

PMI/ANSI Standards Development and the Scheduling Standard

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Definitions

ISO Standard – *Formal technical documents for generally accepted products, processes, procedures and policies*

PMI Standard - *A document established by consensus and approved by a recognized body that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context*

ANSI Accreditation - *Accreditation by ANSI signifies that the procedures used by the standards body in connection with the development of American National Standards meet the Institute's essential requirements for openness, balance, consensus and due process.*

Types of Standards

- **Ad Hoc**
 - usually developed outside the ‘traditional’ standardization framework
 - the marketplace determines the acceptance of a standard – sometimes leads to phrase “de facto”
- **Consortia**
 - limited participation, e.g., developed by organizations that agree to work together to solve a specific market need
 - no appeals process

Types of standards, cont.

- **Regulatory Specifications or Standards**
 - written or adopted by government agencies
- **Voluntary Consensus**
 - Written in a open environment by professionals from both the private and public sector
 - Follows a process based on openness and balance leading to consensus

What are consensus-based standards?

- Voluntary, consensus based standards developed under ‘formal’ due process procedures include those developed by:
 - International Organization for Standardization (ISO)
 - International Electro-technical Commission (IEC)
 - American National Standards Institute (ANSI)
Accredited Standards Developers
 - Project Management Institute
- Consensus standards are supported more and more by national, regional and local governments worldwide

Due Process

Four principles of standards development

- Openness
- Balance
- Lack of dominance
- Consensus

History of PMI Standards Activities

- **1969** – PMI founded
- **1983** – PMI Special Report on Ethics, Standards, and Accreditation – the Standards portion was *The Project Management Body of Knowledge (PMBOK)*
- **1987** – *PMBOK* Standard was published
- **1996** – *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)* [first edition] published
- **1998** – PMI accredited as a Standards Development Organization (SDO) by ANSI
- **1999** – The *PMBOK® Guide* – accredited as an American National Standard (ANS)
- **2007** - PMI designated Secretariat for US TAG for PC 236

PMI and ANSI

- PMI is an ANSI accredited standards developing organization (SDO)
- PMI is accredited as the Administrator of the U.S. Technical Advisory Group (TAG) to ISO/PC 236
- A US TAG is similar to the “mirror committees” in most countries

The Future

- Continue to develop PMI Global Standards
- Increase our involvement at the ISO level
 - Possible Cat A liaison to Societal Responsibility ?
 - Possible Cat A liaison to ISO/TMB/RM Risk Management (ISO 31000)?
- Increase our involvement with ANSI
 - Join US TAG on Risk Management ?
 - Others?

2008 PMI Standards Program Management Team

- **PMI Standards Program Member Advisory Group:**
 - Terry Cooke-Davies, PhD, BA
 - Debbie O’Bray
 - David Ross, PMP
 - Paul Shaltry, PMP
 - Chris Cartwright, PMP

- **PMI Staff:**
 - John Zlockie, PMP, Standards Manager
 - Kristin Vitello, Standards Project Specialist
 - Elaine Lazar, Standards Project Specialist
 - Amanda Freitick, Standards Program Administrator
 - Nan Wolfslayer, Standards Compliance Specialist

Practice Standard for Scheduling

The Practice Standard for Scheduling:

- Provides general scheduling guidelines.
- Remains consistent with the *PMBOK® Guide*.
- Addresses a **single** project only.
- Supports recognition as “good practice” for **most projects most of the time**.
- Adheres to broadly accepted scheduling concepts.
- ***Is Not*** provide a how to guide.

Timeline

- **Chartered** - March 2003
- **Development** – July 2003 thru May 2006
- **Exposure Draft** – June – August 2006
- **Document Published** – May 2007

PMI®
Global Congress
E M E A 2007

14-16 May 2007

Statistics

- Team members from **23** countries participated, with the top five (outside of the USA) including:

Canada

India

Australia

Venezuela, UAE, & Japan (tied)

Statistics

- Team members (~180) from many industries/market segments:
 - Information Technology
 - Construction
 - Consultants
 - Software
 - Etc.

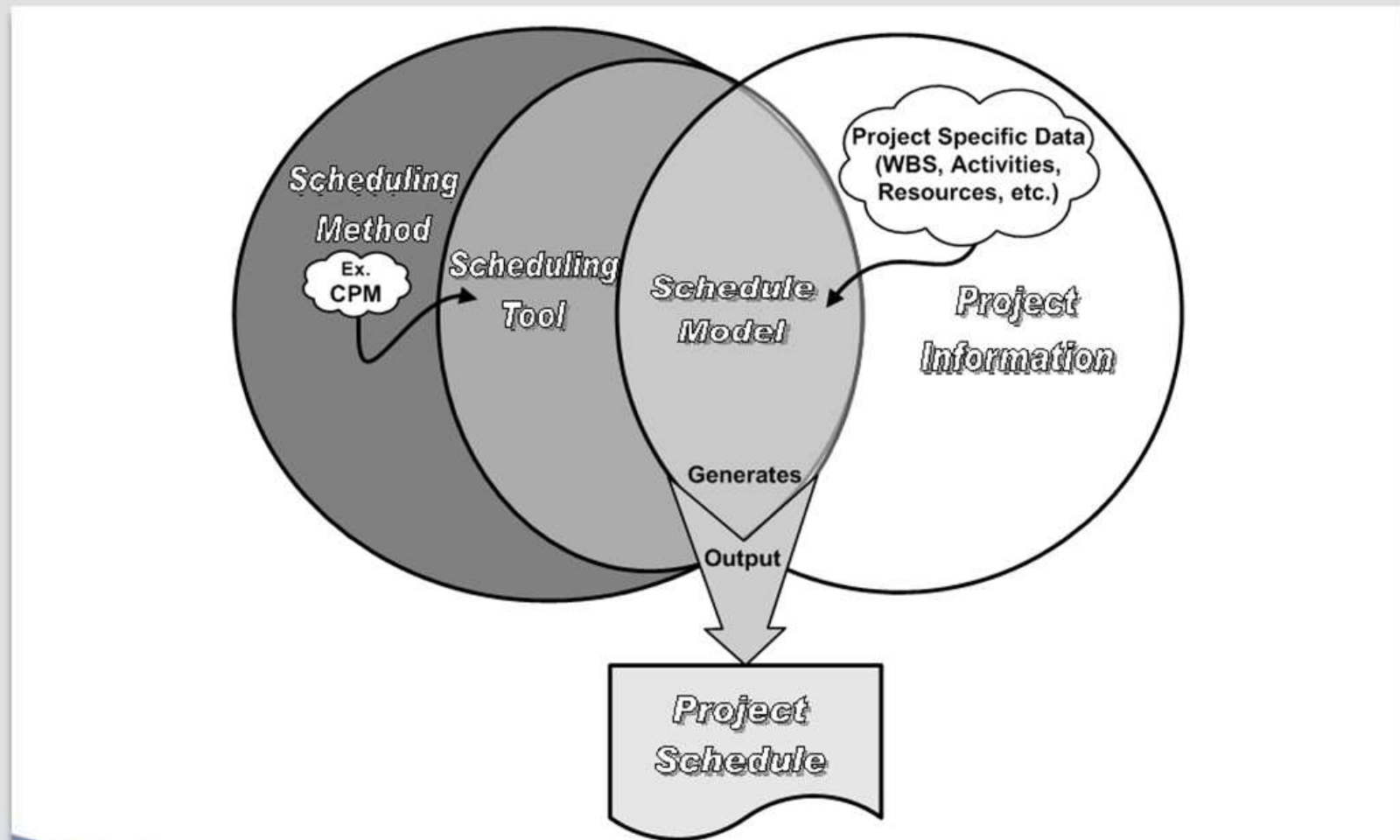
Statistics

- **80%** of the exposure draft comments were either accepted or accepted with comments (the highest percentage of any standard in memory)
- On top of that almost **7%** were deferred, which means they were good comments that needed development in future editions, **87%** of the comments were or will be applied!

What is a “schedule?”

- **1987 PMBOK Guide** – “Schedule - A display of PROJECT time allocation.”
- **1994 PMBOK Guide** – “Project Schedule – The planned dates for performing schedule activities and planned dates for meeting milestones.”
- **2000 PMBOK Guide** – unchanged
- **PMBOK® Guide-Third Edition** – “Project Schedule {Output/Input} – The planned dates for performing schedule activities and the planned dates for meeting schedule milestones.”

New Set of Scheduling Terms



Examples of Project Schedules:

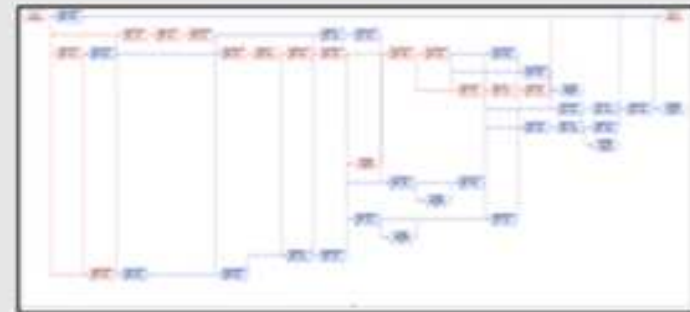


A screenshot of a project activity list, showing a table with columns for activity name, duration, and other project details.

Activity List



Bar Chart



Network Diagram

Schedule Method

- A *system of practices, techniques, procedures* and rules used by project scheduling schedulers.
 - Performed manually
 - *Using Software*
- For example: CPM, Critical Chain, PERT ...

Scheduling Tool

- A *tool* which supports a *scheduling method*:
 - Identifying Component names
 - Providing Component definitions
 - Contains Component relationships
 - Is used to generate the project-specific schedule model
- For example: Primavera, MS Project, Artemis, Welcom, Spider ...

What is a schedule component?

- It is definable.
- It has behaviors.
- It has attributes.
- It has an optimal use (good practice).
- These are the things that make our schedule model work!

Schedule Model

- A dynamic representation of the project's plan
 - Applying the *scheduling method* through a *scheduling tool*
 - Using *project specific data* such as *activity lists* and *activity attributes*
 - Reacting to inputs and adjustments made throughout the *project's life cycle*, as the Team expects the project to react

Schedule Model

- The schedule model can produce:
 - *critical paths*
 - instances of *project schedules*
 - *resource profiles*
 - *activity assignments*
 - records of accomplishments
 - etc.

(Scheduling Method plus Scheduling Tool plus Project Specific Data equal Schedule Model)

Project Schedule

- “The planned dates for performing schedule activities and the planned dates for meeting schedule milestones. See also, Project Schedule Model.”
- This is typically presented in the form of activity lists, bar charts, network diagrams.

Good Practices

Critical Path: To establish a meaningful Critical Path, it is necessary to:

- develop logical and well defined activity relationships
- reasonable and accurate durations estimates
- minimize any open ends
- minimize constraints

Good Practices

- **Constraints:** Constraints must not be a replacement for schedule network logic.
- **Mandatory Constraints:** Since this constraint overrides the CPM calculation, this component should not be used.

Good Practices

- **Open Ends:** All activities, except the first and last activity, must have at least one "?S" predecessor relationship and one "F?" successor relationship, where "?" can be either a S or F, regardless of any other relationships that may be present. (Where S = start and F = finish).
- **Update Cycle:** A good practice to determine the length of update cycle is to tie the period to the duration of the project activities. The concept is to ensure that every activity within the current reporting period goes no longer than two update cycles without status.

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Questions?

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