New Acquisition Conference a Hit with Attendees

Janet Rex

The first Conference on the Acquisition of Software-Intensive Systems was held January 28-30, 2003, in Arlington, Virginia. U.S. government acquisition organization employees, their support organizations (support contractors and federally funded research and development centers), and federal government contractors met to share their experiences and insights about acquisition.

The conference was co-sponsored by the SEI and the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics.

Why Acquisition?

While there were already conferences on software engineering, the people who actually spend billions of government dollars on software usually made do with perhaps a track at a conference aimed at engineers. This was the first conference aimed exclusively at the people in U.S. government program offices responsible for acquisition.

The conference focused on improving the acquisition of software-intensive systems throughout government. It drew from the experience and expertise of practitioners in the field to provide insights for acquisition professionals who are trying to enhance the effectiveness of their methods and techniques.

While organizers expected up to 150 attendees at this first conference, more than 200 people participated. The majority of attendees were from the Department of Defense (DoD), but there were also representatives from a wide range of U.S. governmental organizations, including the Internal Revenue Service (IRS), National Aeronautics and Space Administration, and the Federal Aviation Administration.

Conference Highlights

The keynote address was given by the Honorable Claude M. Bolton, Jr., Assistant Secretary of the Army (Acquisition, Logistics and Technology). His presentation covered the critical role of software in the U.S. Army's transformation, and focused on acquisition, specifically for future combat systems. The Army's Strategic Software Improvement Program must meet the challenge of building software systems that are flexible, expansible, sustainable, affordable, and secure, Bolton said. By bringing broad and strategic thinking to this process, the Army plans to

institutionalize improved acquisition processes, to develop enterprise initiatives, and to cultivate strategic partnerships with the SEI and other organizations.

"SA-CMM® in a Large Complex Program," presented by Lloyd Anderson of the IRS and Hugh Gray of Computer Science Corp., covered work performed by the IRS Business Systems Modernization Office. The Software Acquisition Capability Maturity Model® (SA-CMM) was selected as the acquisition management model used to develop capabilities for acquiring business solutions. The presentation covered the organizational challenges that were overcome to implement SA-CMM and the keys to a successful implementation, including establishing a process-improvement infrastructure, aligning process improvement to the organization's business strategy, and using the process to address issues important to project teams. SA-CMM has allowed the IRS to field six major functional capabilities in four years including a modernized help desk, a new application for agents computing complex business tax returns, and modernized telephony for the world's largest call center.

Several papers highlighted relevant SEI work. Ted Marz and Jim Smith shared their insights gained from evaluating several recent acquisitions in "The State of Practice in DoD Acquisitions and Some Proposed Alternatives." They noted that while Capability Maturity Model for Software (SW-CMM) Level 3 is a great start, a more sophisticated understanding of a contractor's abilities is often necessary. The presenters recommended that a Software Capability Evaluation be performed as part of source selection.

"TRL Corollaries for Practice-Based Technologies" by Caroline Graettinger, Suzanne Garcia and Jack Ferguson offered a draft set of technology readiness level (TRL) descriptions for use in assessing practice-based technologies (PBTs), because improvement of acquisition practices will require the implementation of PBTs. A study by the SEI and the U.S. Army Communications-Electronics Command in 2002 showed that current use of TRLs is not readily applied to information-assurance PBTs. These enhanced TRL descriptions are one proposal to remedy the situation.

Tricia Oberndorf and Pat Place delivered a presentation on "Acquisition Practice: Good and Bad," which focused on the acquisition of commercial off-the-shelf-based systems. Using the SA-CMM as a basis, they compared the acquisition experiences of two federal agencies that were involved in acquiring, tailoring, and deploying a financial-management package.

Feedback from attendees on these presentations and others was positive. Many commented that the conference theme and size were ideal, giving them plenty of opportunities to get together and share their experiences. The content of presentations was informative and sparked interesting

discussions. The presentations are available on the SEI Web site at *http://www.sei.cmu.edu/products/events/acquisition/2003-presentations/?si*.

The next Conference on the Acquisition of Software-Intensive Systems will be held January 26-28, 2004, in Arlington, Virginia. For more information, see the conference Web site at *http://www.sei.cmu.edu/products/events/acquisition?si*.

For more information, contact—

Jack Ferguson

Phone
412-268-5800

Email
jrf@sei.cmu.edu