**Engineering Policy 176** 

**Contingency management of infrastructure projects** [Implementation and Finalisation]

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## 1 Policy statement

The Department of Transport and Main Roads will manage project budget contingency through qualitative and quantitative risk and opportunity management during implementation of Infrastructure projects.

Transport and Main Roads have a responsibility to ensure that active contingency management is applied to the Approved Project Delivery Value (APDV) and is aligned to the output of quantified project risks.

#### This will enable:

- Validation of current project budget adequacy for reporting purposes.
- Inform contingency status through qualitative and quantitative risk and opportunity evaluation and re-evaluation during Project Implementation and Finalisation.
- Forecast project contingency demand confirming adequacy to deliver the works or take appropriate remedial measures to preserve allocated contingency.

#### 1.1 Policy principles

Transport and Main Roads project management uses OnQ Project Management methodology for all the department's transport infrastructure projects and requires project managers to actively manage all components of an approved budget upon financial funding approval through all applicable phases of OnQ.

Figure 1.1(a) – OnQ phases and contingency relationship

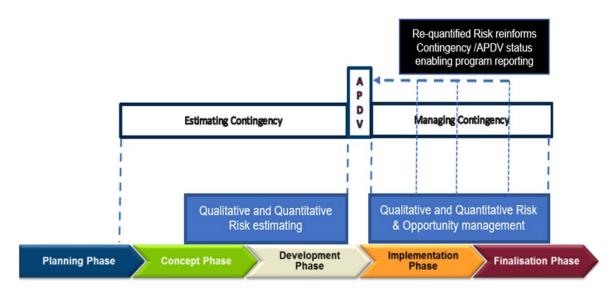


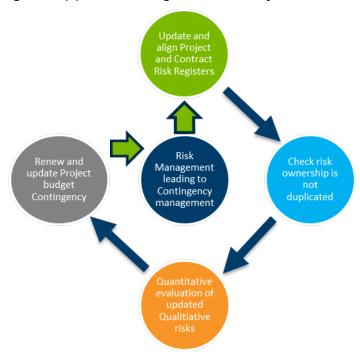
Figure 1.1(a) illustrates the link between OnQ phases and the contingency relationship, the milestone of issuing the Approved Project Delivery Value after contract award and the duration in which project risks and opportunities should be continually assessed and forecasted to revalidate the adequacy of project contingency.

The management of time and cost are essential elements of successful Project Management and are required to be managed throughout the duration of the Project lifecycle.

## This policy:

- Provides a clear approach for project budget contingency through qualitative and quantitative risk management processes.
- Enables the accurate reporting and forecasting of project status applicable to cost contingency.
- Facilitates advance intervention measures should contingency allowances become stressed.
- Improves authorised Project decision making environment with greater certainty leading to optimum program benefits.
- Establishes a consistent methodology approach which demonstrates risk and contingency management are interconnected.

Figure 1.1(b) – Risk management review cycle



## 1.2 Key Governance and Management Roles (or Roles and responsibilities)

- Project Leadership Teams or Project Boards.
- District leadership / Project owner.
- Principal Representative and Delegate.
- Program Delivery Boards.

## 2 Background and purpose

Transport and Main Roads Risk Management Framework provides guidance on the risk management process. This document supports the department's Risk Management Organisational Policy which outlines the department's obligation to manage risks. Transport and Main Roads identifies risk as 'the effect of uncertainty on objectives', as indicated in the ISO 31000:2018, *Risk management* — *Guidelines* 

Division 4, Section 23 (2) of the Financial Performance Management Standard 2019 (FPMS) states... "the risk management system must provide for—

(a) mitigation of the risk to the department or statutory body and the State from unacceptable costs or losses associated with the operations of the department or statutory body)"

Transport and Main Roads Project Management Reference Guidelines states:

"Risk management is an essential element for the control of project scope and cost. Risks that cannot be adequately treated during the planning and design development process should either be accounted for in the scheduled work (as provisional items) or included in the contingency amount in the estimate (non-contract item) for use by the Project Manager when any of these risks actually occur."

## 3 Scope

Project contingency is expressed in monetary terms within a project estimate. Once the project estimate is approved it become the project budget. Project Contingency is a component of the Project Budget.

This policy applies to both aspects of contingency management upon the Approved Project Delivery Value being issued and an infrastructure contract is awarded.

Quantitative probabilistic estimating of contingency is addressed in the department's *Project Cost Estimating Manual* and referenced in the *Project Management Reference Guidelines* and is not repeated in this policy.

## 3.1 Objectives

The objective of this policy and supplementary guide is to set out appropriate financial and time governance of contingency in an infrastructure project, informed through robust risk management processes during construction by providing a clear framework for managing and monitoring projects by providing:

- a structured approach to the discharge of department's obligations under the Financial Performance Management Standard 2019
- a clear understanding of how project risk and financial contingency must be managed in unison
- methods, measures, and responses for monitoring qualitative and quantitative risk leading to appropriate contingency evaluation, management, and reporting, and
- ensuring a proactive approach to risk evaluation that informs contingency status in a project during implementation and finalisation, leading to optimised program management.

## 3.2 Policy implementation

The policy applies to all projects valued at \$10 Million or more and is applied as they progress through the implementation and finalisation phases.

## 4 Risk management and Early Works

During Implementation, with projects risk (including contractually owned risks) constantly changing, project contingency can only be assessed and reassessed during project delivery by qualitative and quantitative re-evaluation of risk. The collective output from these assessments informs the status and sufficiency of project contingency allowance.

For projects that require works to be conducted in advance of the main construction work and where funding for such works is approved, such as:

- PUP negotiation and relocations
- · Property resumptions
- Approval processes, including environmental, cultural heritage, and program / project / contract approvals.

This policy should be exercised to ensure risk and contingency are monitored and actively managed and continue to be managed after the main contract award throughout the remaining duration of the project.

#### 5 References

This policy will ensure Transport and Main Roads is actively meeting the requirements of the following references:

- The Financial Performance Management Standard 2019 Division 4, Section 23.
- Risk Management Organisational Policy and Framework
- Project Management Practice Guidelines
- Project Cost Estimating Manual
- Project Risk Management and Contingency Development Process Manual
- Governance Guidelines for Major Projects V1.0
- Controls Framework V1.0
- QTRIP Saving Management Policy
- Guideline for Contingency Management supplement to this policy.

#### 6 Review

This policy will be reviewed annually by the Director (Delivery Risk).