audit

The roles and responsibilities of internal audit units include the conduct of internal reviews of key financial and operational activities, including information communication systems. The reviews focus on operational effectiveness and efficiency as well as compliance with financial and legal requirements. Through these reviews, the audit committee and the Board can gain assurance that—

- the internal control environment is operating as intended or requires modification as necessary;
- there is a system for implementing new controls before serious loss occurs rather than in response to loss; and
- there is a proactive system for anticipating change.

Board subcommittees function as special focus groups of directors established to—

- ensure that a subject of particular interest to the Board will receive adequate attention;
- bring independent judgment to bear in the committee's functional area of focus by selecting appropriately skilled and experienced members to serve on the committee; and
- promote objectivity in committee decisions through the outlining of functions in terms of reference that include the specification of reporting duties to the Board.

Because of the extra administrative load that committees impose and their leverage on directors' time it is important to carry out a cost/benefit analysis prior to establishing them. Once a decision has been made to establish a committee, steps must be taken to facilitate performance of the committee. Regular reviews are required to assess the continuing contribution of a particular committee to the governance of the organisation.

Because many jurisdictions have no statutory requirement to establish particular committees, there is generally little uniformity in relation to the types of committees across organisations. Exceptions might be the audit, remuneration and nomination committees. Of these the audit committee is of particular importance in this Plan.

Audit Committees

Audit committees exist as advisory bodies to Boards and, among other things, provide a quality assurance review as to the effectiveness of the organisation's control structures. This is achieved through the provision of advice on audit and audit-related matters and through its monitoring and review of the audit function by —

- approving a charter for internal audit setting out its role responsibilities, authorities and reporting responsibilities;
- ensuring that the internal audit unit is adequately resourced and its charter remains relevant;
- managing the selection and appointment process where external service providers are utilised;
- directing internal and external audit resources towards the coverage of high risk areas of the control and operating environment;
- communicating internal and external audit issues and recommendations to the executive group;
- ensuring an effective liaison is developed and maintained between external and internal audit to reduce unnecessary duplication and overlaps; and
- monitoring the implementation of adopted recommendations from internal and external audit.

Processes addressing Purpose, Capability and Commitment provide the inherent control assurance over the output of committees. Internal and external audit by addressing Monitoring and Learning provide formal control assurance. Implementation of these processes is the responsibility of the Board assisted by the CEO.

External audit

External audit's assurance responsibility is primarily one of public trust and it owes ultimate allegiance to external stakeholders. Whilst the owners of the organisation—its shareholders—are a primary audience, other important stakeholders may include customers, creditors, regulators and the community. Audit independence from the client organisation and the avoidance of conflicts of interest are key principles.

Notwithstanding this external focus, external audit can provide the audit committee and the Board with independent assurance as to the functioning of the organisation's control environment. An important role for the audit committee is the facilitation of co-operation between internal and external audit to reduce overlaps or duplication in coverage.

Independent Control Assurance Focus (Internal Audit, External audit and Board Committees)

Independent bodies responsible for independent control assurance require—

- the necessary mix of skills and experience (competencies);
- clarity of roles, responsibilities and authority;
- understanding of the business environment of the organisation;
- maintenance or development of new competencies as necessary;

- commitment to ethical issues such as conflicts of interest and confidentiality of information;
- monitoring and assessment of performance; and
- an information system that supports their monitoring, review and reporting responsibilities.

Control Activities to address the above control assurance focus vary with the functional nature of each body as follows.

1 Control activities (Internal and External Audit)

Assurance is facilitated in both Internal and External Audit by a mixture of internal resources and external service providers in the case of internal audit and entirely external resources in the case of external audit. External service providers have additional assurance requirements over and above those applying to internal resources. These additional requirements are outlined below under External Service Providers.

(a) Internal Service Providers (Internal Audit)

Assurance is facilitated by—

- an appropriate internal audit charter setting out the roles, responsibilities, authority and reporting responsibilities for the internal audit function;
- recruitment and selection processes to provide an appropriate mix of skills;
- organisational and workplace inductions to promote understanding of the business risk profile of the organisation, the internal audit function and expected ethical behaviour;
- professional development programs aimed at maintaining and developing new skills as necessary;
- effective information systems to provide effective control assurance reporting; and
- monitoring and review to maintain quality in the performance of responsibilities, including the extent and timing of the implementation of audit recommendations.

(b) External Service Providers (Internal and External Audit)

Whilst it is recognised that internal and external audit differ in their operational focus they share a number of risks and controls associated with their selection, appointment and operating protocols. Dealing with these common risks requires—

- transparent and rigorous contract selection processes addressing skills and experience to ensure competencies are relevant to the tasks to be undertaken;
- contract agreements clearly setting out—
  - expected roles, responsibilities and authorities;
  - ethical issues especially addressing conflicts of interest and confidentiality;

  - deliverables (reports with clear reporting protocols); and
  - performance measures and procedures for performance review;
- induction into the business environment of the organisation; and
- regular performance review against expectations.

2 Control Activities (Board Committees)

Assurance in Board committees is facilitated by—

- selection process to provide a mix of competencies relevant to the committee's area of responsibility;
- clear terms of reference setting out the roles, responsibilities, powers and operational procedures of the committee;
- induction into the roles, responsibilities and powers of the committee, its role in the governance of the organisation and expected standards of behaviour;
- ongoing professional development programs to maintain and develop new competencies as necessary;
- implementation of effective meeting procedures to ensure active participation and informed decision-making by members;
- development and maintenance of quality records to ensure decisions are accurately recorded and transmitted to the appropriate employees, and that action items are noted and followed up;
- development and periodical review of reporting protocols to ensure the committee provides and receives the appropriate quality and quantity of information in a timely manner;
- self-assessment against the terms of reference and annual program set by the committee to gauge whether the body is functioning as required and that its terms of reference remain valid; and
- a Board performance review of the committee to ensure its functions continue to add value to the governance of the organisation.

5.2 Medium to Small Organisations

Where organisations do not have the resources to adequately fund an internal audit unit they need to implement alternative procedures to provide control assurance to the Board.

The Board should set out its decision in relation to internal audit and any alternative arrangements in an Internal Audit Policy that might include provisions for—

- an annual review of the continuing relevance of the organisation’s Internal Audit Policy;
- conducting workshops for directors and senior managers to develop competencies in planning and risk management;
- ensuring all employees are capable and committed in relation to the organisation’s mission and vision, and to risk management and control (i.e. develop a sound system of inherent control);
- developing effective risk/control reporting processes and instigating discussions on the organisation’s risk environment and controls at each Board meeting;
- assigning to each director a particular aspect of the organisation’s activities and seeking regular reports on its performance, risk (internal and external), emerging opportunities and controls;
- requesting the external auditor to carry out additional work; and
- the engagement of independent, external resources as needed for reviews of areas of particular concern to the Board, e.g. acquisition of new information systems; IT security etc.

6 Managing change

The concepts and processes outlined in the Control Assurance Plan are underpinned by standard management practices already utilised in all organisations. For this reason it is not necessary to engage extra resources or develop additional bureaucracies, but rather to refine and align current business practice. Nevertheless, it is important to develop an implementation plan and obtain buy-in initially from senior managers and ultimately from all members of the organisation.[21]

Priority should be given to developing a top-down bottom-up planning process linking strategic and operational objectives, and implementing enterprise-wide risk management and information frameworks. Concurrent implementation processes enhancing workforce capability and commitment will involve cultural changes requiring time to generate buy-in. This being so, the initial steps may involve a degree of compliance which will diminish as capability and commitment grow. Effective change management is therefore a critical instrument of control for successful implementation.

[21] *Implementing Turnbull*, A Boardroom Briefing. http://www.icaew.co.uk/

NOTES

NOTES

Standards Australia

Standards Australia is an independent company, limited by guarantee, which prepares and publishes most of the voluntary technical and commercial standards used in Australia. These standards are developed through an open process of consultation and consensus, in which all interested parties are invited to participate. Through a Memorandum of Understanding with the Commonwealth government, Standards Australia is recognized as Australia's peak national standards body. For further information on Standards Australia visit us at

www.standards.org.au

Australian Standards

Australian Standards are prepared by committees of experts from industry, governments, consumers and other relevant sectors. The requirements or recommendations contained in published Standards are a consensus of the views of representative interests and also take account of comments received from other sources. They reflect the latest scientific and industry experience. Australian Standards are kept under continuous review after publication and are updated regularly to take account of changing technology.

International Involvement

Standards Australia is responsible for ensuring that the Australian viewpoint is considered in the formulation of international Standards and that the latest international experience is incorporated in national Standards. This role is vital in assisting local industry to compete in international markets. Standards Australia represents Australia at both ISO (The International Organization for Standardization) and the International Electrotechnical Commission (IEC).

Electronic Standards

All Australian Standards are available in electronic editions, either downloaded individually from our web site, or via On-Line and DVD subscription services. For more information phone 1300 65 46 46 or visit Standards Web Shop at

www.standards.com.au

ISBN 0 7337 6892 X

This page has been left intentionally blank.