

# RISK MANAGEMENT

<b>Key lessons learnt</b>	Risk management involves the identification, assessment, treatment, assurance, monitoring and reporting of all risks that can impact the objectives of the project. This includes customer outcomes, safety, the environment, asset management and the financial performance of the project itself.
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## Introduction

Risk management involves the identification, assessment, treatment, assurance, monitoring and reporting of all risks that can impact the objectives of the project. This includes customer outcomes, safety, the environment, asset management and the financial performance of the project itself.

This guidance note is premised mainly toward major or high risk projects, however its principles apply generally.

## Key considerations

A pre-requisite to the successful achievement of the project objectives is the development and ongoing application of risk management. Rigorous identification and management of risk reduces uncertainty, maximises opportunities and better prepares the project (and its sponsors) to respond to problems. This increases the likelihood of successfully delivering the projects.

The risk management approach adopted by the project should be compliant with the requirements of AS/NZS 31000 Risk Management – Principles and Guidelines and any policies or guidelines prepared by the relevant governing agency.

Successful risk management recognises the following key principles in its development and delivery:

- ▶ Develop and implement effective risk management processes that identify, assess, treat, monitor and allow for the effective quantification of risk.
- ▶ Implementation of an organisational structure which promotes good governance.
- ▶ Ensure the value and project benefit is not eroded.
- ▶ Risk Management is systematic and disciplined.
- ▶ Fostering and maintaining a 'top down' risk awareness culture.

## Business Case

The business case should be supported by a robust and considered risk management plan (RPM). The RPM structure is based on the principles and guidelines contained within relevant standards and supporting agency documents.

The risk schedule is the primary management instrument for capture and analysis. The schedule should contain as a minimum:

- ▶ The risk identification and categorisation.
- ▶ Risk owner.
- ▶ Analysis of risk including cause, impact and controls.
- ▶ Risk rating and treatment.
- ▶ Date of risk review.
- ▶ Risk priority.

The schedule should be supported by re-occurring meetings with 'risk owners' to ensure that the status of existing risks are current and new risks are onboarded. It is critical that formal 'facilitated' workshops are completed at pre-determined milestones.

The risk schedule should be monitored and reviewed to ensure it does not become stagnant; failing to capture new risks and effective treatment of current risks. Key risks for High Profile High Risk (HPRH) projects will be subject to an external reporting regime with their effective management or otherwise exposed to review and scrutiny.

To activate ownership across the project the risk should be reviewed and sanctioned periodically by:

- ▶ Project executive risk reviews.
- ▶ Project Director risk reviews.
- ▶ Subject -Specific Risk Assessment workshops.
- ▶ Technical advisor, service provider risk reviews.

It is not the intention of the risk schedule to capture every possible risk. Rather, the intention is that the risk register captures the key risk concerns for attention and action, and provides links to supporting risk information where appropriate. The degree of risk definition will vary depending on the different stages of project development.

## Quantitative Risk Assessment

The Final Business Case (FBC) will be reliant on a contextual and full considered project risk schedule. The Quantitative Risk Assessment (QRA) will be reliant on the information contained within the project risk schedule. It is critical to recognise that the QRA will be relied upon to inform the contingent risk provisions which are typically represented at the P50 and P90 level. The QRA should not only recognise the known unknowns but also the unknown unknowns. QRA models informed by the project

risk schedule alone can be deficient if the assessment is limited to design or stakeholder centric activities (which is often the case in risk schedule development). The QRA should not be solely reliant on the project risk schedule and needs to ensure it captures a broader risk profile inclusive of delivery and commercial aspects.

The author of the project risk schedule should recognise that the project risk schedule suitable for the management of project risks may not be entirely suitable for the QRA. The risk definition along with its impact and consequence should provide enough granularity to allow effective quantification. The inclusion of composite risks with several identified risks and consequences diminishes the validity of the QRA output.

The QRA process is integral to the development and completion of the Capital Cost estimate.

## Source material

Sourcing Guidelines and Templates:

- ▶ AS/NZS 31000 Risk Management – Principles and Guidelines.

The above documents are reference points. Agencies have developed guidelines and advice which differ from one another and represent their expectations and needs regarding cost deliverables. It is advised that detailed queries relating to the development of robust cost advice should be referred to an appropriately experienced subject matter expert.

### ▶ About the author:

David Lawson is a Director of InfraSol and Principal of Cost, Commercial and Risk Management Services with over 25 years of industry experience. David has delivered cost, risk and commercial advice across a range of state and nationally significant infrastructure projects including Parramatta Light Rail, NSW Housing Stimulus, WestConnex 1A, WaterFix and Melbourne Metro.