Australian Government
Department of Defence
Associate Secretary

Earned Value Management in Defence

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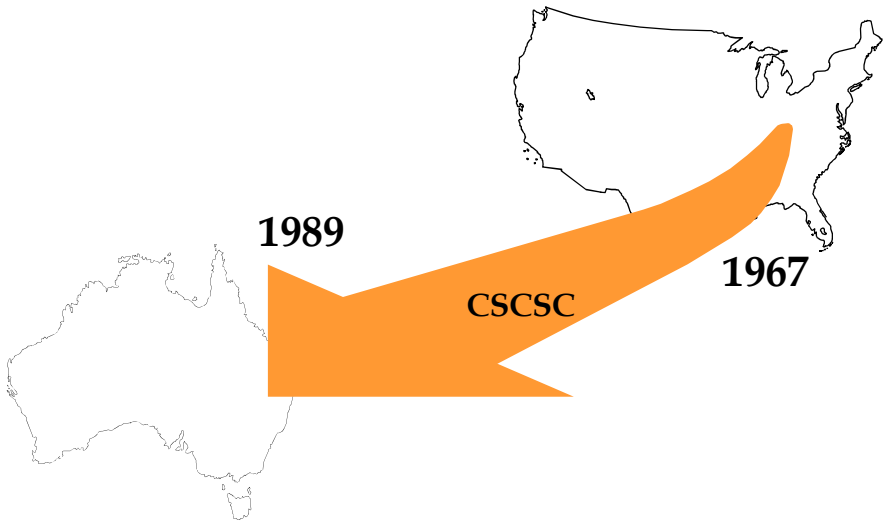
Capability Acquisition and Sustainment Group (CASG)
PGCS August 2019

Defending Australia and its National Interests
www.defence.gov.au

History



The Original Intent

"There are two major objectives of an earned value system:

to **encourage** contractors to use effective internal cost and schedule management control systems; and

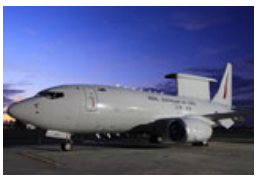
to **permit** the customer to be able to rely on timely data produced by those systems for determining product-oriented contract status."

Quote from 1999 United States Office of Secretary of Defense Earned Value Management Web Site and DEF(AUST)5657.

- The customer (Commonwealth) has insight into the contractor's way of doing business. In other words, how well they are performing against the contract cost and schedule baseline.

Benefits to the Customer

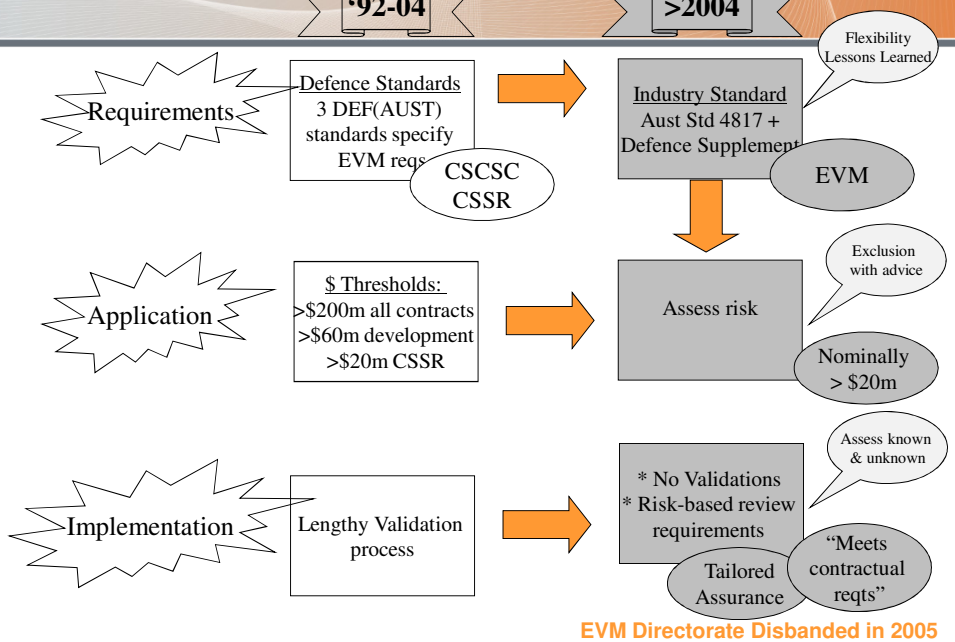
- Confidence in the Contractor's internal management
- Objective contract status information
- Cost and schedule impact of known problems
- Early warning for timely decision making
- Capability to trace problems to source
- Quantitative measurement of Schedule Variance in $
- Measurement against a contract oriented baseline
- Ability to determine the justification for funding
- Visibility at the lowest level of management
  - Work Packages and Planning Packages



Benefits to the Contractor

- Competitive advantage for new proposals
- Internal management desire - increase profit
- Known cost of doing business
- Satisfies customer direction
- Valuable risk mitigation tool

'92-04 >2004



EVM Directorate Disbanded in 2005

EVM Application 2004-2018

2004-18: Mandated in DMO/CASG policy for contracts over $20mil, however waivers could be granted if assessed as low risk:

- Off-the-shelf or developmental?
- Technical risk?
- Cost and Schedule risk?
- Rapid acquisition?
- Existing management systems?

Application was inconsistent

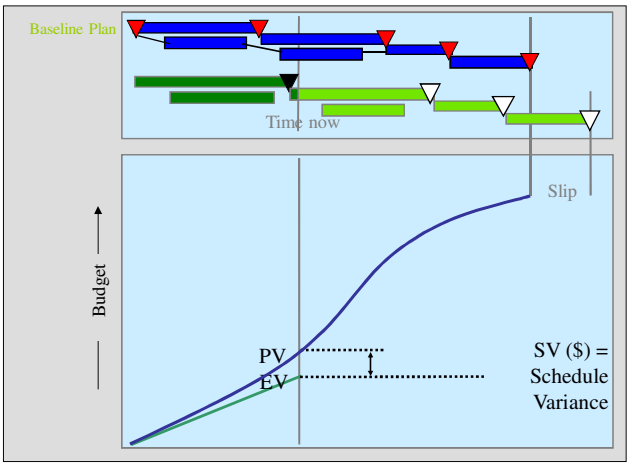
Other Users

- State Governments
- Health Industry
- Mining Industry
- Banking Industry
- Transport Industry
- Manufacturing Industry
- Civil Engineering

Revisiting Benefits of an Earned Value Management System

1. Cost & Schedule impact of known problems
2. Capability to trace problems to source
3. Focuses management attention on most significant problems, facilitating management by exception

Progress Against Plan



Statused Schedule

Schedule Variance = EV - PV

Need to compare SV with the statused schedule to know what's going on

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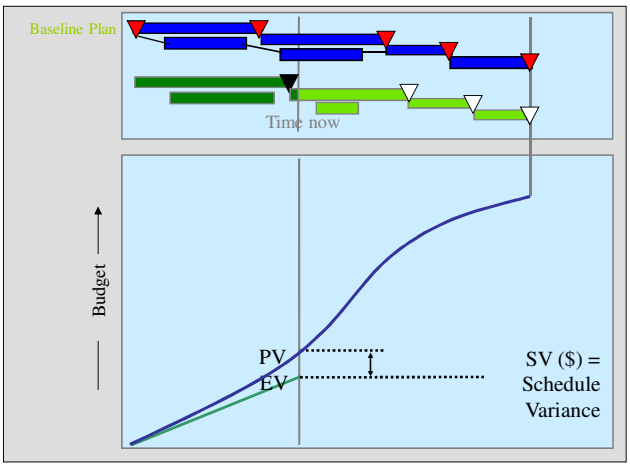
Progress Against Plan



Statused Schedule

Schedule Variance = EV - PV

Behind plan - but found a way to recover

Behind plan – but not on the critical path

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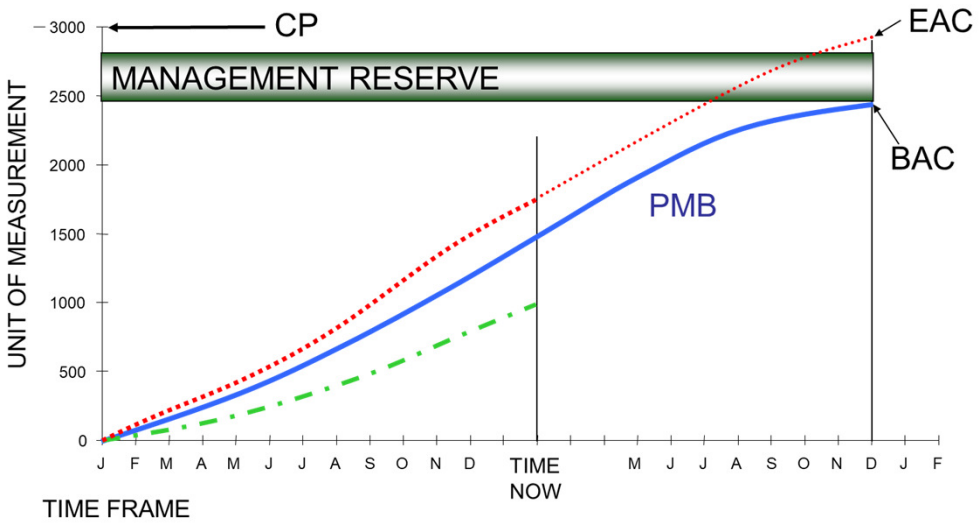
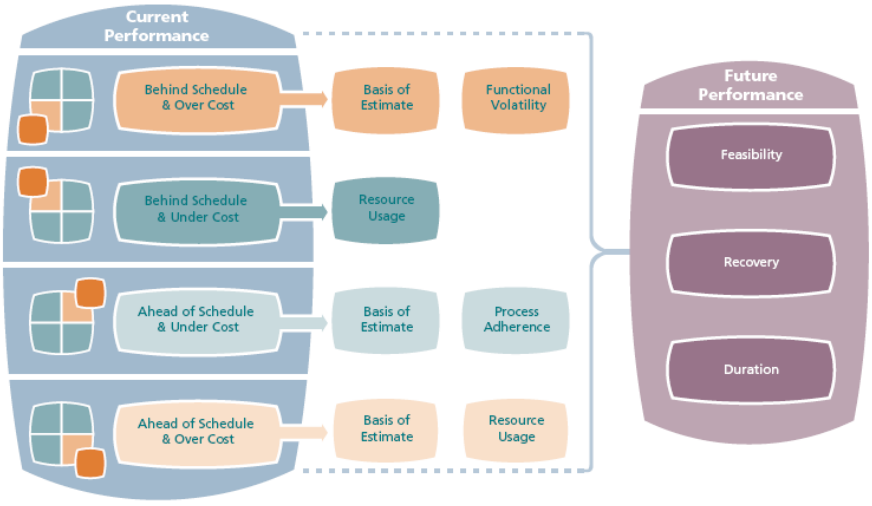
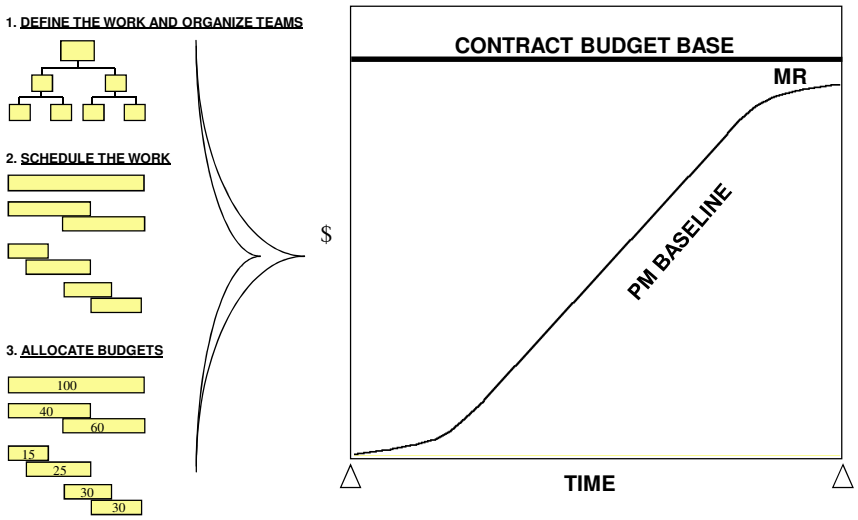
Contract Performance Measurement



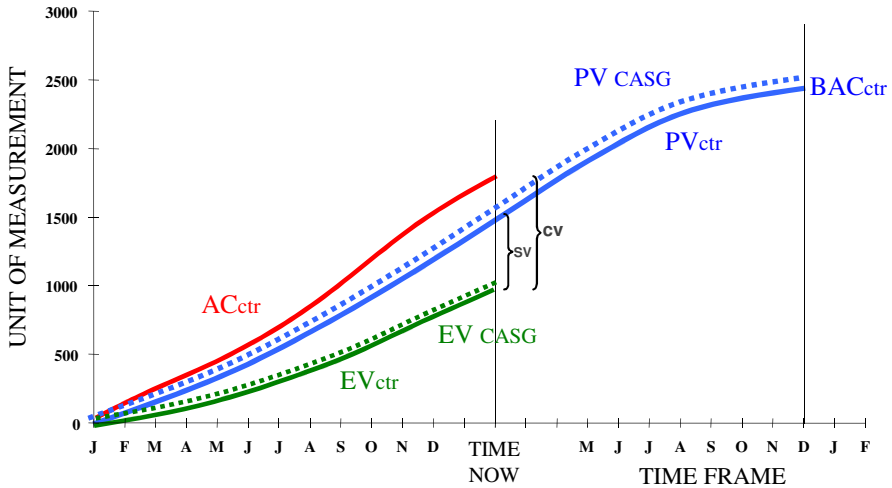
Analyse Trend Information



Planning an Integrated Baseline



Contractor EVM System Data vs Commonwealth Data



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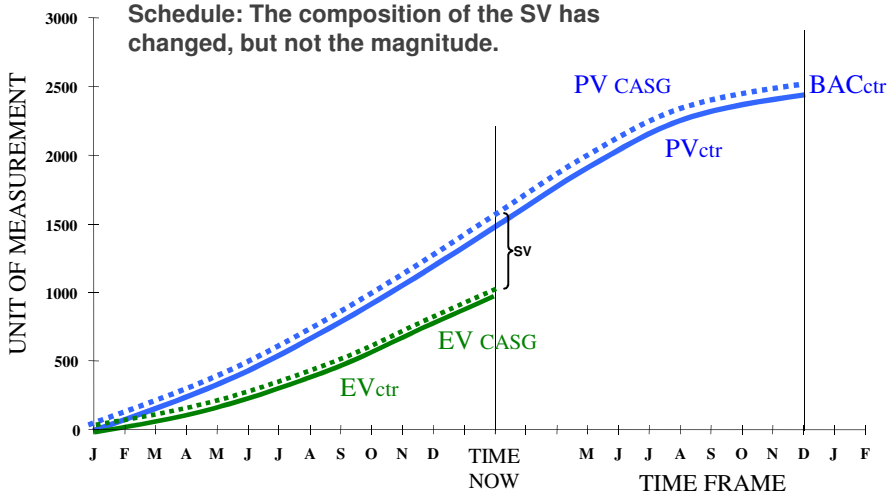

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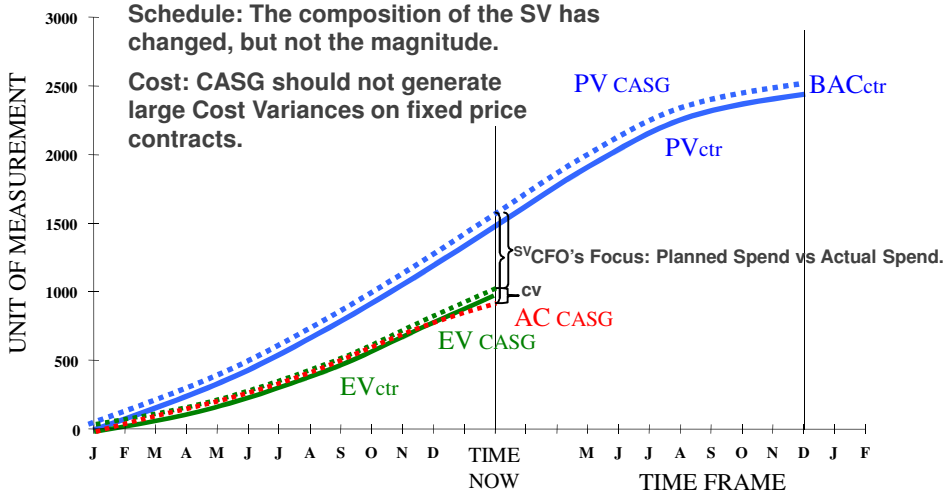
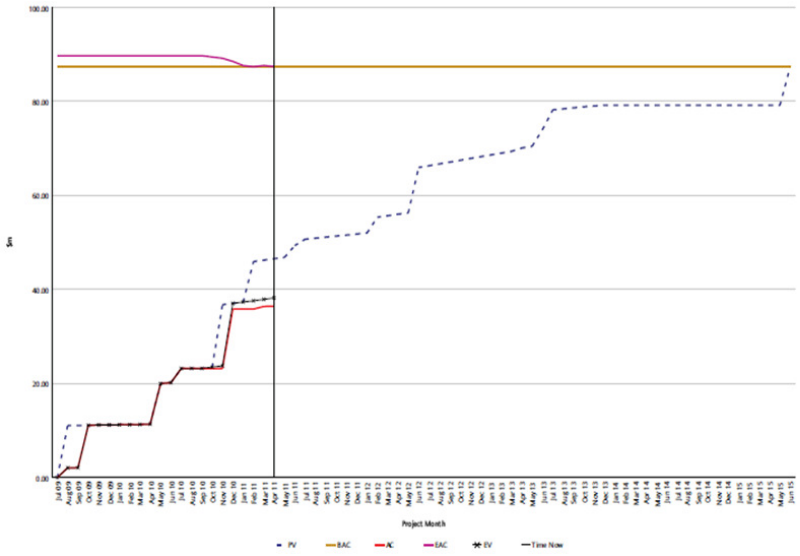


Commonwealth PMB



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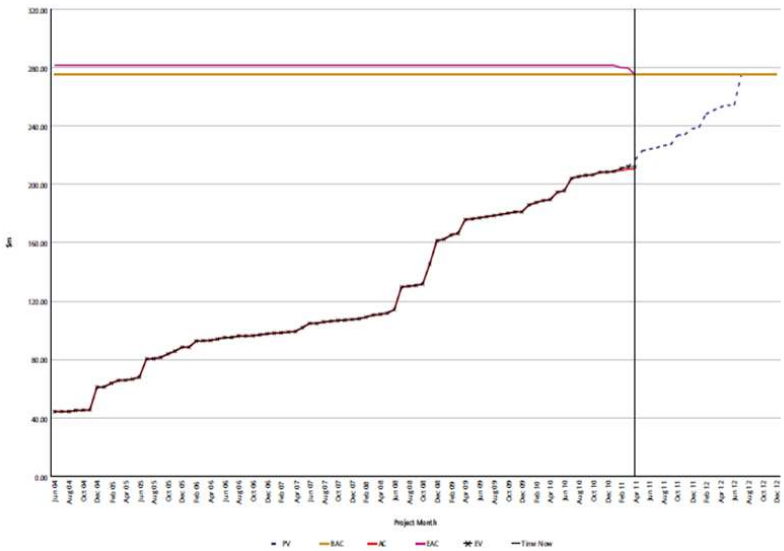
Commonwealth PMB



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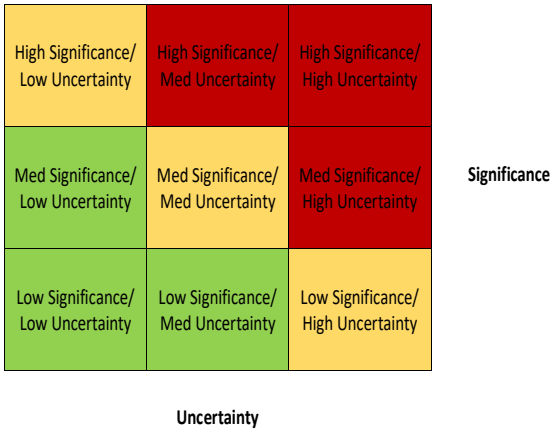
Setting the Direction – New requirements

Policy Directives:

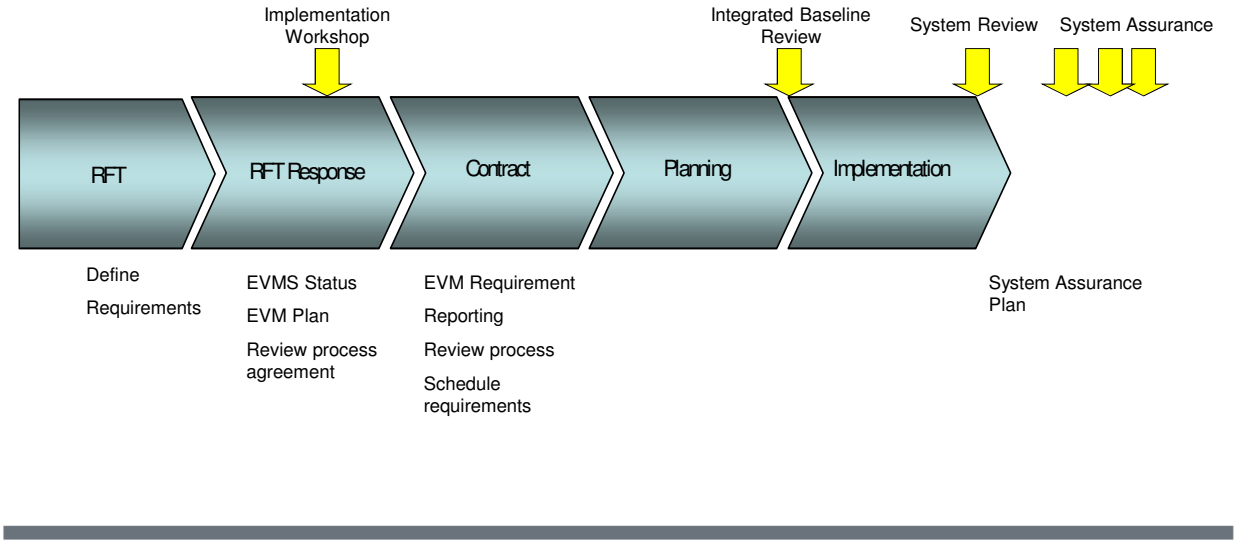
1. The use of the CASG Earned Value Management Risk Questions and Risk Matrix is mandatory for determining if a contract has an Earned Value Management requirement.
2. Solicitation documentation with respect to Earned Value Management is to be derived from ASDEFCON templates and tailored to individual contract requirements.
3. CASG contracts are to apply the Australian Standard for Earned Value Management, AS4817-2006 'Project performance measurement using Earned Value' and the Defence Supplement to AS4817-2006.
4. The Project Manager is responsible for conducting assurance on the contractor's Earned Value Management System to ensure it is implemented in accordance with contractual requirements.
5. The outputs of the contractor's Earned Value Management System system are to be used as inputs into the project risks and issues management process.

Tailored EVM Application to Contracts

Implementation of EVM now tiered with guiding questions on contract risk and significance.
Low Risk. Contracts will not require contractors to implement a formal AS4817-2006 compliant EVM system.
Medium Risk. Contracts will require contractors to implement an EVM system. However, the implementation of EVM should be tailored to reflect the moderate level of risk.
High Risk. Contracts will require contractors to implement an EVM system. Reporting should be at the contractor's Control Account level with the ability to request detail at the Work Package level whenever drill down is required.



Contractual Context



CASG EVM Policy and Guidance Suite

- **Requirements**
  - ASDEFCON Contract Templates, AS4817 + Defence Supplement
- **Policy and Guidance**
  - Integrated Baseline Review Handbook
  - Earned Value System Review Handbook
  - Earned Value Data Analysis Guide
- **Training Courses**
  - Introductory (2 day)
  - System Review Course (on demand)

The Future

- Greater understanding of the EVM discipline
- More informed decisions on Contract application
- Participation in Integrated Baseline Reviews, EVM System Reviews and use of outputs in decision making will lead to more EVM literate workforce
- An EVM literate organisation can then make informed decisions on wider application of the discipline:
  - Possible use of EVM internally where project office is PSI
  - Integration on projects with several contracts

The End