



PGCS PROJECT AND PROGRAM MANAGEMENT SYMPOSIUM
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**A global force for good. Standards
for public benefit.**

**ISO Earned Value Management
Standard Development**

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Agenda

- ▶ ISO Framework
- ▶ ISO Technical Committee 258
- ▶ ISO EVM Standard
- ▶ Why do we care?
- ▶ Why ISO?
- ▶ WG7 – EVM Table of Contents
- ▶ Possible future developments
- ▶ Next steps and questions
- ▶ Backup: WG7 ISO EVM Reference Materials

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The ISO Framework

- ▶ **ISO members are national standards bodies**
 - i.e., Standards Australia, ANSI (USA), BSI (UK)
- ▶ ISO manages 100s of project committees (PC – one-off jobs) and technical committees (TC – coordinated development in a ‘knowledge domain)
- ▶ National bodies decide which of the many possible committees are important to them and create ‘mirror committees’ within their country to support the work of the ISO committee – P-Members (participating)
- ▶ National bodies may also be O-members and simply observe the work of the ISO committee
- ▶ Votes during the development of a standard are limited to P-members, final votes to accept a developed standard are open to all ISO members
- ▶ ISO has an option for expert bodies to join a committee as liaisons – their role is to bring expert knowledge to the deliberations of the committee (no vote)

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ISO/TC 258

- ▶ **The mission of Technical Committee 258 (ISO/TC 258) is to develop and maintain guidance standards and other ISO documentation regarding the management and governance of projects, programmes, and portfolios.**
 - The TC’s ‘value proposition’ is to provide the global marketplace a common understanding and vocabulary with which to practice these management disciplines.
 - TC258 grew out of a PC set up to create an ISO standard for project management (ISO 21500)
- ▶ The Standards Australia ‘mirror committee’ is MB 12 –
 - Advances Australia’s interests by engaging with all aspects of the TC’s work
 - **Other countries “mirror committees” all have similar roles**

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ISO EVM Standard: Another story of global collaboration

- **Technical Committee 258** 
- **Working Group 7: EVM** 
- **WG7: Core Writing Team**
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Australia played an important role




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WG7 – Earned Value Management Table of Contents



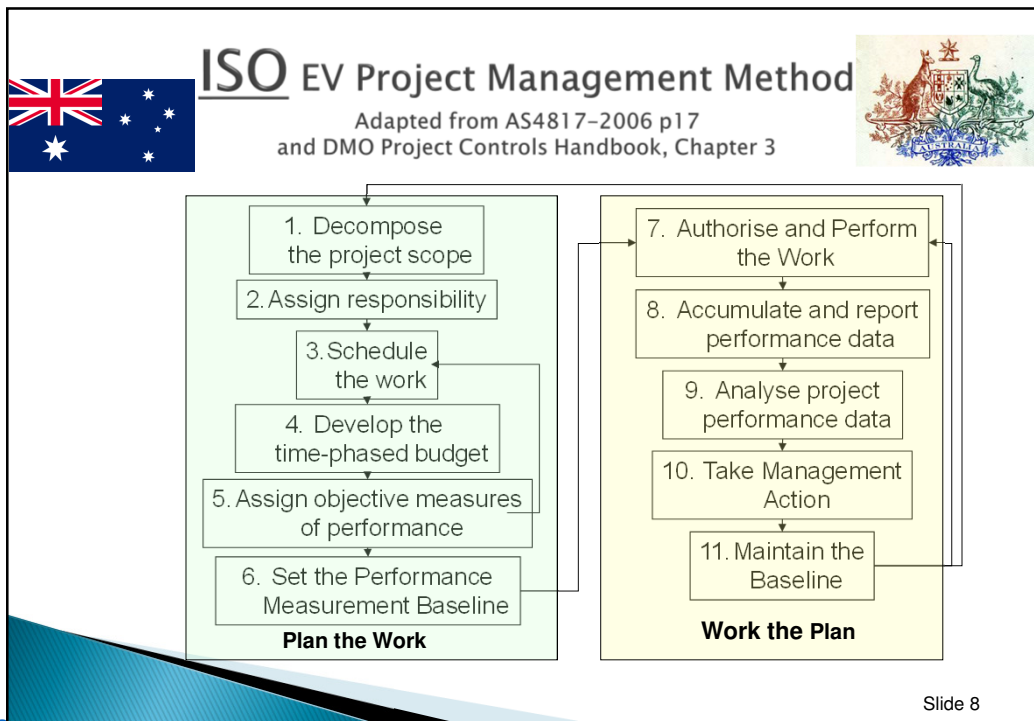
- 1 Scope
- 2 Normative References
- 3 Terms and definitions, abbreviated terms
 - 3.1 Terms and definitions
 - 3.2 Abbreviated terms
- 4 Overview of Earned Value Management
 - 4.1 Role and Benefits of Earned Value Management
 - 4.2 Earned Value management
 - 4.3 Performance management
 - 4.4 Guidelines for an earned value management system
 - 4.5 Earned value management planning
 - 4.6 Using Earned Value performance measurements
- 5 Earned Value Management process description
 - 5.1 STEP 1: Decompose the project scope
 - 5.2 STEP 2: Assign Responsibility
 - 5.3 STEP 3: Schedule the work
 - 5.4 STEP 4: Develop time-phased budget
 - 5.5 STEP 5: Assign objective measures of performance
 - 5.6 STEP 6: Set the performance measurement baseline
 - 5.7 STEP 7: Authorize and perform the work baseline
 - 5.8 STEP 8: Accumulate and report performance data
 - 5.9 STEP 9: Analyse project performance data
 - 5.10 STEP 10: Take management action
 - 5.11 STEP 11: Maintain the baseline
- 6 Earned Value Management System Review
 - 6.1 Integrated Baseline Review
 - 6.2 Demonstration review
 - 6.3 Surveillance



Annex A (informative) Cost and performance measurement analysis using earned value management data
 Annex B (informative) Schedule Analysis using earned value management data (Earned Schedule)
 Annex C (informative) Integrating other project management processes with earned value management
 Annex D (informative) Bibliography

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WBS & EVM – Why do we care?

- ▶ Lord Kelvin
 - "In physical *science the first essential step in the direction of learning any subject is to find principles of numerical reckoning and practicable methods for measuring some quality connected with it.* I often say that when you can measure what you are speaking about, and express it in numbers, you know something about it; but when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meagre and unsatisfactory kind; it may be the beginning of knowledge, but you have scarcely in your thoughts advanced to the state of Science, whatever the matter may be."
 - [PLA, vol. 1, "Electrical Units of Measurement", 1883–05–03]

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EVM – Why do we care?

- ▶ Also from Lord Kelvin:
 - "To measure is to know."
 - "If you can not measure it, you can not improve it."
- only
- ▶ In project and program management
 - EVM remains (today) the "~~gold~~ standard" for measuring project performance and progress **in an integrated way**
- ▶ **Improved measurement provides opportunities**
 - **For improved project delivery outcomes**
 - **Improved project delivery outcomes, improves the public benefits derived from projects**

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Why ISO?

- ▶ ISO standards are **global / trans-national**
- ▶ Another **option** / approach for adopting EVM
- ▶ Trans-national standards
 - Avoids sensitivities which can arise in other countries utilising other countries standards
 - Resource for countries without their own national standard(s)
- ▶ National interests also at stake (EVM especially)
 - Australia: AS 4817-2006
 - United Kingdom: APM Guidelines and Handbook
 - USA: EIA 748C

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Potential Future Developments

- ▶ At ISO EVM level
 - Country based initiatives
 - **Proposal for modified adoption of ISO EVM standard by Australia**
 - Maintain AS4817-2006 normative requirements with an addendum
 - ISO EVM standard includes latest EVM “best practices”
- ▶ ISO
 - Multiple possible projects at TC 258 level
 - Subject to resourcing WGs
 - ISO EVM Implementation Guide ????

“Watch this space”

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Questions ??

- ▶ Thank you

Availability

- ▶ **ISO 21508:2018** Earned value management in project and programme management
- ▶ <https://www.iso.org/standard/63582.html>

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Backup: WG7 ISO EVM Reference Materials

- ▶ AS4817-2006 (AUS)
 - “provided “for use” by Standards Australia
- ▶ APM (UK)
 - Guidelines and Handbook
 - “provided “for use” by Association for Project Management
- ▶ Mr. Walt Lipke
 - **Permission “to use” Earned Schedule source materials**
- ▶ EIA 748C (USA)
 - SAE declined to provide permission to use 32 criteria as a cross reference to ISO EVM standard
- ▶ PMI EVM Practice Standard 2nd edition
 - Provided “for reference” only
- ▶ NASA SP-2012-599
 - Reference

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