

***Practical Software and Systems Measurement***

# ***Practical Software and Systems Measurement***

***A foundation for objective project management***



***PSM Technical Working  
Group Meeting  
Herndon, VA***

***February 24-25, 2004***



# ***Practical Software and Systems Measurement***

## ***Conference Welcome and Introductions***

# ***Practical Software and Systems Measurement***

## ***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***

# ***Practical Software and Systems Measurement***

## ***Logistics***

- ***Meals***
  - ***Continental Breakfast Daily***
  - ***Lunch - SPC Cafeteria (on your own)***
- ***Tuesday - Presentations - Conference Center - 0830 - 1700***
- ***Wednesday - Workshops - SPC meeting rooms - 0830 - 1700***

# *Practical Software and Systems Measurement*

## **Agenda**

- ***After Meeting***
  - ***Presentations and Workshop Materials Available from PSM Web Site***  
***([www.psmssc.com](http://www.psmssc.com))***

# ***Practical Software and Systems Measurement***

## ***Workshops***

- ***PSM Rational Unified Process (RUP)***
- ***Safety and Security Measurement***
- ***Systems Engineering***
- ***System of System Measurement***
- ***Acquisition Measurement***

## ***Practical Software and Systems Measurement***

# ***PSM Users' Group Conference***

- ***26-30 July 2004***
- ***Keystone, Colorado***
- ***Presentations, Workshops, and Training***
- ***Preliminary Agenda Available on the PSM web site***
- ***Now Accepting Proposals. Call for Speakers forms available on the web site***

***[www.psmsc.com](http://www.psmsc.com)***

## ***Practical Software and Systems Measurement***

# ***Accomplishments This Year***

- ***Sample Measurement Specifications Developed***
- ***Experience Reports***
- ***New Technology Paper***
  - ***Applying PSM to Enterprise Measurement***
  - ***Systems Engineering Technical Measures (draft)***
  - ***Measurement of Safety and Security (draft)***
  - ***Systems of System Measurement (draft)***
- ***PSM Insight Releases***
  - ***Maintenance upgrades***
- ***Rational measurement plug-in***



## ***FY04 Activities - Get Involved***

- ***Complete Survey***
- ***Technology Papers (Review Team)***
  - ***Systems engineering technical measures***
  - ***Measurement of safety and security processes (PSM/UK/Australia collaboration) - field trials***
  - ***Acquisition measurement (including 804 performance measurement requirements)***
  - ***Measurement in the Rational Unified Process (PSM/Rational collaboration) - case studies***
  - ***Measurement of system of systems (PSM/DAU/PA&E collaboration)***
- ***Develop Experience Report***

# ***Practical Software and Systems Measurement***

## ***FY04 Activities (cont.)***

- ***Develop Additional Examples to Support Guidance - Measurement Specifications***
- ***Review ISO Product Quality Measurement and Evaluation standards (ISO 25000 - SQuaRE)***

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- ***Measurement with Risk and Performance Management***
- ***PSM Insight Releases***
  - ***Organizational database capabilities***
  - ***Updated terminology***
  - ***Web-based functionality***
- ***Case Studies and Papers***

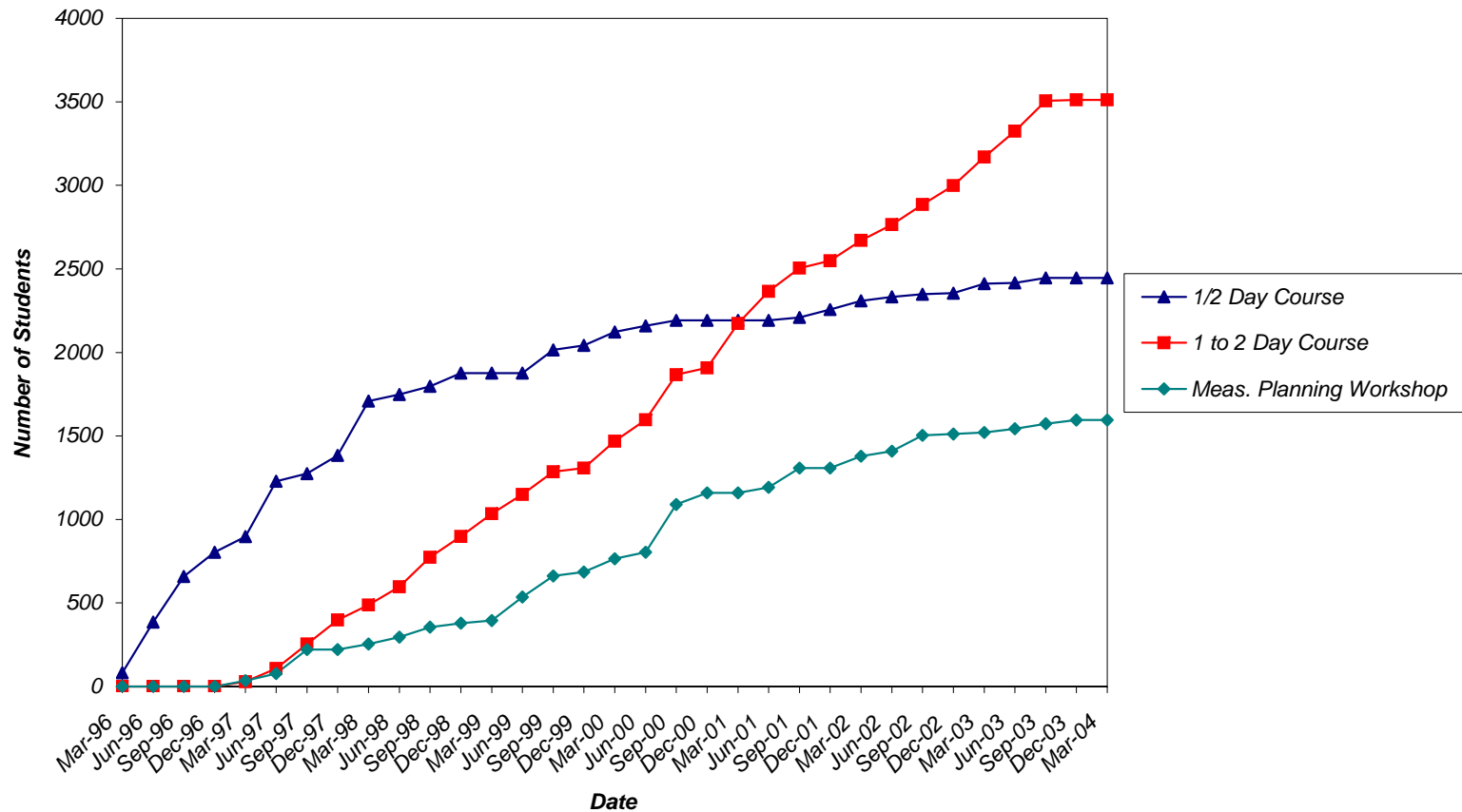
## ***Practical Software and Systems Measurement***

# ***FY04 Schedule - Public Courses***

- ***PSM Training***
  - Watch the PSM web site ([www.psm-sc.com](http://www.psm-sc.com)) or call for information about on-site courses
- ***PSM Insight Training***
  - Watch the PSM web site ([www.psm-sc.com](http://www.psm-sc.com)) or call for information about on-site courses
- ***PSM Train-the-Trainer Course***
  - 20-22 April - Herndon, VA
  - Week of 17-21 May - Brisbane, Australia
- ***Technical Working Group Meetings***
  - Users' Group Meeting - 26-30 July 2004, Colorado

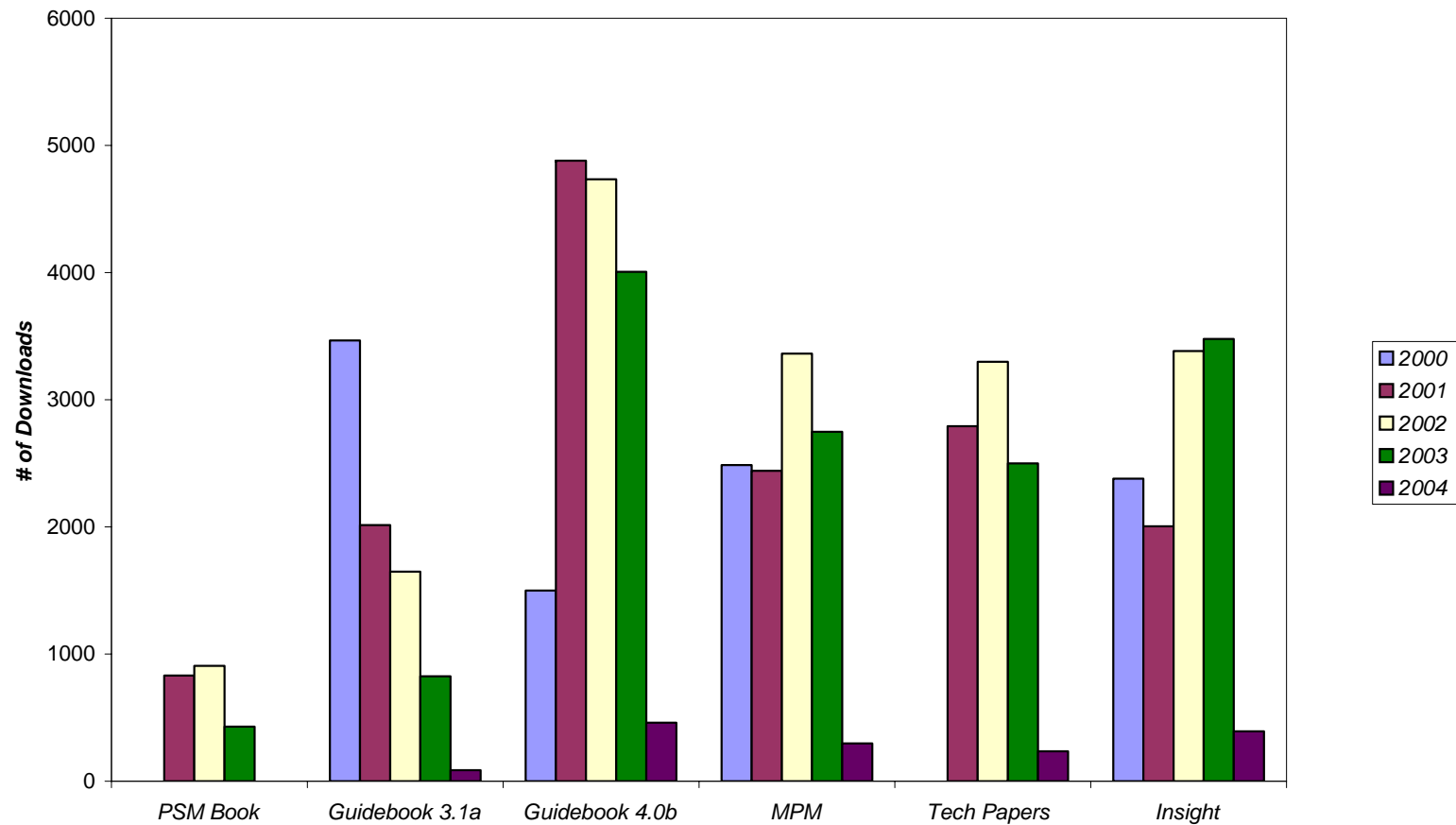
# Practical Software and Systems Measurement

## PSM Transition Activity (Cumulative as of Sep 2003)



# *Practical Software and Systems Measurement*

## **Web Downloads** *As of February 2004*



# ***Practical Software and Systems Measurement***

## ***PSM Participating Organizations***

### **DoD and Government**

- ***US Air Force AFMC***
- ***US Air Force SSSG***
- ***US Air Force STSC***
- ***US Air Force STRATCOM***
- ***US Army AMC***
- ***US Army ATEC***
- ***US Army CECOM***
- ***US Army SAALT***
- ***US Army SMDC***
- ***US Army TACOM - ARDEC***
- ***USMC MCTSSA***
- ***US Navy AEDC***
- ***US Navy ASN RDA***
- ***US Navy FMSSO***
- ***US Navy NAVAIR***
- ***US Navy NAVSEA***
- ***US Navy NAWC***
- ***US Navy NRL***
- ***US Navy NSWC***
- ***US Navy NUWC***
- ***US Navy OPTEVFOR***
- ***Customs & Border Protection (Dept of Homeland Security)***
- ***ODUSD (S&T)***
- ***OSD C<sup>3</sup>1***
- ***OSD PA&E***
- ***Aerospace Corp.***
- ***DAU***
- ***DCMA***
- ***DFAS***
- ***DISA***
- ***DLA***
- ***DSMC***
- ***FAA***
- ***IDA***
- ***MITRE Corp.***
- ***NASA***
- ***Sandia National Lab***
- ***SEI***
- ***Soc. Sec. Admin.***

### **International**

- ***Defence Materiel Org. (Australia)***
- ***Ericsson Espana SA (Spain)***
- ***General Dynamics (Canada)***
- ***i-flex Solutions (India)***
- ***Liveware I.S.S.A. (Argentina)***
- ***NRC (Canada)***
- ***Software Improvements PTY Ltd. (Australia)***
- ***Software Quality Institute (Australia)***
- ***Tangram Hi-Tech Solutions (Israel)***
- ***ti Metrics (Brazil)***
- ***University of York/ York Metrics Ltd (UK)***
- ***UK Ministry of Defense***

# ***Practical Software and Systems Measurement***

## ***PSM Participating Organizations***

### ***Industry***

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

# ***Practical Software and Systems Measurement***

## ***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***
- ***Naval Undersea Warfare Center (NUWC)***
- ***Naval Air Systems Command***
- ***Defense Contract Management Agency***
- ***The Aerospace Corporation***

### ***International***

- ***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 Metrics (Brazil)***
- ***University of York (UK)/York Metrics Ltd***



# ***Practical Software and Systems Measurement***

## ***Transition Organizations***

### **Industry**

- ***Lockheed Martin***
- ***Software Productivity Consortium***
- ***TeraQuest Metrics***
- ***INCOSE***
- ***Northrop Grumman Mission Systems***
- ***Distributive Software***
- ***Quality Plus Technologies, Inc.***
- ***Computer Sciences Corporation***
- ***Texas Guaranteed & Student Loan Center***
- ***The David Consulting Group***
- ***Argon Engineering Associates***
- ***Software Management Solutions***
- ***Titan Corporation***