Engineering Policy 153

Risk Context Profiles

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1 Engineering Policy

1.1 Policy statement

Risk Context Profiles (RCPs) are applied to Transport and Main Roads infrastructure projects to enable better project risk management by attaining a better understanding of a project’s risk context.

1.2 Applicability

This policy is applicable for the delivery of Transport and Main Roads infrastructure projects.

Table 1.2 provides guidance regarding the application of RCPs to departmental infrastructure projects.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Typical Threshold</th>
<th>Project Management Framework</th>
<th>RCP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Project</td>
<td>&gt;100m</td>
<td>PAF</td>
<td>Apply RCP</td>
</tr>
<tr>
<td>Type 1</td>
<td>$50m - $100m</td>
<td>OnQ (PAF if high risk)</td>
<td>Apply RCP</td>
</tr>
<tr>
<td>Type 2</td>
<td>Straightforward, medium risk</td>
<td>OnQ</td>
<td>Apply RCP</td>
</tr>
<tr>
<td>Type 3</td>
<td>Simple, low risk</td>
<td>OnQ</td>
<td>RCP not required**</td>
</tr>
</tbody>
</table>

**Note: A specific risk management tool has been developed for use in cases where a project manager is responsible for a number of simple, low risk projects (Type 3) at once. This tool (Collection of Projects Risk Profile) is discussed in Section 3.

1.3 Context

The Transport and Main Roads Risk Management Framework is aligned to ISO 31000:2018 Risk management – Guidelines (the Standard). The Risk Management Process as described by ISO 31000 is shown in Figure 1. Establishing the context is a specific activity within the Risk Management Process.

Figure 1.3 – Risk Management Process
1.4 Objectives and benefits

RCPs are a risk management tool that will support project managers in establishing a project’s risk context.

It is intended that RCPs will enable more effective and efficient project risk management. RCPs will assist Project Managers to identify and focus on a project’s key risks, and better prioritise the use of project resources.

The application of RCPs will:

- Enable consistent assessment of project risk context for departmental infrastructure projects.
- Provide an effective process to prioritise project risk context areas.
- Enable the development of more effective project risk registers.
- Provide clear and consistent documentation to capture project risk context assessment.
- Enable effective discussions within project teams regarding project risk management.

1.5 Consultation

This policy was developed in consultation with Project Directors, Project Managers and various relevant Subject Matter Experts involved with Transport and Main Roads infrastructure project delivery.

1.6 Evaluation and policy review

The Manager – Risk (RISE, Program Management and Delivery) is responsible for reviewing this policy as required. Feedback to PDO_RISK@tmr.qld.gov.au is welcome at any time.

1.7 References

- Transport and Main Roads Risk Management Policy
- Transport and Main Roads Risk Management Framework
- Transport and Main Roads Risk Management Practice Guide

1.8 Availability of the RCP tool

The RCP tool is available via request, please contact PDO_RISK@tmr.qld.gov.au.

1.9 Contact personnel

This policy is developed by the PDO Risk Team (RISE, Infrastructure Delivery Services, Program Management and Delivery).

For further information please contact PDO_RISK@tmr.qld.gov.au.
2 Engineering Guidelines – Project RCP

2.1 Introduction

RCPs are intended to complement the project risk register, not replace the project risk register. A RCP is intended to assess and document a project’s risk context whereas a project risk register is intended to assess and document specific project risks.

A good understanding of a project’s risk context enables better and more effective project risk assessment. RCPs are a risk management tool that will support project managers in getting a better understanding of a project’s risk context.

The RCP tool is presented in Excel format and includes the following:

- Cover sheet (including basic instructions)
- Project information (to be completed by the Project Manager)
- RCP Dashboard (automatically created) (Refer to Appendix 1), and
- Worksheets for each risk category.

Each project RCP consists of 10 project risk categories:

1. Geotechnical
2. Environmental, Cultural Heritage and Native Title
3. Weather
4. Stakeholders
5. Procurement
6. Project Management
7. Preconstruction
8. Contract Administration
9. Construction
10. Finalisation.

Each risk category has several relevant nominated risk areas. There is also provision for a project specific risk area.

An example RCP risk category worksheet is shown in Figure 2.1.
Figure 2.1 – Example of RCP risk category worksheet

2.2 How to complete a RCP

Each risk category is completed one at a time. To do this, a score for Relevance (1-5) and a score for Impact (1-5) for each risk area is determined. The RCP tool then calculates a score and rating (Low, Medium or High) for each risk area.

If a relevant project risk area is identified and has not already been adequately addressed by the existing nominated risk areas, then there is provision to add a project specific risk area. (Note: If more than one project specific risk area is required please contact PDO Risk Team).

The RCP tool will calculate the overall score and rating (Low, Medium or High) for each risk category. The RCP tool will automatically create the RCP Dashboard based on the results. (Refer to Appendix 1 for an example of a RCP Dashboard).

2.3 Who is responsible for completing a RCP

The Project Manager is responsible for project risk management activities, including completing a RCP. (At times the Project Manager may choose to delegate certain project risk management activities, however the Project Manager is still responsible overall for project risk management.)

It is encouraged that the Project Manager consult with any relevant subject matter experts and key project team members in completing a RCP.
The Project Manager (or assigned delegate) may choose to request a member of the PDO Risk Team to facilitate completion of a RCP.

Once a RCP has been completed, a copy of the RCP should be either provided to a member of the PDO Risk Team directly or emailed to PDO_RISK@tmr.qld.gov.au.

2.4 When to complete a RCP

As a general guide, it is intended that a RCP be completed at least once during each phase of a project (that is, Concept, Development, Implementation and Finalisation).

It is highly recommended that a RCP be completed at the following key stages:

- Preparation of the Business Case
- Contract award
- Prior to the start of construction works.

The Project Manager (or assigned delegate) may complete a RCP at any time during a project if it is determined to be beneficial, particularly if it is determined that a project’s risk context has changed considerably since the last time a RCP was completed.

It is also recommended that a RCP be completed (or at least reviewed) prior to preparing or reviewing the project risk register.

2.5 What to do after completing a RCP

After completing a RCP, the RCP Dashboard will provide an overview of the results, including a ranked listing of the risk category scores (highest to lowest) (refer to Figure 2.5). This ranking provides a useful basis to prioritise project risk management activities and resources.

Figure 2.5 – RCP risk category ranking

![RCP risk category ranking](chart)

If a project does not have a current risk register, the risk area ranking from the RCP results provides a logical order in which to assess project risks (or in other words, complete the project risk register according to the risk area ranking from the RCP results). For example, if Stakeholders has the highest RCP risk category score, begin the project risk assessment by considering Stakeholder risks and then progressively work down the order of RCP risk categories (highest to lowest).

One or more specific project risks captured in the risk register may be associated with each RCP risk area.
If a project already has a current risk register, it is still recommended that a RCP be completed. In this situation, the results of the RCP can be cross referenced with the risk register to ensure there is consistency across the project risk assessment.

3 Engineering Guidelines – Collection of Projects (CoP) Risk Profile

3.1 Introduction

In the situation where a project manager is responsible for a number of simple, low risk projects, it is still expected that project risks are managed effectively.

For simple, low risk projects (Type 3) completing a RCP and developing a risk register is likely too onerous and is not worthwhile.

For this reason, the CoP Risk Profile tool was developed to enable project managers to effectively and efficiently develop a risk profile for the delivery of a ‘collection of projects’.

The CoP Risk Profile tool is presented in Excel format and includes the following:

- Cover sheet (including basic instructions)
- Project information (to be completed by the Project Manager)
- CoP Risk Profile Dashboard (automatically created) (Refer to Appendix 2)
- Project risk profile worksheets (one for each project)
- Information worksheets for each risk category.

Each project risk profile worksheet consists of eight project risk categories:

1. Geotechnical
2. Environmental, Cultural Heritage & Native Title
3. Stakeholders
4. Procurement
5. Project Management
6. Preconstruction
7. Contract Administration
8. Construction

Each risk category has several relevant nominated risk areas. There is also provision for a project specific risk area.

An example project risk profile worksheet is shown in Figure 3.1.
3.2 How to complete

The CoP Risk Profile is completed by completing a project risk profile worksheet for each project. It is expected that each project risk profile worksheet will take approximately 20 minutes to complete.

To complete a project risk profile worksheet, a score for Relevance (1-5) and a score for Impact (1-5) for each risk area is determined. The CoP Risk Profile tool then calculates a score for each risk area.

If a relevant project risk area is identified and has not already been adequately addressed by the existing nominated risk areas, then there is provision to add a project specific risk area.

The CoP Risk Profile tool will calculate the score and rating (Low, Medium or High) for each risk category and subsequently the overall risk score and rating for each project.

The CoP Risk Profile tool will automatically create the CoP Risk Profile Dashboard based on the results. (Refer to Appendix 2 for an example of a CoP Risk Profile Dashboard.)

3.3 When to complete a CoP Risk Profile

As a general guide, it is intended that a CoP Risk Profile (or more precisely, a project risk profile worksheet) be completed at least once during each phase of a project (that is, Concept, Development, Implementation and Finalisation).

It is highly recommended that a CoP Risk Profile be completed at the following key stages:

- Preparation of Project Scope Identification and Project Plan
- Contract award and/or prior to the start of construction works.
3.4 What to do after completing a CoP Risk Profile

After completing or updating a CoP Risk Profile, the results are presented by a series of graphs and infographics (including a ranked listing of the risk category scores (highest to lowest) and overall project risk rating). These graphs help a project manager get an understanding of a project's risk profile and provide a useful basis to prioritise project risk management activities and resources. Also, the CoP Risk Profile Dashboard provides an overview of the risk profiles for all the projects.

Once a CoP Risk Profile has been completed or updated, a copy should be either provided to a member of the PDO Risk Team directly or emailed to PDO_RISK@tmr.qld.gov.au.
Appendix 1 – Example of RCP Dashboard
Appendix 2 – Example of CoP Risk Profile Dashboard