

GSAW 2011 Tutorial I:

Software Acquisition Best Practices

Length: Half day

Overview:

A new space acquisition policy has recently been released that requires military space programs to use the DODI 5000.02 acquisition life cycle. The requirements of this new policy have large impacts on software, especially in the early life cycle phases. As a result, programs are seeking guidance on how best to acquire complex, software-intensive space systems under the new policies.

This tutorial describes a comprehensive set of software acquisition best practices for the DODI 5000.02 acquisition life cycle. The tutorial covers the software acquisition best practices in chronological order that must be carried out by program offices through each phase of the acquisition life cycle, from program inception through retirement. Attendees will obtain practical information that will enable the immediate application of the best practices to their programs.

The software acquisition best practices described in this tutorial apply to all large, complex software-intensive systems in domains requiring high reliability and integrity. There will be a special emphasis on best practices for ground systems. Although targeted to the DODI 5000.02 acquisition life cycle, these best practices are also applicable to programs using other acquisition life cycles.

Instructor: Suellen Eslinger, The Aerospace Corporation

Biography:

As a Distinguished Engineer at The Aerospace Corporation, Ms. Suellen Eslinger is the Software Engineering Subdivision's specialist in software engineering and software acquisition. In 25 years at The Aerospace Corporation, Ms. Eslinger has provided full life cycle support to numerous space programs. She has developed the software-related areas of Requests for Proposal and has participated in source selection evaluations as an advisor to the Air Force. She has also provided technical review and guidance in software engineering-related areas throughout the system life cycle, from requirements definition through system acceptance and transition to operations and maintenance, as part of the Government acquisition team for multiple space programs. Ms. Eslinger also supports the SMC Chief Engineer's software organization, for which she leads teams to develop software guidance for SMC programs and software standards for use on contracts. Ms. Eslinger is currently the principal investigator of a Long-Term Capability Development (LTCD) Independent Research and Development (IRAD) project to develop state-of-the-art software acquisition guidance that can be used across multiple programs. She has also led the development and delivery of in-depth training courses in software engineering and software acquisition through The Aerospace Institute. Previously, as a development contractor, she developed software and managed software development projects for DOD and NASA. Ms. Eslinger has a B.A. degree from Goucher College and an M.S. degree from the University of Arizona, both in mathematics.

What Participants Should Expect to Learn:

The participants should expect to come away with a set of software acquisition best practices that can be applied on their programs, no matter where their programs are in the acquisition life cycle.

Who Should Attend:

The tutorial is targeted toward government, FFRDC, and other personnel responsible for acquiring (or supporting the acquisition of) large software-intensive systems. While it is directed toward best practices that can be applied by the government team, the tutorial will also benefit contractors who are

seeking to learn about the best practices that their government customers might be using on current and future contracts. The participants should have some knowledge of software development and management and/or some knowledge of government acquisition practices.