

UNIVERSITY OF OXFORD

# Capital Projects Risk Strategy



Contents

Introduction ..... 3

Risk Appetite ..... 3

Roles and Responsibilities..... 3

Updating a risk ..... 4

How to run a risk report..... 8

How to make a risk not applicable..... 9

Annex A – Risk Scoring Scenarios..... 10

## Introduction

Managing risks effectively is a critical part of the delivery of successful projects. A risk is defined as an uncertain event or set of events that, should it occur, will have an effect on the achievement of objectives. A risk is measured by a combination of the probability of the perceived threat or opportunity occurring, and the magnitude of the impact on objectives. All projects encounter uncertainty when trying to achieve their objectives. Risk management is not necessarily about risk aversion, but about recognising threats and ensuring that action is taken to mitigate risks and take advantage of opportunities where appropriate. Risk management is about taking responsibility for risks, and is an evolving process adapting to the needs of the project.

## Risk Appetite

This is the unique attitude towards risk taking that dictates the amount of risk the Project Board considers acceptable. The University is generally a risk averse institution so this should be considered when discussing risk management.

## Roles and Responsibilities

The Senior Responsible Owner (SRO) holds overall responsibility for the identification, management and mitigation of project risks. This responsibility has been delegated by the Buildings and Estates Sub-Committee (BESC). As risk is a standing item on all Project Board meeting agendas, the attendees will have oversight of the current risk position and any matters on the horizon (if possible to foresee) that could affect the project.

Although the SRO is responsible for risk, the management of risks can be delegated. It is often the case that the SRO will be the 'Risk Owner' whereas individual Project Managers will be 'Risk Managers'.

Red flag project risks (those scored at the maximum level for both impact and likelihood) are reported to BESC via the Programme Board. Risks scored highly, although not as severe as red flag risks, but with an upward trend should also be reported. This escalation process forms part of the governance framework the Capital Projects Team is responsible for upholding.

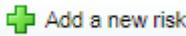
It is the duty of the Project Board members to interrogate the risk registers (e.g. scores and mitigation measures) to ensure all risks are being managed appropriately.

The Concerto Risk Log should be regularly maintained in line with Project Board reporting. The frequency of reports should be agreed with the Project Board, but as a rule, risks should be reviewed monthly.

## Updating a risk

Every new project is set up with 35 standard risks that have been informed by experience on previous projects. It is the responsibility of the Project Manager to review the risks, updating those that are relevant to the project, marking those that aren't as 'Not applicable' and adding any additional risks that are specific to the project.

To update an existing risk, navigate to the project in question, select the risk log module from the left hand menu and then click on the risk you wish to update by clicking on it.

To add a new risk to the selected project risk log, select the  button from the main Risk log screen.

Both options take you through to a screen enabling you to update the risk details (see below)



## Select a standard risk

It is possible to add one of the standard risks if required. Select 'Yes' from the 'Select a standard risk' drop down menu. The screen will refresh and display two extra drop down menus: 'Standard risk category' and 'Standard risk'. The 'Standard risk category' allows you to filter by risk category and the 'Standard risk' option allows you to select a pre-loaded risk.

## Risk description

A brief overview of the risk should be added to this box. To provide consistency please use the following format:

There is a risk that...

Because...

Which could result in... (\*this should be included in the potential effect box)

The first part ('There is a risk that') describes what the potential issue that could happen is. The second part ('Because') tells the reader why it could happen. The third part ('Which could result in') outlines what the consequence could be if that risk materialises to become an issue.

e.g. There is a risk that archaeology could be found on site because there have been archaeological finds in the area in the past, which could result in a delay to the project of 2 months.

Potential effect

As above this box should be populated with a description of what is likely to happen if the risk materialises and the likely impact this would have on the project.

Owner

Select who will be responsible for owning the risk. If a risk is the responsibility of more than one person this should be the person ultimately responsible for monitoring the risk. If in doubt this should default to the Project Manager.

Primary Impact

This field has been created to reflect the outcome of using the Risk Impact Matrix detailed later in this document. Your selection here should reflect the impact area that has the highest score from that matrix. One of Cost, Programme, Operational or Project delivery/quality/scope.

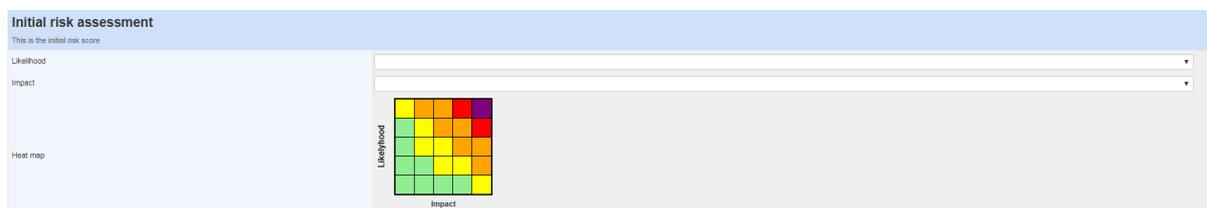
Status

This will default to a live risk and so this does not need to be amended when first creating a risk. This should be updated when closing a risk. Once 'Closed/mitigated' is selected and the risk is saved the risk will be removed from the open risks tab and appear in the closed risk tab.

Potential cost range

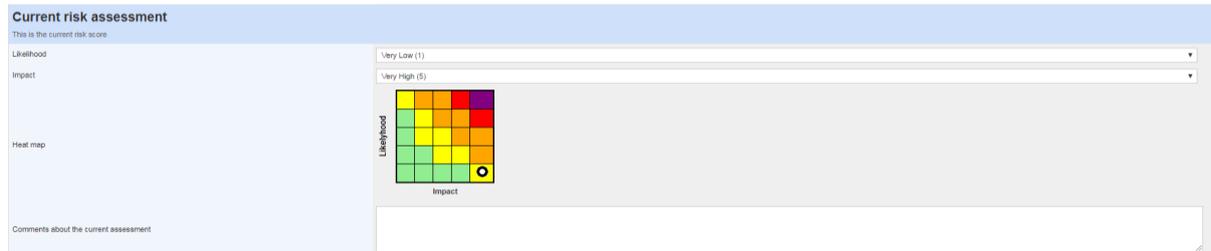
This drop down details the potential financial impact that the risk holds. It's based on the increase in total project budget that the risk materialising would have. As an example, a risk that would see an increase of £500k on a £6m project would fall in to the 'Up to 10% increase' category.

Initial risk assessment



This section is only available the first time you input information regarding a risk. It captures the initial risk rating at the point that you input it into the system. Select a risk likelihood and impact rating based on the guidance information provided below.

Current risk assessment



This section should be completed for any subsequent updates to the risk scoring following the initial risk assessment. Details regarding any changes in circumstance that may have affected the risk assessment can be recorded in the 'Comments about the current assessment' section.

Risk Likelihood

When assessing the likelihood of a risk occurring, Project Managers should use the table below to inform their scoring.

<b>Likelihood</b>	<b>5</b>	80-100% of the risk occurring
	<b>4</b>	60-80% of the risk occurring
	<b>3</b>	40-60% of the risk occurring
	<b>2</b>	20-40% of the risk occurring
	<b>1</b>	0-20% of the risk occurring

Risk Impact Matrix

When reviewing the risks the following Impact guide should be used. Project Managers should consider each of the four main risk impact areas: Cost, Programme, Operational concerns and project delivery/quality/scope.

	Cost	Programme	Operational	Project delivery/quality/scope
5	More than 10% increase	More than 15% increase	Catastrophic impact on service provision affecting, clients, stakeholders or neighbours	Catastrophic impact on project delivery/quality
4	Up to 10% increase	Up to 15% increase	Significant impact on service provision affecting, clients, stakeholders or neighbours	Significant impact on project delivery/quality

3	Up to 4% increase	Up to 10% increase	Major impact on service provision affecting, clients, stakeholders or neighbours	Major impact on project delivery/quality
2	Up to 2% increase	Up to 5% increase	Minor impact on service provision affecting, clients, stakeholders or neighbours	Minor impact on project delivery/quality
1	Up to 1% increase	Up to 3% increase	Negligible impact on service provision affecting, clients, stakeholders or neighbours	Negligible impact on project delivery/quality

The impact of some risks may affect more than one of these areas. In such a case the Project Manager should record the score for the highest rating risk area and select this as the 'primary impact' in the dropdown box. Reasoning for the scoring and information about the other impact areas that could be affected should be included in the 'Potential Effect' box.

Example scenarios are included in Annex A – Risk Scoring Scenarios.

Overall Risk Matrix

The table below details the overall risk scoring matrix. Risks scoring 20 or above pull through to Project Highlight reports presented to the Project Board. Risks scored as 25 are escalated to the Programme Board and, if appropriate, BESC.

Likelihood	5	5	10	15	20	25
	4	4	8	12	16	20
	3	3	6	9	12	15
	2	2	4	6	8	10
	1	1	2	3	4	5
		1	2	3	4	5
		Impact				

Score:

- \* 1 to 4 (Minimal - Green)
- \* 5 to 9 (Moderate - Yellow)
- \* 10 to 16 (High - Amber)
- \* 20 (Very High – Red)
- \* 25 (Serious - Purple)

Comments about the current assessment

Use this area to provide information related to the reasons that the assessment may have changed from the initial assessment.

Mitigation

Mitigation	
Option 1	<input type="text"/>
Option 2	<input type="text"/>
Option 3	<input type="text"/>

There are 3 boxes here to detail mitigation measures that have been put in place. Mitigation options are the actions to be taken to counteract the risk. If the risk was in relation to the implementation of building management systems, but no users had experience of using the systems, then a counter measure could be to schedule training sessions prior to handover.

Costs

Costs	
Risk value	<input type="text" value="0"/>

If a specific risk value has been identified this box can be used to record it.

Notes and comments

Notes and comments	
Latest notes and comments	<input type="text"/>

This can be updated with general notes about the risk and any updates to it.

How to run a risk report

It is a requirement to provide a Project Manager’s report providing updates regarding the progress of the project to the Project Board (including Intermediate projects) at a frequency agreed by them, usually once a month. The Concerto risk log should be used to generate the risk reporting element of this.

To generate a report, navigate to the risk log module and select  **Export to excel** from the options along the top of the page.

This will then give you the option to save the Excel version of the report locally. The report can then be sorted or adapted as required, although the overall format should be altered as little as possible. Save a pdf of the risk report in the relevant document folder ready for incorporation into your Project Board report.

It is also possible to generate a PDF version of the report by selecting the 'Reports' option from the front page of the Risk Log. On the following screen select 'Generate PDF report' to produce the PDF. The risk sorting functionality detailed below will not pull through when generating a report in this way.

Sorting risks

Prior to generating the report it is also possible to sort the risks by any of the column categories listed along the top of the risk log. For example, to list the most serious risks first, click on the 'Current Score' header twice to toggle the risk score from highest to lowest. When the Report is subsequently generated the risks will be listed with the most serious risks at the top.

How to make a risk not applicable

When reviewing the risk log, if a generic risk is not relevant or appropriate to the project it is possible to set it as 'Not applicable' so that it does not appear in the log. To set a risk as not applicable, click on the relevant risk and then select the 'Not applicable' option listed along the top of the page.

Alternatively if you have a number of risks that need to be set as not applicable, from the risk log page check the tick boxes along the left hand side of the table for the relevant risks and then choose the 'Not applicable' option from the options along the top of the page.

Risks that have been made not applicable can be viewed by selecting the 'Not applicable risks' tab in the risk log.

If a risk that has been set as not applicable needs to be reinstated as a live risk you can do this by locating the risk in the 'Not applicable risks' tab, clicking on 'Options' button and selecting 'Make applicable'.

Ref	Date raised / Updated	Description	Mitigation
<input type="checkbox"/> Options 1 04 Nov 2016 Archaeological finds			
		Audit trail and details	
		Review and assess risk	Will ground contamination cause problems
		Add a note	
		Tasks and actions	Environmental - risk of flooding
		Documents	Drawings not available for underground power/data cabs and drainage, within or adjacent to site
		Make applicable	Undertake survey of below ground services during design stage
		Options 7 04 Nov 2016 / 30 Nov 2016	Inflation is greater than predicted
			Provide value engineering within design process. Ongoing monitoring of tender price inflation.
		Options 8 04 Nov 2016 / 30 Nov 2016	Innovative construction techniques being trialled by project
			Specialist BREEAM or Passivhaus consultant to be appointed oversee design process
		Options 9 04 Nov 2016	Medicine in occupied buildings - possibility for security breaches

## Annex A – Risk Scoring Scenarios

### Examples - Scenario 1

A project is initiated to construct an extension to an existing building in readiness for the new academic year. The building is located in an area of Oxford that has previously been known to contain archaeology. A time limited grant is providing half of the funding for the project. In order for the grant to be secured, the new facility must open in readiness for the new academic year to accommodate new students arriving on a scholarship. The project is already on a tight programme to meet this. Discovery of any archaeology will delay the project by 6 weeks which would potentially result in a delayed opening. The likelihood of archaeological finds has been rated as a 4 as there is a 60%-80% chance of archaeology being discovered.

This risk has the potential to impact on 3 of the 4 risk impact areas: Programme, Operational and Project Delivery.

**Programme** – Although it is the first impact area that comes to mind when considering this risk, the actual impact on the programme is fairly minimal in relation to the risk ratings. The project is 52 weeks long in total – therefore a 6 week increase equates to an 11% increase in time on the project which would be rated as a 2.

**Project Delivery** – The delay to the programme would push the Practical Completion date past the deadline for the grant money to be used. This would result in a funding shortfall requiring the need for alternative funding to be explored. This would have a major impact on overall project delivery and thus should be rated as a 3.

**Operational** – The impact of the delay and inability to deliver the building extension would mean that the department would not be able to accommodate the new students. This will cause significant operational and reputational damage and thus should be rated as a 4.

Therefore a score of 4 should be recorded against Risk Impact (as it is the highest) and Operational should be selected as the Primary Impact.

### Examples - Scenario 2

A new building is being constructed in the Science Area. The site is small and enclosed and there are numerous neighbours that will be affected by the works, including other University departments. If there is not sufficient consultation all four risk impact areas could be affected.

**Operational** – Complaints regarding the works would cause considerable reputational damage. Both within the University through complaints by other departments and externally through coverage in the local media. In this instance a score of 3 should be recorded.

**Programme** – Complaints from neighbours may involve re-planning works or re-routing deliveries which could have an effect on the overall programme. Against an 18 month programme this is likely to add 1 or 2 weeks to the programme and so in this instance a score of 1 would be appropriate.

**Cost** – Any re-planning of work to lessen the impact on neighbours could have additional costs associated to it. Against a total project budget of £80m though this will be relatively negligible and is estimated to increase the project budget by £200k. Therefore this criteria should be scored 1 as it is a less than 5% increase.

**Project delivery** – The impact of the programme and cost risks are that the overall deliverability of the project also comes under pressure. Although in this instance the impact is likely to be negligible so a score of 1 would be appropriate.

Therefore a score of 3 should be recorded against Risk Impact (as it is the highest) and Operational should be selected as the Primary Impact.