



Project Controls Expo

09/10 Nov London 2011

Integrating Risk and Earned Value
Management

Speaker Profile

Since joining BMT in 2000, Edwina has provided Project Controls expertise to MoD 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. This has included conducting regular risk analysis as well as providing inputs to Main Gate Business Cases and Review Notes and taking part in a number of Integrated Baseline Reviews.

Edwina was a member of the working group that produced the APM's Interfacing Risk and Earned Value management Guide and is a member of the APM Risk Specific Interest Group committee.

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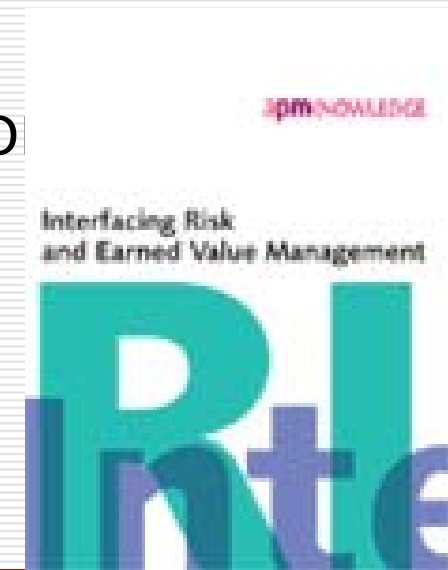
- The Background
- Risk Management – A summary
- Earned Value Management – A summary
- Integrating the two disciplines
- Summary

The Risk and Earned Value Working Group

- Sponsored by the APM Risk and EV SIGs
- Mix of Risk and Earned Value experts
- Mix of industry expertise mainly defence and construction
- Started in 2005
- Guide published 2008

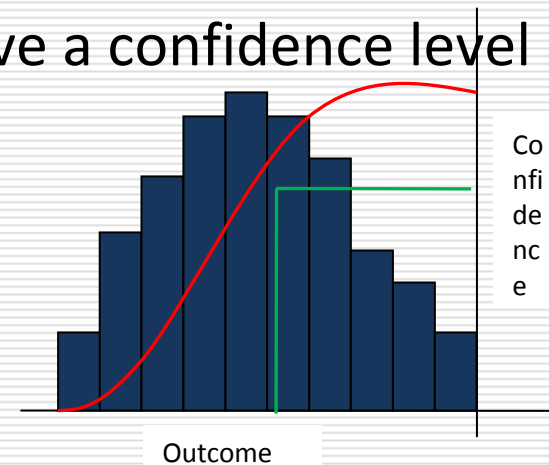
The Risk and Earned Value Working Group

- What was the aim?
 - The group agreed that it wanted to produce a practical guide
 - Understand the interfaces between the two disciplines
 - Worked with other professional bodies
 - Defence EVM Implementation Group D
 - PMI
 - NDIA etc



Risk Management – A Summary

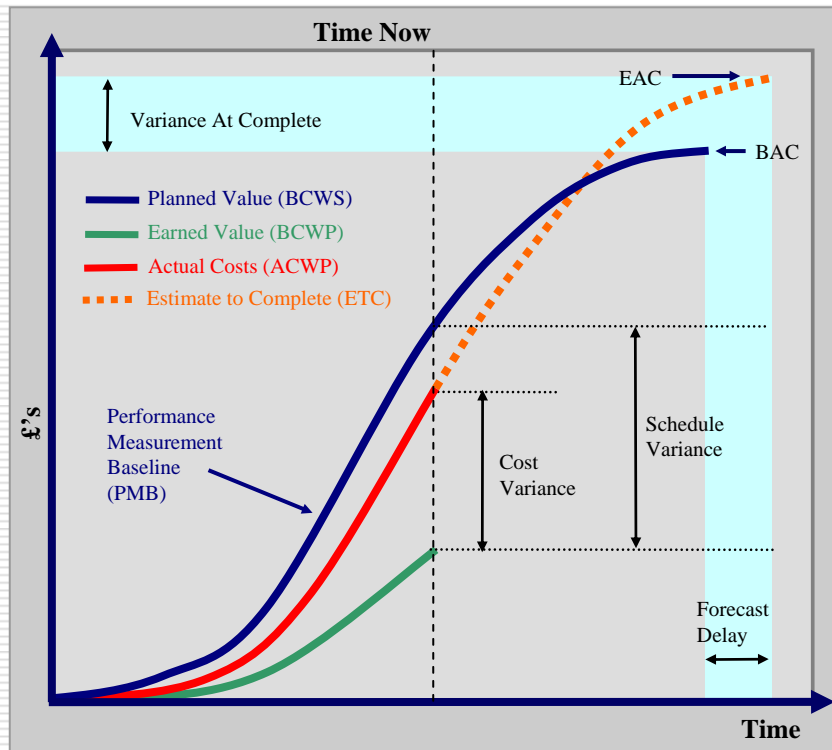
- ❑ Identifies uncertain future events that could effect the outcome of the objectives
- ❑ Identifies actions to be put in place to reduce the threat or optimise the opportunity
- ❑ Risk = Probability x Impact
- ❑ Monte Carlo Simulation used to give a confidence level



Earned Value Management – A Summary

- Measures performance against a baseline
- Provides trends
- Provides early warnings
- Can use this to estimate outcome

Earned Value – A Summary continued



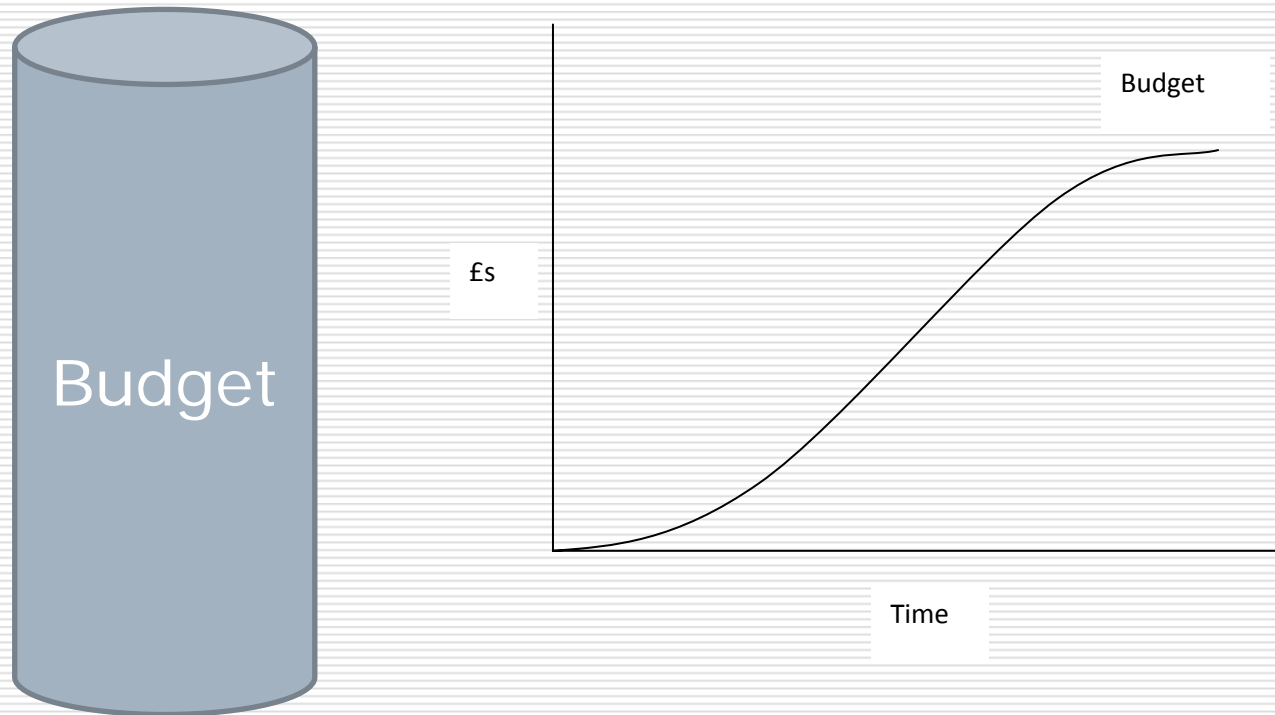
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Integrating the two disciplines

- Risk Management and Earned Value integrate at various points
 - Establishing the Baseline
 - Through out the lifecycle

Integrating the two disciplines – Establishing the Baseline

- How is the budget to deliver the project scope made up?



Integrating the two disciplines – Establishing the Baseline

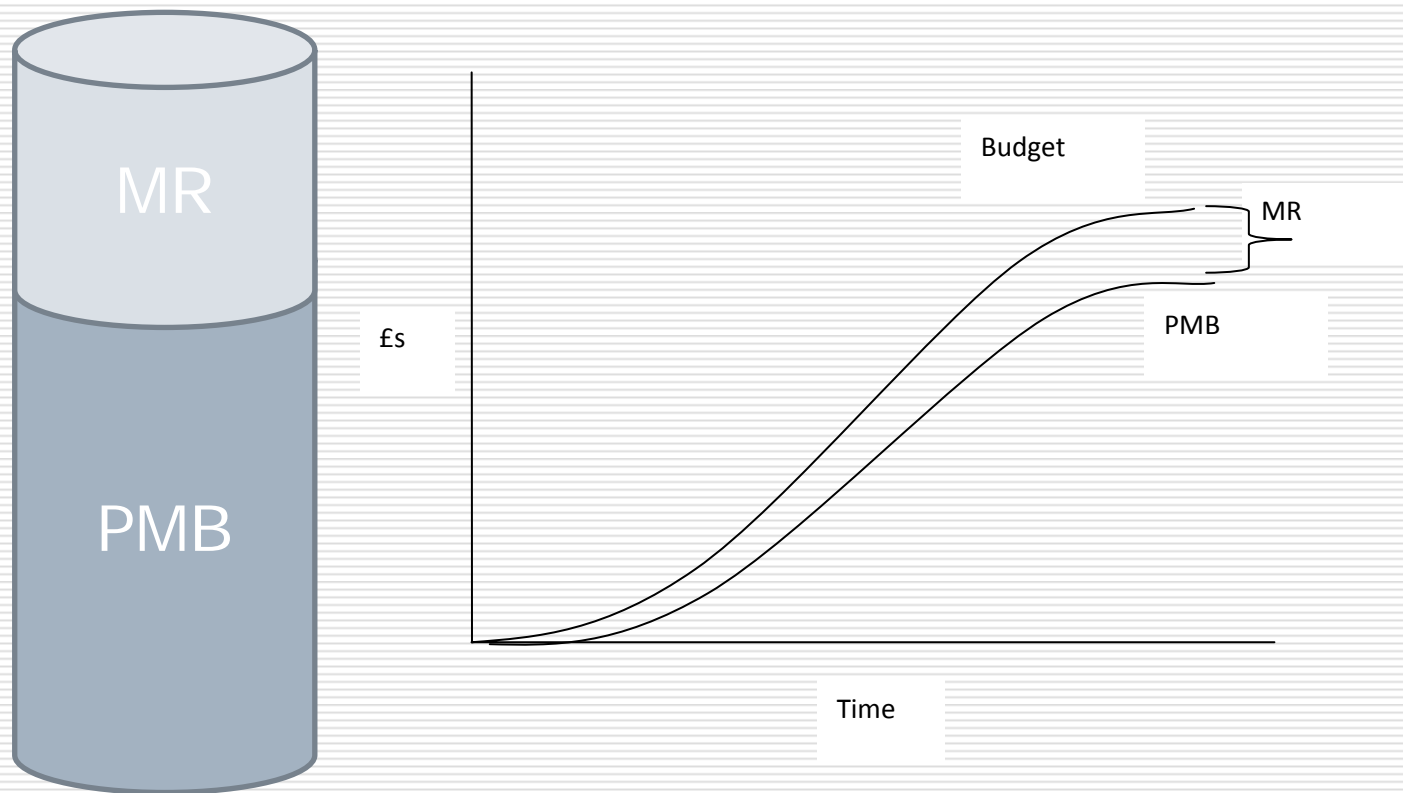
- But what is it made up of?



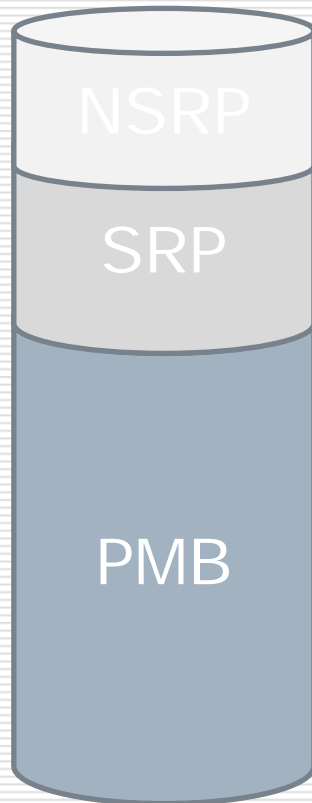
Management Reserve is the provision for identified and emergent risks

PMB is the approved plan that the project will be measure against

Integrating the two disciplines – Establishing the Baseline



Management Reserve

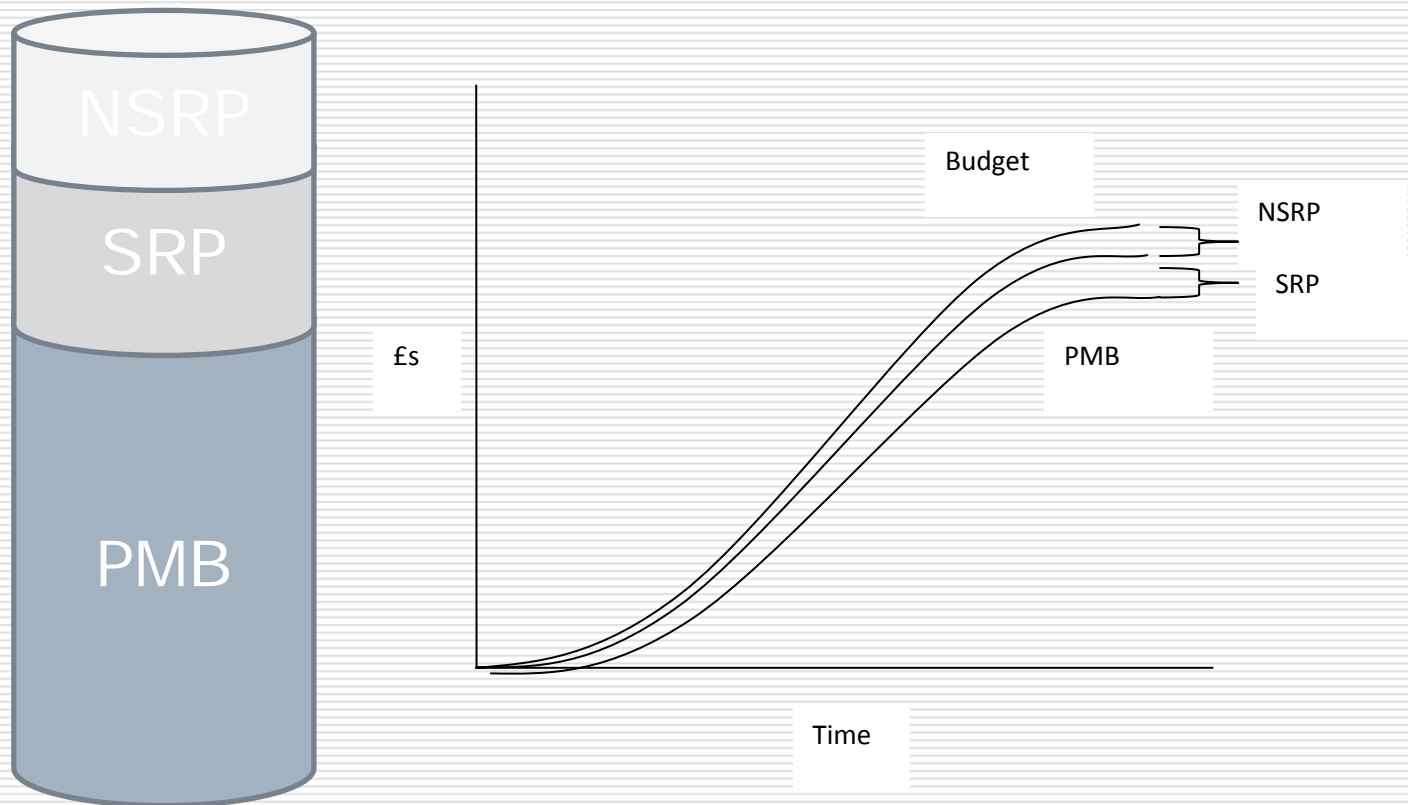


Non Specific Risk Provision –
emergent risks

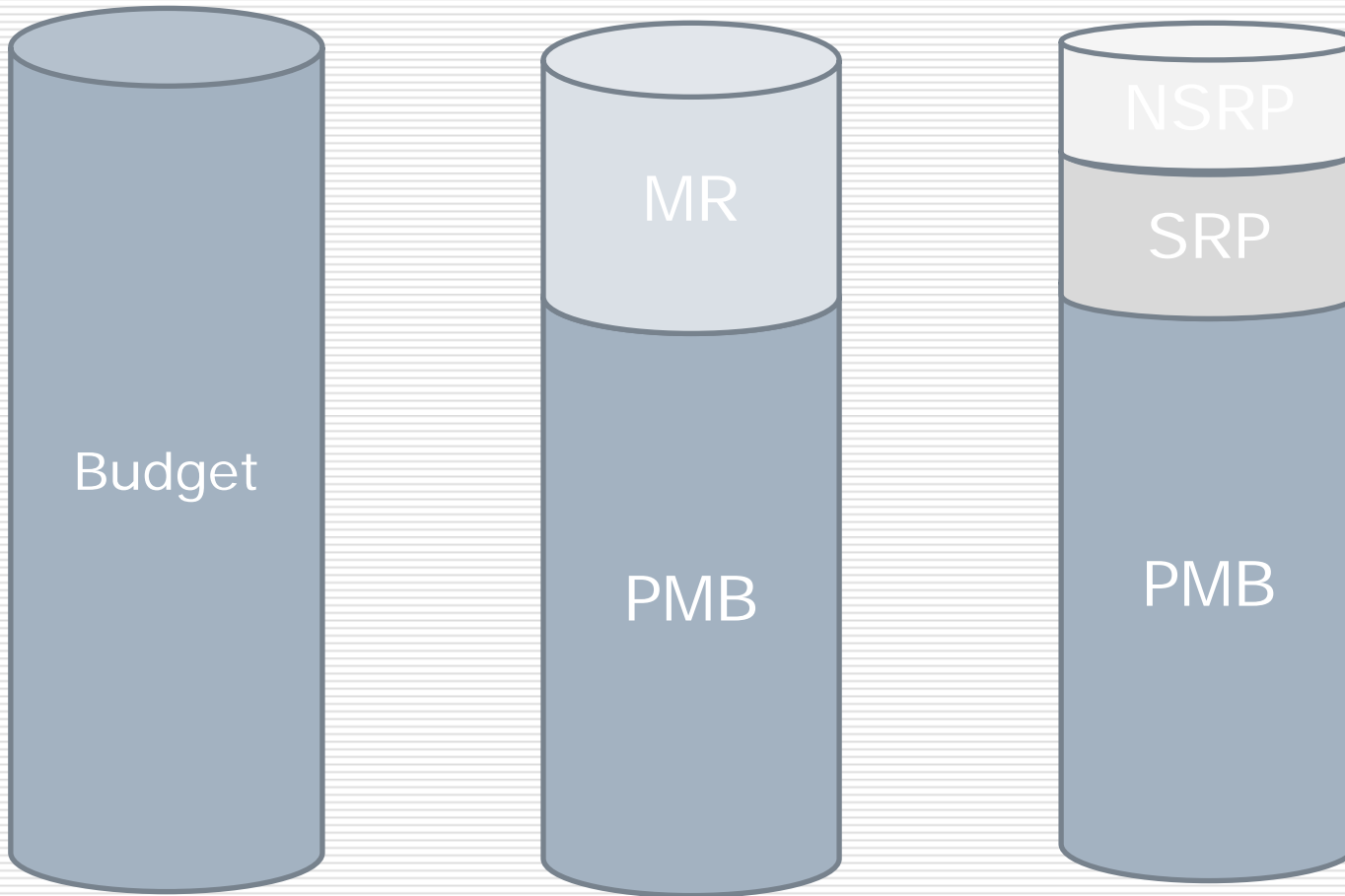
Specific Risk Provision –
identified risks

The approved plan

Management Reserve



The Budget

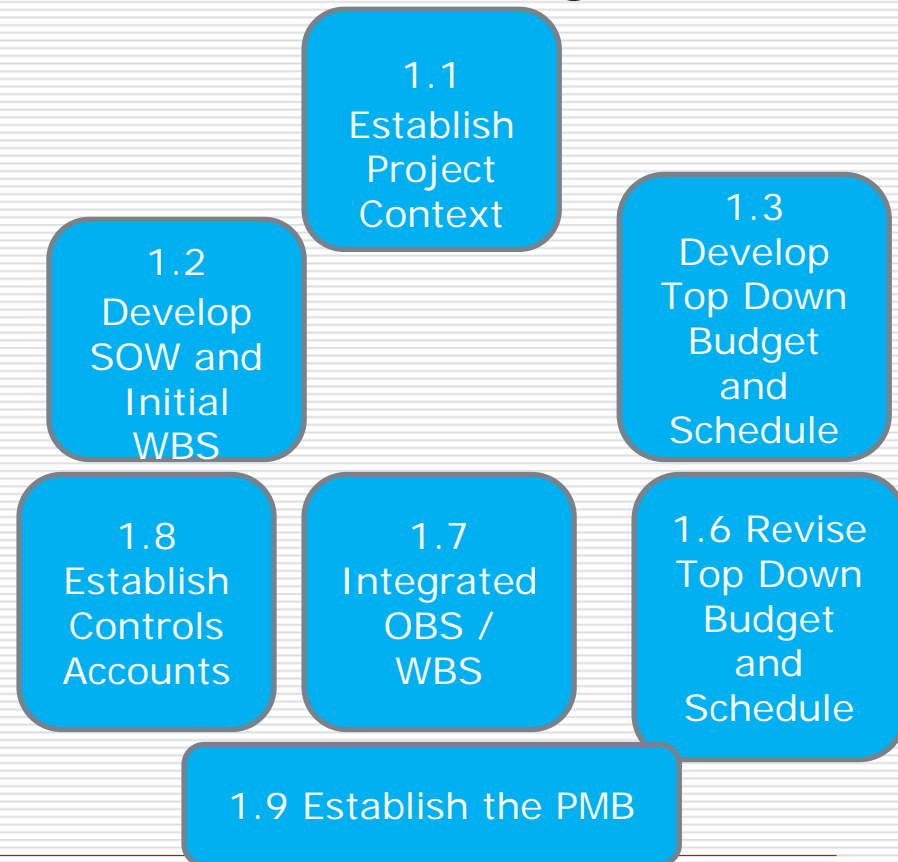


The Two Disciplines

Risk Management



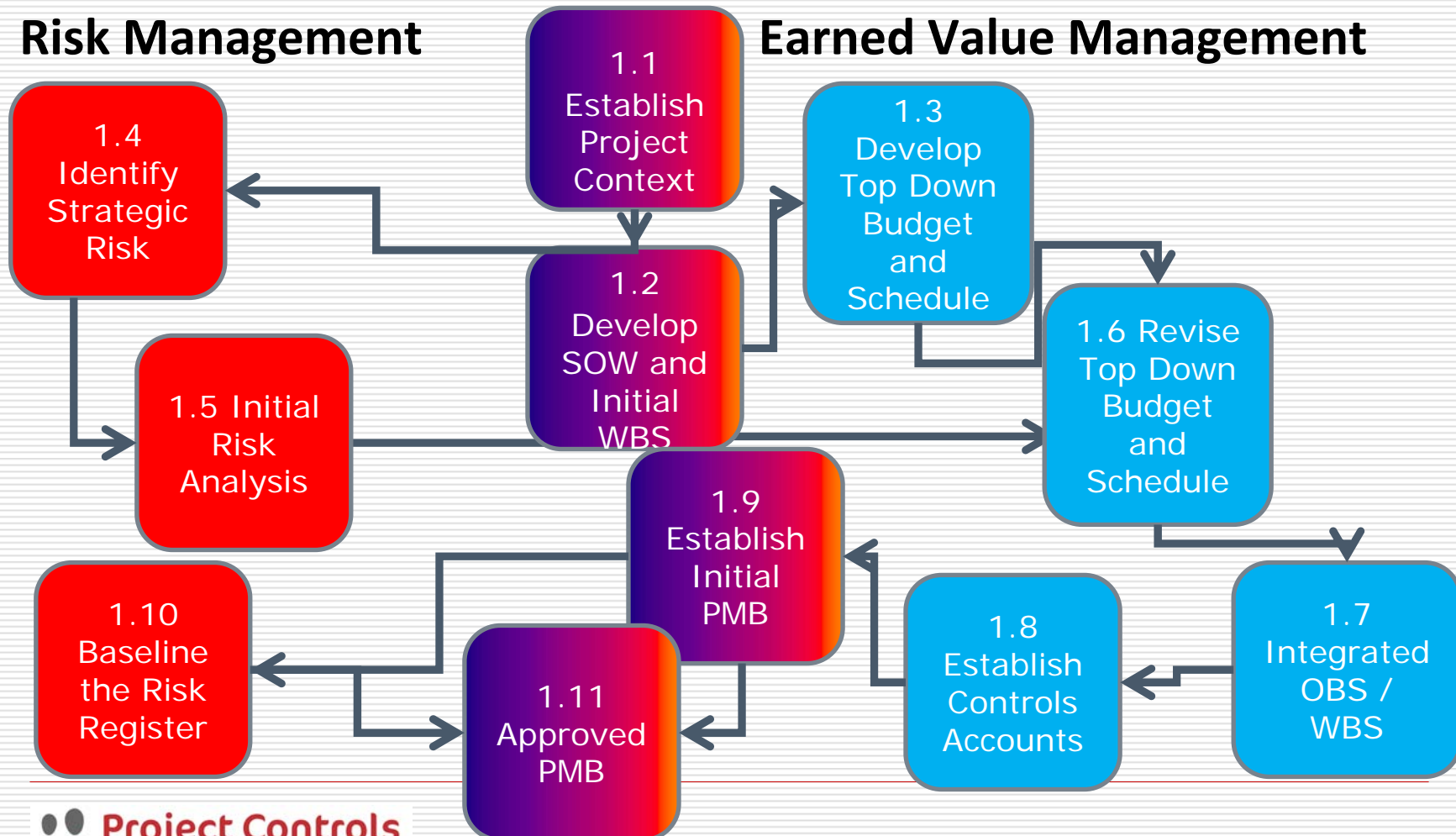
Earned Value Management



The Two Disciplines

Risk Management

Earned Value Management



Integrating the two disciplines - Risk Informs the Baseline

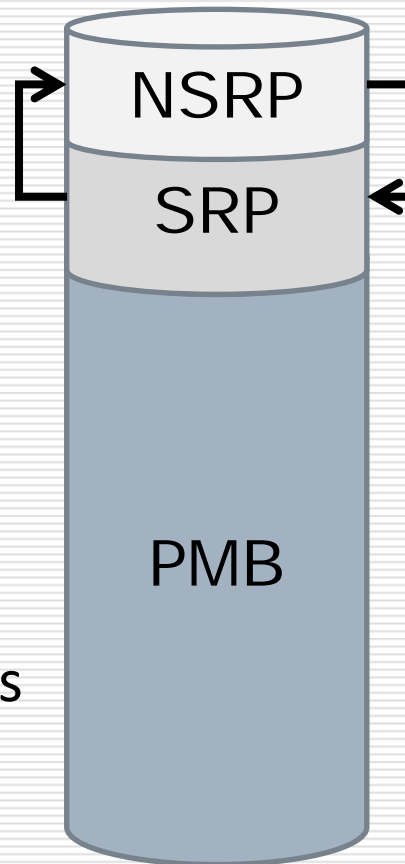
- So how does risk feed the baseline?
 - Risks have been reviewed
 - Actions approved and included in the baseline
- Risk Analysis is undertaken to inform the baseline
 - Agreed level of confidence in the PMB

Integrating the two disciplines - Risk Informs Management Reserve

- Specific Risk Provision
 - Determined by carrying our Monte Carlo simulation on the risks identified in the register
 - Also enables you to understand the risk exposure
- Non Specific Risk Provision
 - Use previous projects
 - Previous experience
 - Use the risk exposure to give you a view

Through the project lifecycle – Risks

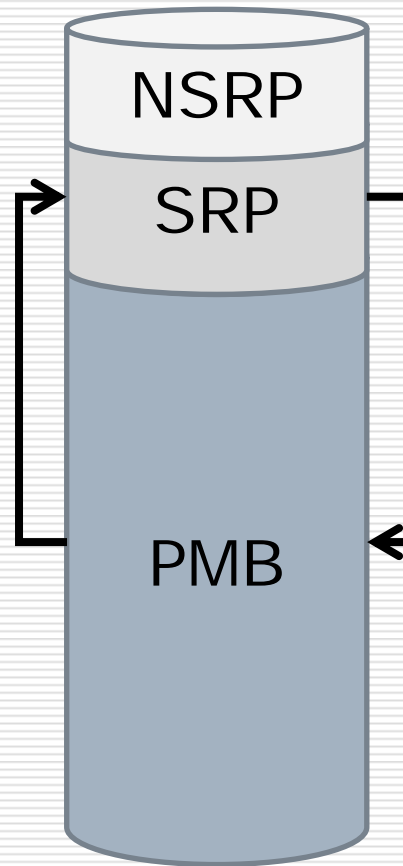
- Risk Closed / Revised (threat and opportunity)
 - Greater knowledge
 - Actions successfully carried out
 - Project milestones achieved
 - Plan updated



- New Risk Identified / Existing risks reviews (threat and opportunity)
 - Greater knowledge
 - Actions unsuccessfully carried out
 - Change to scope
 - Plan updated

Through the project lifecycle - PMB

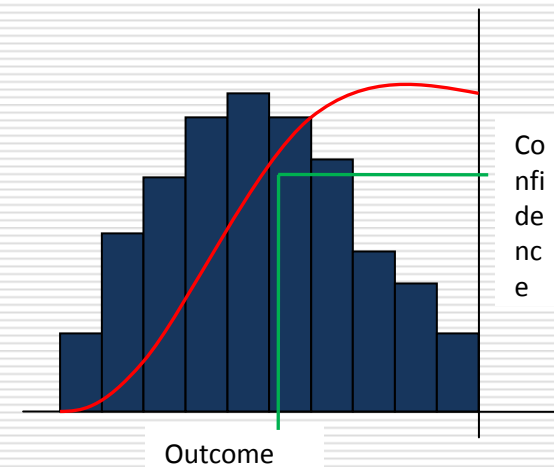
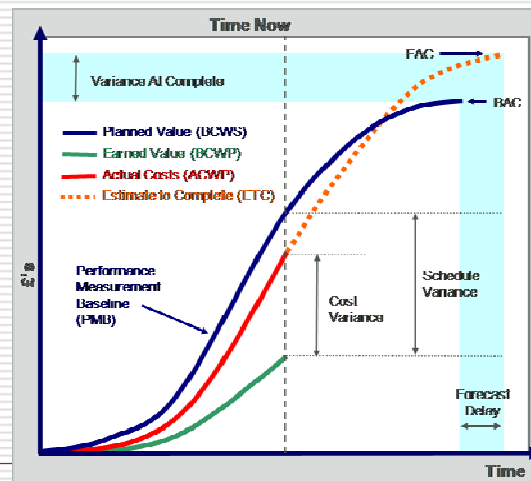
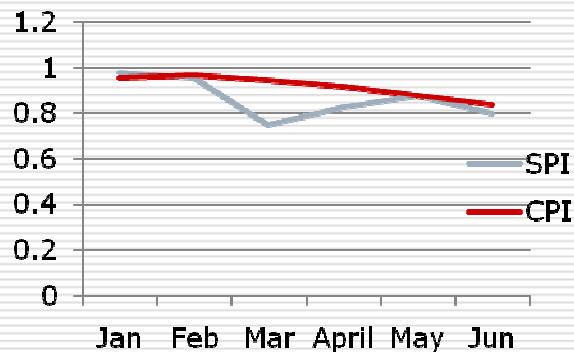
- Approved Transfer from PMB
 - Action no longer valid
 - Risk is closed / exploited



- Approved Transfer in to the PMB
 - Action identified and planned
 - Risk recovery

Reporting and Decision Making

- Outputs should aid Management Decision
 - Risk Analysis outputs – likely outturn or project in terms of cost and schedule
 - Earned Value
 - SPI and CPI trends
 - EACs



Summary

- Risk Management is required to inform the PMB
- Well understood PMB is essential
 - What is in and not in the PMB
- Information from the Risk and EV process help inform management decisions

Questions





THANK YOU

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