GAO Best Practice Guides Light the Way

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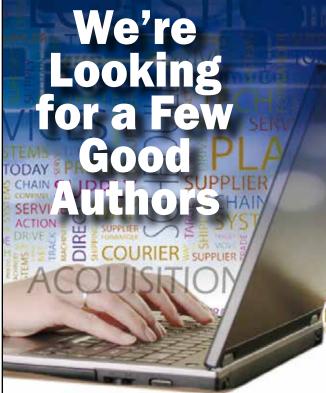
Fifth in a series of articles

ince 2005, the U.S. Government Accountability Office (GAO) has developed and distributed a series of guides that address shortcomings, recommend best practices, as well as related case studies regarding integrated program management (IPM). All were developed to support improved performance and end results of federal government programs through better planning, risk awareness and enhanced management decision making.

Overview

Best practices guides are compilations that federal organizations and industry use to develop and maintain reliable project controls and management tools throughout the life of a government acquisition

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program. Guides can be used across the federal government for developing, managing and evaluating various aspects of federal acquisition programs. Guides provide principles for GAO auditors to use in assessing various aspects of acquisition programs.

It is important to note that all guides were developed in collaboration with experts in one or all of the cost, schedule or technical management disciplines covered by the best practice guides. This approach was implemented with the development of the first best practice guide and has become a well-understood process that has been applied to other publications. The process itself involves GAO seeking input from a wide range of experts, starting with planning and design through report development.

GAO's best practice guides are developed through an iterative, consultative process that involves a committee of experts in the related domain(s). Members are from government agencies, private companies, independent consultant groups, trade industry groups and academia. On the *Cost Guide*, comments were invited from nearly 1,000 experts representing a broad range of industries, international perspectives and program environments. Expert meetings are open to anyone with the requisite experience and interest in the topic. Meeting minutes are extensively documented and archived after review by the GAO team and all participants.

The foundational guides that have been published to date and are in development are as follows:

The Cost Estimating and Assessment Guide (GAO-09-3SP)

GAO's original intention was that the *Guide* would provide GAO auditors with a standardized approach for analyzing program costs. Internal GAO research found that federal guidelines were limited on processes, procedures and practices for ensuring credible cost estimates. The team concluded that GAO could best serve the Congress and the federal community by filling that gap. GAO began drafting the *Guide* in 2005, issued a draft release in 2007 for public comment and officially released the *Guide* in 2009.

The purpose of the Cost Assessment Guide is to:

- Address generally accepted best practices for ensuring credible program cost estimates applicable across government and industry.
- Provide an explicit link between cost estimating and earned value management (EVM).
- Discuss how both cost estimating and EVM are needed for setting realistic program baselines and managing risk.

Schedule Assessment Guide (GAO-16-89G)

The Schedule Assessment Guide expands on the scheduling concepts introduced in the draft Cost Guide and was intended to be an appendix to the official release of the Cost Guide but

instead was issued as a publication in its own right. Drafting of the *Guide* began in 2010; a draft was issued for an 18-month comment period in 2012, and the final draft was issued in 2015.

The purpose of the *Schedule Assessment Guide* is to allow GAO auditors to assess the reliability of reported dates through an assessment of project schedules. It is also a useful resource for agencies to create or append existing policies and guidance on creating and maintaining project schedules.

Agile Implementation Guide (Draft)

This *Guide* will fill a criteria void on "cost," "schedule" and "performance" (particularly technical) in the "cost-schedule-performance" trio of management elements of capital acquisition programs when specifically auditing programs utilizing an Agile, rather than traditional, software development approach. It also addresses the cultural and organizational changes that are needed for Agile development to effectively work in a government agency. Drafting of the Guide began in 2016; a draft



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Technology Readiness Assessment Guide (GAO-16-410G)

The Technology Readiness Assessment Guide fills a criteria void on "performance" (particularly technical) in the "cost-schedule-performance" trio of management elements of capital acquisition programs. Drafting of the Guide began in 2013, a draft was released for a 12-month comment period in 2015, and the final is scheduled to be issued in 2018.

This *Guide* was designed to bring understanding and practice of technology readiness assessments, invented decades ago by NASA and utilized extensively in the Department of Defense, but now available to other agencies that lack a large technical staff. It also allows GAO auditors to assess the reliability of the identification and management of technologies critical to the success of a given capital acquisition program. It is intended to help agencies create or append existing policies and guidance on creating and maintaining technology readiness assessments, whether they are for ongoing, day-to-day project management or major milestone decision points.

Cost Estimating and Assessment Guide— Update Document

This revised version of the *Cost Guide* updates the original 2009 *Cost Guide* and is intended to improve definitions of criteria and leading practices based on lessons learned over 8 years of application and to provide the latest industry and government practices along with updated references to existing laws and federal guidance. This *Guide* provides updated graphics, more recent case studies, and provides integration with the *Schedule Guide*, the *Technology Readiness Guide*, the *Agile Guide*, and *Standards for Internal Control*. Drafting began in 2016, with release scheduled for 2018.

is expected to be released for a 24-month comment period in 2019, with final issuance probably in 2021.

The *Agile Guide* is intended to foster a better understanding and practice of Agile software development, codified in a 2001 manifesto drafted by software development experts in the private sector, but now utilized extensively by federal agencies and soon to be promoted as the preferred approach to software development by the Office of Management and Budget. It is intended to allow GAO auditors to assess the reliability of the management of processes and technologies critical to the success of capital acquisition programs using an incremental or Agile approach to software development and the risk assumed by federal agencies in transitioning from a traditional to Agile approach to software development.

The Agile Guide is meant to be useful for agencies seeking to create or append existing policies and guidance on developing software using an Agile approach, whether for ongoing, day-to-day project management or overarching organizational policy.

All GAO best practice guides are available free of charge online by browsing at http://www.gao.gov/search.

All of the best practice guides include numerous case study examples highlighting the advantages and disadvantages of varying degrees of following their recommended practices. These case studies are also documented and available at the same Web resources free of charge for those wishing to explore the topics in greater depth.

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