

Practical Software Measurement

Practical Software Measurement

A foundation for objective project management



***Software Product
Engineering Workshop***

***Office of the Under Secretary of Defense
Acquisition and Technology***

***Joint Logistics Commanders
Joint Group on Systems Engineering***

PSM 1

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Workshop Participants

- ***Dave Card***
- ***Ed Dudash***
- ***Bob Laws***
- ***Fred Hall***

PSM 2

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Restatement of Objectives

- ***Review SPE Recommendations and Approach***
- ***Develop Plan for Going Forward***
- ***Identify Significant Obstacles or Issues***

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Disposition of Recommendations

- ***Incorporate SPE material into next revision of PSM guidebook***
 - ***Basis for defining categories in SPE different from PSM***
 - ***Terminology inconsistent (e.g., “user”)***
- ***Expert system out of current scope***
- ***Basic tool needs can be addressed by PSM Insight***
- ***Study group plan incorporated into workshop plan***

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Outline of SPE Plan

- ***Background***
- ***Objectives***
- ***Tasks***
- ***Schedule & Resources***
- ***Assumptions***
- ***Obstacles***

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Technical Objectives

- ***Fit the existing SPE work into the current PSM I-C-M and analysis structures***
- ***Incorporate ISO/IEC 9126 Quality Factors or similar established approach***
- ***Maintain the multiple perspectives of user, developer, and maintainer***
- ***Develop draft text to be inserted in the next revision of the PSM guidebook***
- ***Reconcile terminology differences***

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Tasks - 1

- ***Develop proposed changes to I-C-M structure for three issues: Stability & Size, Product Quality, and Technical Adequacy***
- ***Develop approach for supporting User/Developer/Maintainer perspectives***
- ***Identify inconsistent terminology and develop proposed resolution***
- ***Review and reach agreement on proposed approaches***

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Tasks - 2

- ***Review existing quality measurement approaches/standards***
- ***Update SPE Impacts Table - extending its scope to the case studies***
- ***Develop proposed text changes***
- ***Develop detailed Measure and Category Tables***
- ***Review and revise final report***

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SPE Impacts on PSM

	Occurrences
• SPE Principles	5
• SPE Issues/Categories/Questions	8
• Audience change from Manager to Customer	6
• Life Cycle change from Development to Development and Maintenance	5
• Expanded focus of Product examination to include life cycle artifacts	1
• Analysis to include	6
– assessment/prediction concepts	
– guidance as to what to do or NOT to do to impact product quality or functionality	
• Defined PSM processes and document updates need to include SPE	
• Links to & Conflicts with SYS-ENGR	5

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Assumptions

- **Willingness to adopt an established quality measurement approach**
- **Some Study Group members will continue to be involved**
- **SPE material will be integrated into the next revision of PSM by the development team**
- **Updates to PSM Insight will be driven by document updates**

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Obstacles

- ***Problem - lack of resources***
- ***Constraint - work needs to be substantially completed before next revision of PSM begins***
- ***Risk - inability to reach consensus on technical approach***

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Next Steps/Action Items

- ***Produce Planning Document***
- ***Obtain Resources***
- ***Identify Participants***
 - ***Authors***
 - ***Reviewers***

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