



PROJECT AND PROGRAM MANAGEMENT SYMPOSIUM
› **Better Management** › **Better Projects**



UNSW
CANBERRA

A global force for good. Standards for public benefit.

ISO Earned Value Management Standard Development

Kym Henderson

17 May 2017

www.pgcs.org.au

Agenda

- ▶ ISO Framework
- ▶ ISO Technical Committee 258
- ▶ What we are doing?
- ▶ Current status (WG6 WBS and WG7 EVM)
- ▶ Why do we care?
- ▶ Why ISO?
- ▶ WG7 ISO EVM Reference Materials
- ▶ WG7 – EVM Draft Table of Contents
- ▶ Possible future developments
- ▶ Next steps and questions

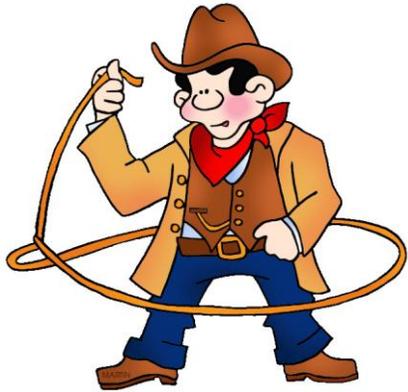
The ISO Framework

- ▶ **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)

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**

Australia (and United Kingdom) plays an important role



What we are doing?

- ▶ ISO Standard Development process
 - New Work Item Proposal (NWIP)
 - Working Group draft standard
 - Committee Draft standard
 - Draft International Standard (DIS)
 - Published ISO standards
- ▶ Consensus based approach → *1 vote per country*

What we are doing?

- ▶ ISO Standard Development process
 - **New Work Item Proposal (NWIP)**
 - Working Group draft standard
 - Committee Draft standard
 - Draft International Standard (DIS)
 - Published ISO standards
- ▶ Consensus based approach → *1 vote per country*
- ▶ **ISO EVM (WG7) and WBS (WG6) proposed by France**

What we are doing: Current Status WG6 and WG7

- ▶ ISO Standard Development process
 - New Work Item Proposal (NWIP)
 - Working Group draft standard
 - **Committee Draft standard**
 - **Draft International Standard (DIS)**
 - Published ISO standards
- ▶ Consensus based approach → *1 vote per country*

WBS & EV – 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]

Why do we care?

- ▶ Also from Lord Kelvin:
 - "To measure is to know."
 - "If you can not measure it, you can not improve it."

- ▶ In project and program management
 - EVM remains (today) the "gold standard" for measuring project performance and progress

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

Why ISO?

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

WG7 ISO EVM Reference Materials

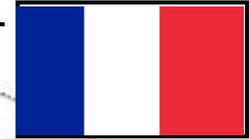
- ▶ AS4817–2006 (AUS)
 - “provided “for use” by Standards Australia
- ▶ APM (UK)
 - Guidelines and Handbook
 - “provided “for use” by Association for Project Management
- ▶ Mr. Walt Lipke
 - Permission “to use” Earned Schedule source materials
- ▶ EIA 748C (USA)
 - SAE declined to provide permission 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

ISO EVM Standard: Another story of global collaboration

➤ **Technical Committee 258**

➤ **Working Group 7: EVM**

➤ **WG7: Core Writing Team**



WG7 – Earned Value Management Draft 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**

WG7 – Earned Value Management Draft Table of Contents



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

6 Earned Value Management System Review

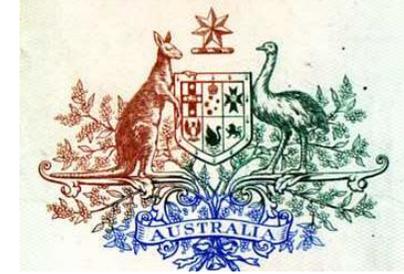
6.1 Integrated Baseline Review

6.2 Demonstration review

6.3 Surveillance

Annex C (informative) Integrating other project management processes with earned value management

WG7 – Earned Value Management Draft Table of Contents



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

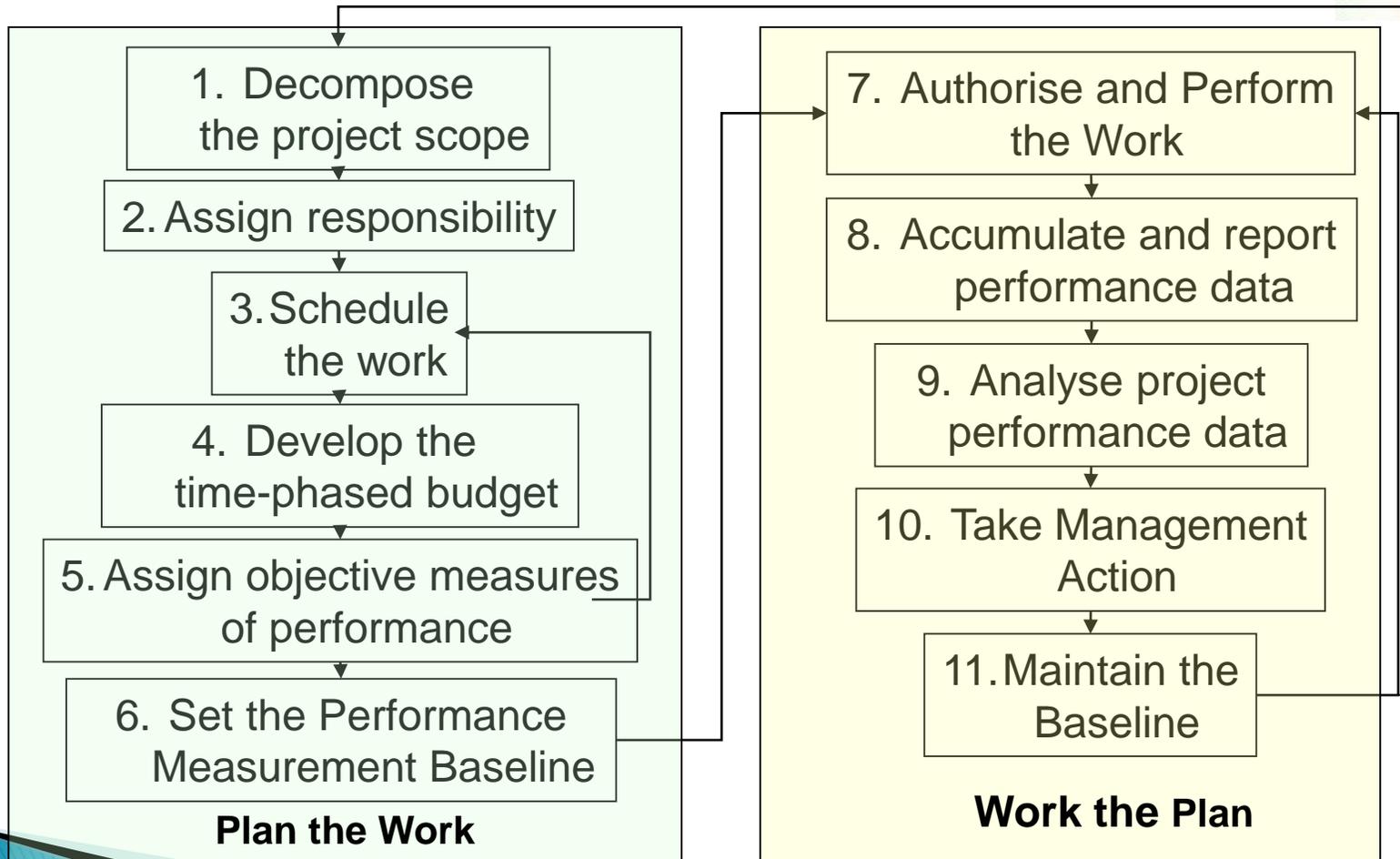
5.11 STEP 11: Maintain the baseline

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)

EV Project Management Method

Adapted from AS4817-2006 p17 and DMO Project Controls Handbook, Chapter 3



Possible future developments

- ▶ Multiple possible projects at TC 258 level
 - The issue is resourcing NWIPs
- ▶ At ISO EVM level
 - Country based initiatives?
 - *“Watch this space”*

Next Steps ISO EVM and WBS CDs

- ▶ Final disposition of CD conditional approval comments
- ▶ Submit for country vote
 - To become a “Draft International Standard (DIS)”
- ▶ Place in public domain
 - Comments from the world at large
- ▶ Disposition of any DIS comments
- ▶ **Final vote to become ISO standard**

- ▶ **ISO TC 258 plenary meeting**
 - Australia will be hosting in Melbourne
 - September 2017
- ▶ Annual meeting to control the overall progress of the TC

Questions ??

- ▶ Thank you