Practical Software and Systems Measurement

A foundation for objective project management

PSM Users’ Group Meeting
Keystone, Colorado

July 14-18, 2003
Making Measurement Work throughout the Enterprise
Practical Software and Systems Measurement

2003 PSM Users’ Group Conference

Sponsored by the PSM Support Center and the International Council on Systems Engineering

in cooperation with ASQ Software Division
Conference Welcome and Introductions
Objectives

• **Conference Participants**
  - User perspectives - share lessons learned
  - Discuss guidance for new areas
  - Information on related initiatives

• **PSM Project Expectations**
  - Technical Inputs in development of new guidance
  - Interaction with users - experiences using PSM
Logistics

- **Meals**
  - Breakfast Daily
  - Lunch Provided - Tues/Thur
  - Dinner - Wed
    - Kickapoo Tavern

- **Registration/Logistics**
  - Conference Center
Dinner - Kickapoo Tavern

- Wednesday, 16 July
- Cash Bar starts at 7:00pm, Dinner at 8:00
- Kickapoo Tavern, River Run Village
- If you are staying in Keystone, you will receive a voice mail with directions - If not please stop by the PSM registration desk for directions
- Guests are allowed to attend for 35.00/each please stop by the registration desk
- Casual
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Agenda

- **Tuesday**
  - Presentations, 0830 - 1645
- **Wednesday**
  - Presentations, 0830 - 1200
  - Workshops, 1330 - 1700
- **Thursday**
  - Workshops, 0830 - 1200
  - Workshops, 1300 - 1630
- **Friday**
  - Presentations, 0830 - 1000
  - Workshop Outbriefs, 1000 - 1200
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Agenda

• After Meeting
  - Presentations and Workshop Materials Available from PSM Web Site (www.psmsc.com)
  - CD Will Be Mailed to Each Participant
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Workshops

• COSYSMO Working Group
• Software Product Quality Modeling
• Software Acquisition PI Program
• TAI Architecture
• System of System Measurement
• Measurement Specifications
• CMMI Measurement and Analysis Interpretation Guidance
• Acquisition Measurement
• Safety and Security Measurement
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Accomplishments This Year

- Training Materials v5.0d Developed (book)
- DoD Implementation Guidance
- Sample Measurement Specifications Developed (template, 11 drafted)
- Experience Reports (template, 5 completed)
- New Technology Paper
  - Applying PSM to Enterprise Measurement
- Web Site Development
- PSM 4.0 Finalized and Posted to Web
Accomplishments This Year (cont.)

- **PSM Insight Releases - v4.2.1**
  - Pack without data (templates)
  - Measurement plan template
  - Attribute by attribute indicators
  - Rolling Periods
  - Emailing attachments
FY03 Activities - Get Involved

• Complete Survey

• Technology Papers (Review Team)
  - Systems engineering technical measures
  - Measurement of safety and security processes (PSM/UK/Australia collaboration)
  - Acquisition measurement (including 804 performance measurement requirements)
  - Measurement in the Rational Unified Process (PSM/Rational collaboration)
  - Measurement of system of systems (PSM/DAU collaboration)

• Develop Experience Report
FY03 Activities (cont.)

- Develop Additional Examples to Support Guidance - Measurement Specifications

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- Measurement with Risk and Performance Management
- PSM Insight Releases
  - Organizational database capabilities
  - Updated terminology
  - Enhanced database
- Case Studies and Papers
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FY03 Schedule - Public Courses

• **PSM Training**
  - 8-9 September 2003 - VA area

• **PSM Insight Training**
  - 10-12 September 2003 - VA area

• **PSM Train-the-Trainer Course**
  - 10-12 September - Los Angeles, CA

• **Technical Working Group Meetings**
  - PSM TWG - Feb/Mar 2004, Herndon, VA
  - Users’ Group Meeting - July 2004, Colorado
Web Downloads
As of June 2003
**Practical Software and Systems Measurement**

**PSM Participating Organizations**

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<th>International</th>
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<td>• US Air Force SSSG</td>
<td>(Australia)</td>
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<td>• US Air Force STSC</td>
<td>• Software Quality Institute</td>
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<td>• US Air Force CRSIP</td>
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<td>• Tangram Hi-Tech Solutions</td>
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**International**

- Defence Materiel Org. (Australia)
- Software Quality Institute (Australia)
- Tangram Hi-Tech Solutions (Israel)
- Liveware I.S.S.A. (Australia)
- Software Improvements PTY Ltd.
- Ti Metricas, Brazil
- University of York (UK)
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PSM Participating Organizations

Industry
- Alion Science and Technology
- ACS GSG
- American Sys. Corp.
- Argon Engineering Associates
- BAE Systems
- Bloodworth Int. Tech.
- Booz Allen Hamilton
- Carnegie Mellon Univ.
- CMIS
- CSC
- CTA
- Distributive Software
- DynCorp
- Federal Reserve Bank
- Fraunhofer Ctr. For Experimental Software Engineering
- Galorath, Inc.
- General Dynamics
- General Scientific Corp.
- Graeme & Garland
- GTE
- Hawaiian Electric
- IEEE
- IFPUG IITRI
- INCOSE
- Independent Engineering, Inc.
- ITABHI
- James Gregory Assoc.
- Kodak Health Imaging
- Litton/TASC
- Lockheed Martin
- L3 Communications
- Northrop Grumman Mission Systems
- OAO Corporation
- QSM
- Quality Plus Tech.
- Raytheon - Hughes
- Reifer Consultants
- Robbins, GIOIA
- Rockwell Collins
- SAIC
- Sallie Mae
- Sentel
- Software Management Solutions
- SPC
- Sverdrup Tech.
- Tecolote Research
- TeraQuest Metrics
- Texas Guaranteed & Student Loan Center
- The David Consulting Group
- Tivoli
- TRW
- Tyrbrin Corporation United Defense
- Univ. Southern CA
- User Trust Network
- US West
- VPI - State University
- West Virginia High Tech. Consortium
- West Virginia University
- Whittaker Group
- Titan Corporation
- University of York
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Transition Organizations

DoD and Government
- PSM Support Center
- US Army ATEC
- AFMC CRSIP - STSC Measurement Teams
- Federal Aviation Administration (FAA)
- Software Engineering Institute
- MITRE Corporation
- Defense Systems Management College
- Naval Undersea Warfare Center (NUWC)
- Naval Air Warfare Center (NAWC)
- DCMA
- The Aerospace Corporation

Overseas
- Defence Materiel Organisation (Australia)
- Software Quality Institute (Australia)
- Tangram Hi-Tech Solutions (Israel)
- Liveware I.S.S.A (Argentina)
- Software Improvements Pty Ltd. (Australia)
- ti Metricas (Brazil)
- University of York (UK)
Transition Organizations

Industry
- Lockheed Martin
- Software Productivity Consortium
- TeraQuest Metrics
- INCOSE
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