

Agenda Item No: 1.11 - Appendix 2

# Relationship between Risk and Change Control

Cambridgeshire and Peterborough Combined Authority (CPCA)



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# O. Glossary and References

## Glossary:

- CE: Change Event.
- CMT: Corporate Management Team.
- CPCA: Cambridgeshire & Peterborough Combined Authority, also known as Combined Authority.
- EWN: Early Warning Notification.
- FBC: Full Business Case.
- OBC: Outline Business Case.
- PD: Project Director.
- PID: Project Initiation Document.
- PM: Project Manager.
- PMT: Project Management Team.
- PMO: Programme Management Office.
- RAG: Red Amber Green
- SOBC: Strategic Outline Business Case.
- SRO: Senior Responsible Officer.

#### References:

- Cambridgeshire & Peterborough Combined Authority Risk Management Strategy (January 2020)
- Cambridgeshire & Peterborough Combined Authority 10 Point Guide to Project Management (April 2020)
- Cambridgeshire & Peterborough Assurance Framework (November 2019)
- Cambridgeshire & Peterborough Combined Authority Constitution (November 2020)

## 1. Introduction

This document will outline the processes used within the Combined Authority for both Change Control and Risk Management.

Change can result in changing business requirements, reaction to unplanned events or failures, and loss of stakeholder confidence, all of which can affect the ability of the portfolio, programme and/or project to deliver its objectives. Change control is the process through which all requests to change the baseline scope of a project, programme or portfolio are captured, evaluated, and then approved, rejected, or deferred.

When good governance is in place, it is likely that the major risks and/or issues will be under control, but it is important to ensure that rigour and control processes are applied to all changes. The Change Control process therefore links closely with the Risk Management process. Risks can be seen as both positive and negative, and changes to a project, programme or portfolio can be seen as a risk or an opportunity. Many small changes can have a serious aggregated effect on the overall programme / portfolio and may go totally unnoticed.

The Risk Management Strategy defines the process on how risks are managed. They are managed by a decision to either accept, avoid, transfer, or reduce. In order to know whether to accept, avoid, transfer, or reduce a risk event, it is important to understand the relationship with Risk Appetite and Risk Tolerance.

Change Control Management is part of the governance process within a Programme Management Office (PMO), it is a project management process, and any contract variations will need to be consulted with the procurement team. Portfolios, Programmes or Projects are inherently about delivering change, but they do not work in isolation, and changes are happening to the environment they are delivering in.

## 2. Risk

The amount of risk that CPCA is willing to accept is based on the Risk Appetite.

#### What is Risk Appetite?

Risk Appetite is defined as the amount and type of risk that an organisation is prepared to seek, accept, or tolerate.

#### What is Risk Tolerance?

Risk Tolerance is an organisation's readiness to bear the risk or opportunity, after treatments are established, in order to achieve its objectives.

In order to know the type of risk CPCA is prepared to seek, accept, and tolerate, the CPCA Risk Management Strategy must be referred to. This defines how risks are identified, how they are processed and how they are mitigated. But how does CPCA quantify risk and opportunities?

#### Quantifying Risk and Opportunities

As part of the CPCA Risk Management Strategy each risk is identified and assessed against its likelihood and impact (qualitive assessment) and defined against a 1-5 scoring matrix. Every risk and/or opportunity for each project, programme or portfolio is recorded within the Risk and Opportunity Register, which are included as Appendix 3 and 4 of the CPCA Risk Management Strategy.

In addition, risks are now to be assessed against a quantitative assessment, as well as qualitive. A new risk and opportunity register has been issued to the organisation, to include this amendment.

New Risk and Opportunity Register can be found Here

Within this new register, each risk and opportunity are first given an inherent RAG (Red Amber Green) rating. This represents the current risk level, taking into consideration the existing set of action, rather than a hypothetical notion of an absence of controls. The risk is then further scored for its residual RAG rating, which is the risk level that would remain after additional controls are applied.

For example, a new risk could have a likelihood score 4 and an impact score of 5, which is an overall inherent score 20 and a **Red** RAG rating. But following mitigation controls, the likelihood of the risk happening is reduced to 2, and the impact will reduce to 3. The overall residual score would therefore reduce to 6 and an **Amber** RAG rating.

These controls/actions are called Risk Treatments, which define the mitigation of the risk.

The CPCA Risk Management Strategy defines these treatments as:

#### Risk:

- Accept Here we accept the risk and take no proactive action other than putting monitoring
  processes in place to make sure that the potential for damage does not change. Once the
  risk is accepted, it is generally necessary to provide for some form of contingency to provide
  funds / time to accommodate the risk should it happen (despite its lower likelihood /
  impact).
- **Avoid** The only real way to avoid a risk is to change the project scope or approach what we do or the way we do it.
- Transfer We seek to move the risk from our risk register onto someone else's risk register.
   We seek to transfer the potential for harm to another. Usually through an insurance policy or a contract.
- **Reduce** Either the likelihood or impact.

#### Opportunity:

- **Reject** Choose not to take the advantage of the opportunity, possibly because it is worth too little or requires too much work to capitalise on.
- **Enhance** Take proactive steps to try and enhance the probability of the opportunity being able to be exploited.
- **Exploit** This involves changing the scope of the project /programme to encompass some aspect that was not previously discussed that will achieve some extra benefit.
- **Share** Seek partners with whom can actively capitalise on the circumstances such as a Joint Venture.

This is a qualitative assessment of the risk and opportunity and uses the existing likelihood and impact definitions and matrix found within the CPCA Risk Management Strategy.

After the qualitative assessment of each risk and opportunity has been complete, they are quantified against an approximate financial value, where applicable. Not all risks and opportunities can be monetised. All significant risks – such as timing, reputational impact, or changes to planned outcomes, nevertheless need to be considered.

For example, a risk relating to additional planning application would require a financial value whereas a risk around a consultation event potentially receiving bad publicity would not.

The risk owner is responsible, where appropriate, for providing an approximate financial value of each risk, but may consult the project team, supplier, or any other relevant person to help quantify.

As each monetised risk is quantified throughout the lifetime of the project, the approximate financial implication of the project is calculated and may change. The amount of monetised risk that CPCA is willing to accept is based on the Risk Appetite and Risk Tolerance.

## CPCA's Risk Appetite

The CPCA has allocated a level of monetised Risk Appetite as a percentage of the financial cost. This is based on the overall financial cost of the project. Where the Green Book process of preparing successive business case stages in followed, the risk appetite should reduce the closer to delivery the project advances.

Table 1: CPCA Risk Appetite for HM Treasury's Five Business Case Model only:

Business Case Stage	% Level of Appetite
Feasibility	40%
Strategic Outline Business Case (SOBC)	30%
Outline Business Case (OBC)	20%
Full Business Case (FBC)	10%
Construction / Delivery	10%

This percentage level of appetite is based on the total financial cost of the business case.

The CPCA Assurance Framework requires Business Cases to be developed in line with HM Treasury's Five Case Model. HM Treasury guidance sets out a three stage Business Case process: The Strategic Outline Business Case (SOBC), the Outline Business Case (OBC) and the Full Business Case (FBC). More detail can be found in the CPCA's 10-Point Guide to Project Management.

At each stage, the documents become more detailed as the project prepares to enter delivery and therefore, the risk appetite changes. This is a result of a more detailed understanding of the project and requirements of its delivery.

For example, a project at feasibility stage has an approximate overall cost between £1 - £1.2m. Due to the level of uncertainty, the CPCA allows a 40% risk appetite, meaning the approximate overall cost of the project can lie between £1.4 - £1.68m. As the project goes through the HM Treasury Five Case model process, the overall cost of the project becomes clearer and the risk appetite should reduce appropriately. By the time this reaches construction phase, the risk appetite will reduce to 10%.

<u>If</u> the project does not follow the successive business case process, then the Risk Appetite is based on the overall cost of the project. This is defined below:

Table 2: CPCA Risk Appetite for Project Cost only:

Total Project Cost	% Level of Appetite
Anything over £500,000k	30%
£250k to £500k	20%
£100k to £249k	10%
£0 – £99k	10%

For example, a project within housing with a total cost of £500,000 will have a risk appetite of 30%. The Risk Appetite for that particular business case is therefore £150,000. The approved project cost would be £650,000.

This simpler approach should also be used in allowing for risk in the budget for developing a business case itself, although in that case the percentage allowances should be 10/5/0/0%.

Unmonetised risks cannot be budgeted for in this way.

# 3. Change Control

A change is something that will affect any of the key baselines associated with a project – the time, cost, quality, risk exposure or benefits case. Some changes may be welcome whilst some not. Either way all change needs to be proactively managed.

Change can happen due to a number of reasons:

- External influences; for example, a change of government or organisational strategies.
- Contractual changes generated by clients / subcontractors / suppliers or other stakeholders.
- A new and innovative technique or process, apparent after the original baselines have been agreed.
- Efficiencies of process and change associated with getting things done more efficiently / lower cost that have emerged.
- Changes to the benefit model; perhaps doing a little more may have a huge return.
- Evolving designs and emergence of new information.

In traditional development models where scope is defined early in the life cycle, it is essential that changes to baselined scope are controlled. A rigorous change control process must be established and maintained on all projects, programmes, and portfolios. The purpose of this is to make sure that baselines are secured and only changed with appropriate controls, checks, agreements, and communications. As time progresses, the ability to have an impact on the direction of a project diminishes. Similarly, as time goes by, the cost of any changes will rise. The cost needs to be considered and understood and any change to these parameters may call into question the viability of the project as whole.

#### **Change Control Process**

Within CPCA, we follow the change control process below.

Diagram 1: Standard Change Control Process



#### This process is shown by example in Appendix 2.

A change request can only be submitted by the CPCA Programme/Project Manager.

All Early Warning Notifications and Change Events should be saved on the Early Warning and Change Event Log found <a href="here">here</a>. An Early Warning and Change Event Log should be set up for every project.

#### Step 1: Submit Early Warning Notification

An Early Warning Notification (EWN) is the first notice that a project manager must submit to notify the project director or board of any potential change which could affect the cost, completion progress or quality of the project.

The EWN form can be found here

When the EWN form has been completed, it is recorded on the Early Warning Notification and Change Event Log, given a reference number, and must be formally signed off by the Project Director (PD) and/or agreed by the Project Board where there is one. This sign off should happened within a week of receiving the EWN. Whether the EWN is accepted or declined by the project director, it will stay on the Early Warning Notification and Change Event Log.

The EWN will also refer to a Risk Identification number as part of the Risk Management Process.

The Early Warning and Change Event Log records all submitted EWNs and Change Events (CE). The purpose of the log is to provide a method of change and a means of notification to change the scope, cost, programme, outputs, and deliverables. It also provides a means of escalation of project risks and or issues that require a notification.

The monitoring and quality checking of the Early Warning Notification and Change Event Log will be facilitated by the PMO team.

The EWN is supplementary and will provide supporting information for any future Change Events. The EWN advises the project team that a change may happen, and that additional mitigation might need to be put in place to stop the change from happening. Just because an EWN has been submitted, does not mean that a change event will be submitted at a later date. The EWN will also

give an approximation on the change whether that is the approximate number of days or the approximate financial implication.

For example, an EWN has been issued to notify of a delay in time (approximately 5 days) for modelling work. If this does happen, it will also result in additional funds (approximate financial implication). If the modelling delay is resolved, then a change event will not need to be submitted.

There are no definitive timescales as to when a change request is submitted.

#### Step 2: Submit Change Event

The project manager who requests a change must then provide relevant information on the nature of the change. The request is entered into a change event form.

The CE form can be found here

Once the CE has been completed, it is also recorded on the Early Warning and Change Event Log.

It is then formally submitted to the project director and/or project board. The CE is then given a reference number. If there are any EWNs that provide supporting evidence for the change, then the EWN reference number(s) is also included.

#### Stage 3: Recommendation, Decisions and Delegation

The person with the authority to approve a CE is the named Director responsible for the project, or the CPCA Project Board where one exists.

The Director for Business and Skills has delegated authority to SROs within this directorate, which is shown within **Appendix 1**.

### Stage 4: Update Plans

If the CE is formally accepted, the Programme/Project Manager has to introduce the change into the plan. Most of the normal planning process would already have been carried out during the feasibility stage, but now the live programme, financial reporting, and risk registers will need to be formally updated. Changes must be considered alongside the existing frameworks of product description and specifications; this is outlined with the Project Identification Document (PID) as per the CPCA 10 Point Guide for Project Management. If the change requires a budget increase, that must be approved in line with the usual Combined Authority process for agreeing budget changes. These are set out in Combined Authority Constitution.

Everyone who is involved must be informed about the change.

# Appendix 1

# **Delegated Authority**

# **Business and Skills**

The following SROs have 50% delegated authority for the overall Risk appetite:

Job Title
SRO – Higher Education
SRO – Workforce & Skills
SRO – Adult Education
SRO – LGF Investments
SRO – Business Growth Service & Market Towns

This is agreed as an aggregate (approval of either a single CE or multiple CEs, as long as they do not exceed the 50% Risk appetite in total).

For approvals over 50% Risk appetite, these will need to be authorised by the Director of Business and Skills.

#### **Delivery and Strategy**

Full delegated authority sits with the Director of Delivery and Strategy.

# **Housing and Development**

Full delegated authority sits with the Director of Housing and Development.

# Appendix 2

## Early Warning Notification and Change Event Process Example

Below is a live example of how to complete an Early Warning and Change Event for your project:

# Step 1: Early Warning Notification (EWN) is submitted

The EWN form is completed by the Project Manager and is added into the Early Warning Register with a number allocated:

Early Warning Notification													
		Notification Date	10/11/2020										
EARLY WARNING OF:													
Increase in total of Price	Yes												
Delay Completion	Yes												
Delay meeting a Key Date	No	EW Ref Number											
		Event Date	DD/MM/YYYY										
Brief Description of the Event: (single	e line only)												
Additional planning application is require	ed if current plant	ning application is declined											
Detailed Description of the Event: (E													
Received email from planning authority	<b>5 5</b>	, , , , , , , , , , , , , , , , , , , ,	e advised that the										
planning application may require to be r	e-submitted due	to legislation changes											
Cause of the Event:													
Leglislation changes													
Effects of the Event:													
Time and Cost													
Options Considered/Mitigation Meas													
Currently discussions being held with plants	anning authority a	about the need for new planning	g application										
Why Option chosen was selected:													
Only option													
Delay in Time / Delivery? (highlight But	siness Case if applica	ble)											
Feasbility	SOBC OBC FB	C Construction / Delivery											
If a new planning application is required	confirmed approx	k delay 3-12 weeks.											
Issued by:	Supplier	Date:	10/11/2020										
Provisional Total EW Cost	£ 3,000.0	0											

The reference number is used to link into the risk register, which is then updated.

	P	roject / P	rogramme l	Risk		Resi	dual Sc	ore						
ID No	Risk or Opp	Date Identified	Cause(s)	Risk Event	Effect(s)	Likelihood (1-5)	Impact (1-5)	RAG score	Financial Risk Implication (£k)	Comments/Notes /Assumptions	Risk Contingency (£k)	Risk Owner	Escalation Required?	EWN Ref
								Total	£3,000.00		£2,400.00			
1	Risk	01/11/2020	Change	New planning application required	Cost and Time	4	1	4	£3,000.00			PM	No	EW1
2								0						

If the EWN is demonstrating a new risk that is not already on the risk register, this will need to be added.

The EWN is then discussed internally. In this example, it is deemed appropriate and accepted. The EWN is signed off as approved, by WHO? (this should happen within a week of receiving the EWN from the supplier).

ssued by:		Supplier	Date:	10/11/2020
rovisional Total EW Cost	£	3,000.00		
igned Project Manager - Delivery artner		Х	Date:	12/11/2020
PCA Project Manager		Χ	Date:	12/11/2020
PCA Project Director		Χ	Date:	12/11/2020

# **Step 2: Change Event (CE) is submitted by the supplier:**

In this instance, the risk has been realised (a week after the EWN) and the Project Manager has completed the CE form:

Change Request Form											
CHANGE EVENT OF		Notification Date	21/11/2020								
CHANGE EVENT OF:	Yes										
Increase in total of Price											
Delay Completion	No										
Delay meeting a Key Date	No	CE Ref Number									
		Event Date	28/11/2020								
Brief Description of the Event: (single											
Current planning application is due to be			submitted								
<b>Detailed Description of the Event:</b> (b											
Discussions with the planning team have	e confirrmed that a	new planning application is re	quired due to new								
legislation  Cause of the Event:											
New legislation  Effects of the Event:											
Increase in cost, no delays to programm	o duo to discussion	as with the planning team									
Options Considered/Mitigation Meas		is with the planning team.									
N/A	ures deployed:										
Why Option chosen was selected:											
Only option											
Delay in Time / Delivery?											
Feasbility	SOBC OBC FBC	Construction / Delivery									
New planning application will cost £2,50	0 and no delay in t	ime									
Issued by:	Supplier	Date:	21/11/2020								
Total CE Cost	£ 2,500.00										

A CE Ref Number is allocated, and this is also added to the summary page of the Early Warning and Change Event Log:

Early War	rning and Change Event Register	Project Name:				
				Dropdown		Dropdown
EW/CE Ref Number	Brief Description of Event	Notification Date	Impact on Approved Completion Date (days)	Change in Cost (Y/N)	Provisional Cost Impact (Net £)	Requires Director Approval?
	Additional planning application is required if current planning application is declined	10/11/2020	60	Yes	£ 3,000.00	
CE1	Additional planning application is required	21/11/2020	0	Yes	£ 2,500.00	
		Total:	60	Total:	£ 5,500.00	

\*\* The above Early Warning and Change Event Log shows the difference between the EWN and CE. The CE has a definitive figure of £2,500 and has confirmed that there is no time delay.

## Stage 3: Recommendation, Decisions and Delegation

As the CE is deemed appropriate, the delegated authority agrees to approve the £2,500 CE as this fall within the approved Risk appetite. The CE is signed off by the Director or Project Board and the Early Warning and Change Event Summary log is updated.

New planning application will cost $\pm 2,500$ and no delay in time												
Issued by:	S	Supplier	Date:	21/11/2020								
Total CE Cost	£	2,500.00										
Signed Project Manager - Delivery		Х	Date:	22/11/2020								
Partner CPCA Project Manager		V	Date:	22/11/2020								
CPCA Project Manager		^	Date:	22/11/2020								
CPCA Project Director		Χ	Date:	22/11/2020								
CPCA Director (SRO)		Χ	Date:	23/11/2020								

Early War	rning and Change Event Register	Project Name:													
		Impact on Civil		Dropdown					Dropdown	Dropdown		uction Meeting	Risk Register		
EW/CE Ref Number	Brief Description of Event	Notification Date	Approved Completion Date (days)	Change in Cost (Y/N)	Provisional Cost Impact (Net £)	Approved, Rejected or Deffered		Approved Cost Impact (Net £)	Requires Director Approval?		Proposed/Held Date (DD/MM/YYYY)	Risk Owner	Risk ID	Provision (£)	Comments
	Additional planning application is required if current planning application is declined	10/11/2020	60	Yes	£ 3,000.00	Approved	0	£ -	No	N			1	N/A	EW1 replaced by CE1
CE1	Additional planning application is required	21/11/2020	0	Yes	£ 2,500.00	Approved	0	£ 2,500.00	Yes	N			1	£ 2,400.00	
		Total:	60	Total:	£ 5,500.00	Total:	0	£ 2,500.00							

The approved spend and days are updated to reflect the approved CE.

## **Stage 4: Update Plans**

The supplier is advised that the CE has been accepted and is sent formal confirmation via email to go ahead. The risk register is also updated to reflect this (in this case, the risk event is closed, and the risk contingency amount is removed).

		Project	/ Programi	ne Risk			Resi	dual Sc	ore								
ID No	Risk or Opp	Date Identified	Cause(s)	Risk Event	Effect(s)	Risk Status	Likelihood (1-5)	Impact (1-5)	RAG score	Financial Risk Implication (£k)	Comments/Notes /Assumptions	Risk Contingency (£k)	Risk Owner	Escalation Required?	EWN Ref	Date Closed	
									Total	£3,000.00		£0.00					
4	Risk	01/11/2020	Change		Cost and Time	Closed	4	4	4	£3,000.00	discussions happening with planning team	<del>00.03</del>	PM	No	EW1	23/11/2020	