



Project Controls Expo

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Introducing Risk Management as a part of the
Project Controls System

Speaker Profile

Since joining BMT in 2000, Edwina has provided Project Controls expertise to Programme teams in a number of major defence programmes within the Land and Naval environments. This work has covered all aspects of Project Controls but more specifically Risk, Schedule and Earned Value Management.

Within the Risk Management elements of Edwina's work she has been involved in setting up and maintaining Risk and Opportunity Management processes and conducting regular risk analysis as well as providing inputs to Main Gate Business Cases and Review Notes.

Edwina is currently a member of the APM Risk Specific Interest Group committee.

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Definition of Risk

- A Risk is an uncertain event that should it occur will have a positive (opportunity) or negative (threat) impact on your objectives
- It can be described in terms of cause, effect and consequence
- It has a probability of occurrence associated with it
- The impact can be described in terms of cost, time, performance or a number of other areas including reputation

The Difference between Uncertainty, Risk and Issue

The difference between Uncertainty, Risk and Issue - Uncertainty

- ❑ Penny travels to work during the week by car, this usually takes her 45 minutes.
- ❑ If the traffic isn't too bad and all the traffic lights are green her journey can take as little as 35 minutes.
- ❑ If the traffic is a bit heavier and the traffic lights all turn to red as Penny approaches them, her journey can take an extra 20 minutes.
- ❑ This gives Penny a 3 Point Estimate for her journey to work of 35 mins **Minimum**, 45 mins **Most Likely** and 1 hour 5 minutes **Maximum**
- ❑ The time between the minimum and maximum time it takes Penny to get to work is the uncertainty around her journey



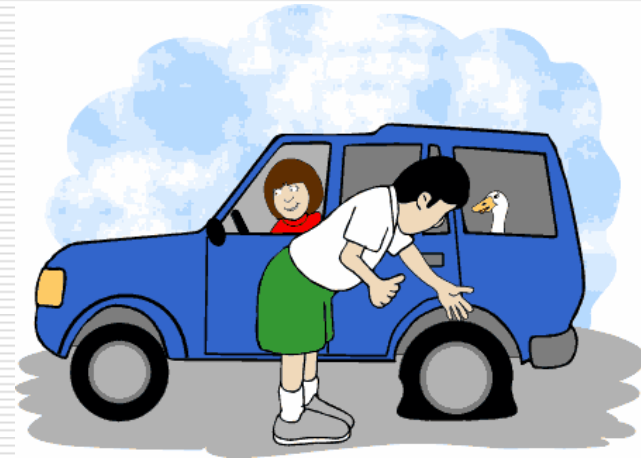
The difference between Uncertainty, Risk and Issue - Issue

- An issue is something that has to be dealt with, this can be a risk that has impacted or just one of those things that can extend Penny's journey time.
- Possible issues for Penny on her journey to work are:
 - Road Works
 - Weather Conditions
 - Traffic Jams
- To deal with the issue of a traffic jam, Penny could take an alternative (although potential longer) route to work



The difference between Uncertainty, Risk and Issue - Risk

- The risks to Penny's journey to work are:
 - Breakdown
 - Causes to this including:
 - Flat tyre
 - Run out of fuel
 - Overheated engine
 - The effect could be that Penny is late for work or indeed misses work
 - **Mitigation** (reduce the risk) to this could be regular maintenance of the car, check the tyres before leaving in the morning
 - **Fallback** (if the risk impacts) options is to have a maintained spare tyre in the boot or to have AA cover



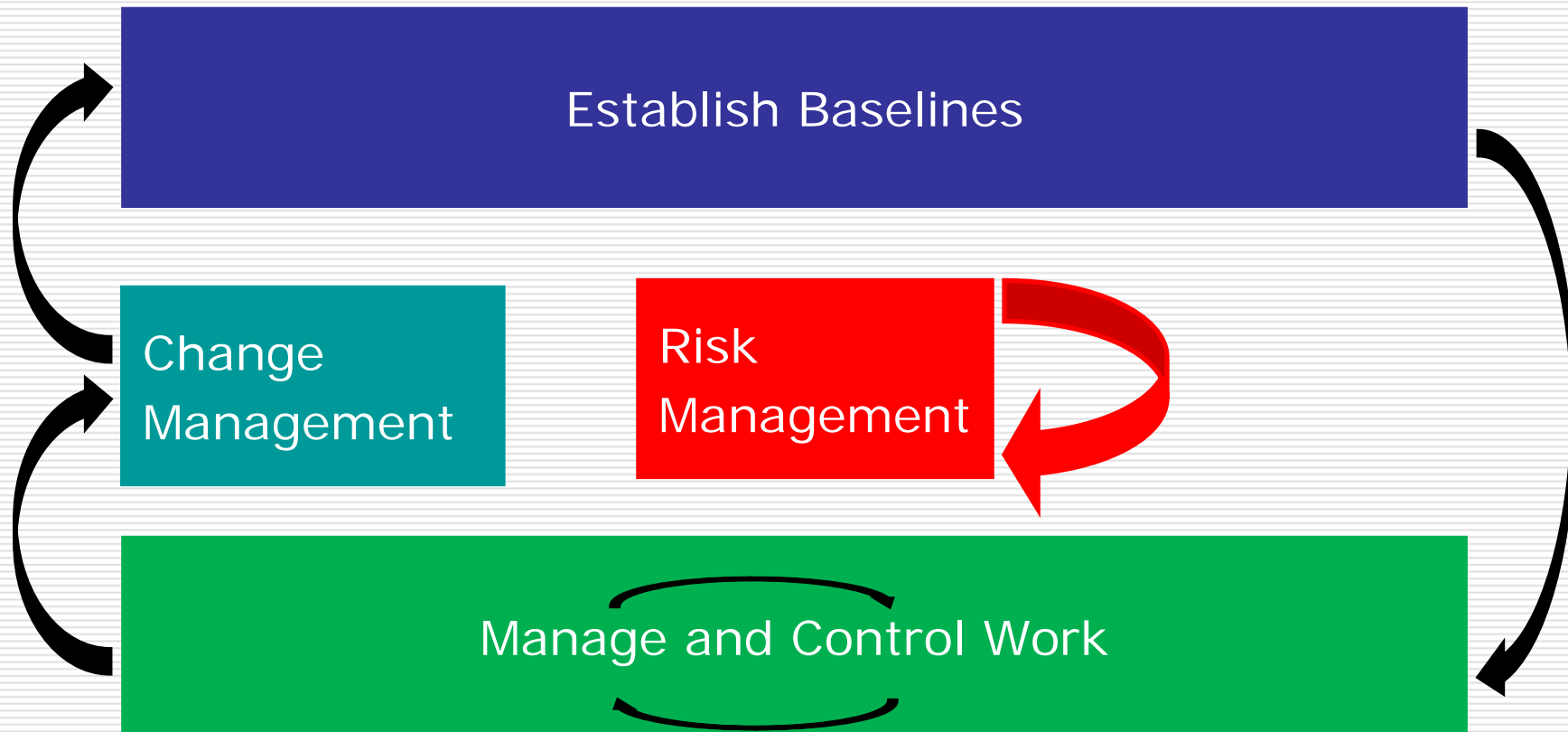
The difference between Uncertainty, Risk and Issue – Risk continued

- Accident
 - This could be caused by driving too close to the car in front, being distracted or tired whilst driving.
 - The effect is that Penny is late for work or doesn't make it work, also a potential bill to repair the car
 - The **Mitigation** is to keep you distance, not drive when tired, don't change radio station when in traffic
 - **Fallback** options for this are to have car insurance



Risk Management as part of a Project Controls System

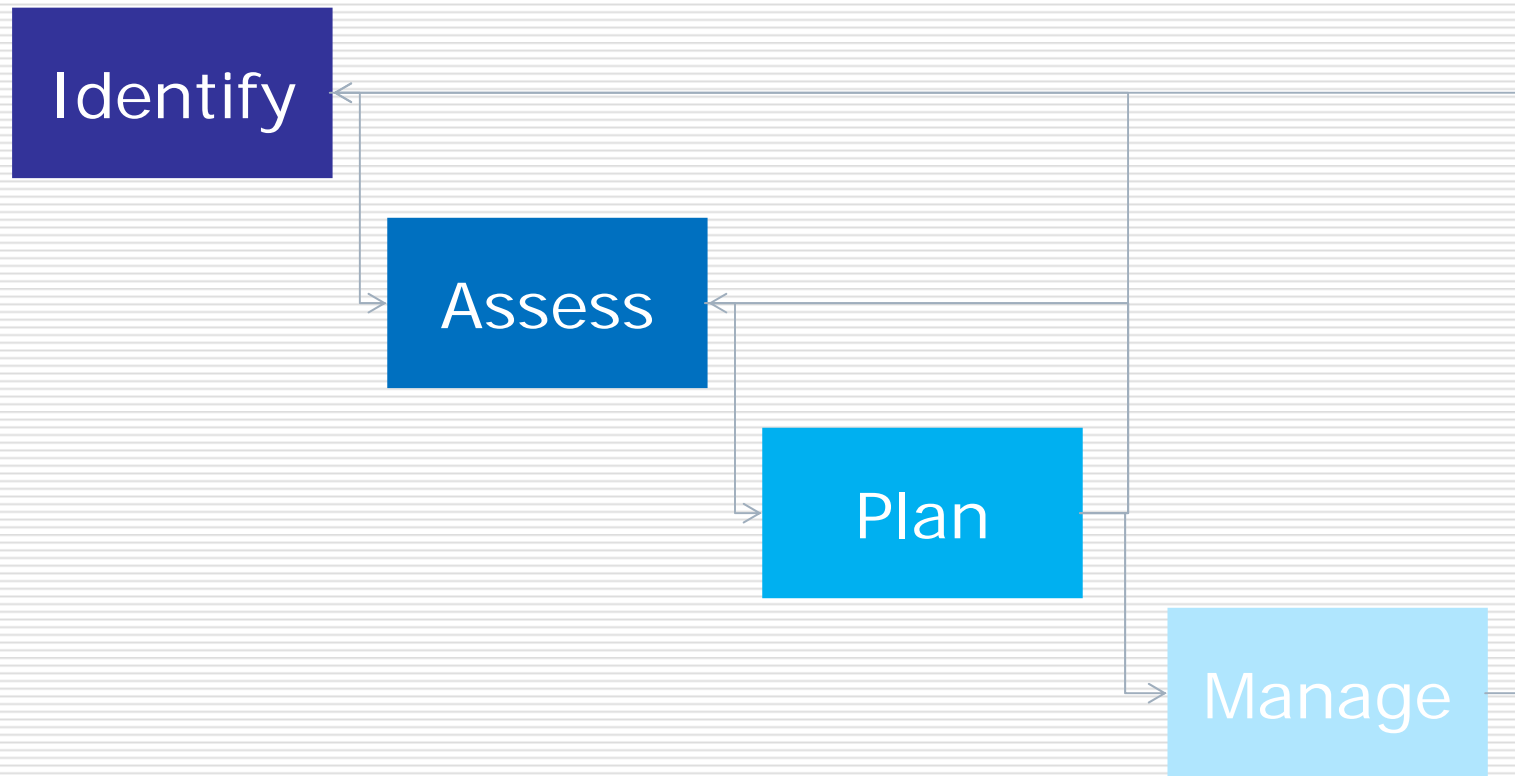
Risk in the Project Controls System



The Risk Process

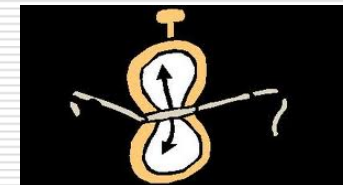
The Risk Process

- The standard Risk Management process follows four steps:



Identify

- ❑ Firstly identify the your objective – what are you trying to achieve?
 - The risks are those things that will stop (threat) or help (opportunity) you achieving those objectives
- ❑ What is the effect if the risk happens?
 - Failing to achieve your objective will have an effect on timescale, cost, performance etc.
 - This should help your identify your current impact score
- ❑ What is the cause of the risk?
 - There may be a number of causes
 - Your responses should address the causes
- ❑ Risks are identified through as the project moves forward



Analyse

- The risk should be scored in terms of current (as you stand today) and target scores (once all actions have been carried out)
 - Qualitative
 - First pass scoring in terms of VH, H, M, L, VL
 - Qualitative
 - More information available
- Risks are scored in terms of probability of occurrence i.e. If there is a 1 in 4 chance of it happening then there is a 25% probability of occurrence
- Impacts in terms of days, £s, performance
 - 3 point estimates – minimum, most likely, maximum

Analyse continued

- Using the probability and the score you can prioritise the risks



Plan

- There should be two levels of planning
 - High level strategy
 - There are a number of options for handling the risk
 - Tolerate (Accept)
 - Transfer
 - Treat (Mitigate)
 - Terminate (Avoid)
 - Lower level actions
 - Activities that are carried out to reduce (risk) or increase (opportunity) the impact of probability of the
 - These tie in with the project schedule and are costed and resources

Plan continued

- Fallback Plans should be identified
 - These are put in place should the risk occur

Manage

- Risk actions are progressed and monitored as activities within the schedule with budget and resource assigned
- Regular reviews of the risk take into account progress of the programme
- Current scores are reviewed as actions are completed

Questions





THANK YOU

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