

Conducting Viability Assessments to Streamline the Acquisition Process and Accelerate Adopting New Technology

Naval Postgraduate School Annual Acquisition Research Symposium

10 May 2018

Virginia Wydler, The MITRE Corporation

Erin M. Schultz, The MITRE Corporation

The views, opinions and/or findings contained in this report are those of The MITRE Corporation and should not be construed as an official Government position, policy, or decision, unless designated by other documentation. This document is approved for public release, 17-4802-4

© 2018 The MITRE Corporation. All Rights Reserved.
7515 Colshire Drive, McLean, VA 22102-7508

MITRE

Introduction

- **Rapidly adopting new technology can be difficult**
 - Protracted procurement process
 - Few ways to quickly assess new technology before award
 - Risky solutions may be discovered after award
- **Federal Procurement process - each proposal is evaluated with the same rigor, whether the solution is viable or not**
 - Government devotes time and resources to perform detailed assessments of non-viable bids
 - Companies spend proposal costs to participate in a source selection that they cannot win
- **Acquisition Professionals can conduct an early assessment of the “viability” of technical solutions**
 - (1) During the market research phase of acquisition planning, or
 - (2) As the first step of the source selection phase

Background

- **FAR Part 7 Acquisition Planning is designed to ensure Government meets its needs in the most effective, economical and timely manner**
 - Offers industry an opportunity to understand priorities
 - Procurement conferences, industry days, trade associations
- **Far Part 10, Market Research is designed to identify contractors win the capability to provide the requirement**
 - Offers Government understanding of industry capabilities
 - Offers Government the chance to refine requirement
- **FAR Part 15, Negotiation offers competitive strategies**
 - Traditional competition, formal proposals and evaluation
 - Multi-step competition, FAR 15.202 Advisory assessment

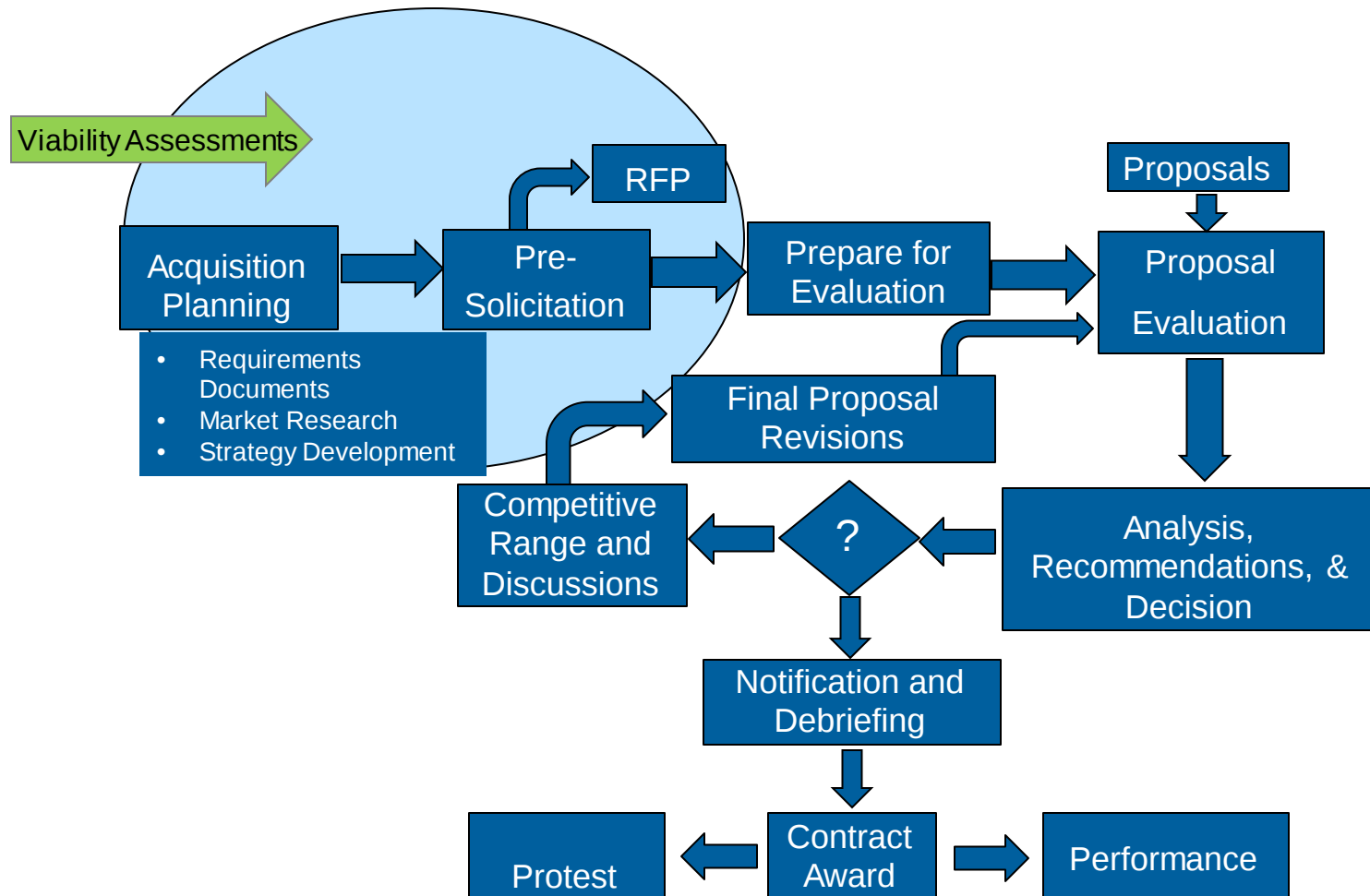
Acquisition Planning

- **Market Research – the Request for Information**
- **Traditional RFI asks for capability statements, size status**
 - Paper responses, evaluated to determine if there are sufficient qualified contractors to perform the work
 - Generally no feedback provided to industry
- **RFI with a viability assessment**
 - Assess capability based on a set of criteria, challenge, or scenario
 - Feedback provided on advisor basis
 - Feedback does not preclude industry from bidding on the formal solicitation
- **Early RFI assessment allows industry to decide if they would pursue the business, considering negative feedback**
 - Government also understands the art of the possible

Source Selection

- **Advisory Multi-Step Process (FAR 15.202)**
 - Part of the solicitation process, Step 1 advisory in nature
 - Allows industry to make informed decision to pursue competition
- **Agency publishes a pre-solicitation notice**
 - Industry must submit information that allows Government to advise offerors about their potential to be viable competitors
- **Step 1 - RFP provides criteria for initial assessment**
 - Agencies conduct the assessment based on that criteria
 - Agencies provide feedback to all respondents
- **Agency advises respondents which are not considered viable**
 - Respondents are advised that they are not restricted from participating in the next step of the source selection
- **Step 2 - Agency proceeds to formal source selection**

Acquisition Process



Designing a Viability Assessment

- **Define the Requirements**
 - Distinctive characteristics, quality attributes, system features
 - New Technologies (cyber, IA, blockchain, modularity, sensors)
- **Format for Responses**
 - White paper, response to scenario, demonstration
- **Evaluation Criteria and scoring**
 - Objective reference points based on characteristics (interfaces, integration, infrastructure, customization, emerging technology)
 - Ability to identify the most viable and least viable – and why
 - Pass/fail, adjectival score, risk level, uncertainty
- **Providing Feedback**
 - Companies advised they do not stand a good chance of success
 - Offeror is not discouraged from submitting an offer later

Measuring Value

Metric	Used to Measure
Time to Award	Reduced lead time during source selection
Number of High-Capability Proposals	Reduced number of proposals that were not responsive to requirements, viability assessment showed vendors they could not meet requirements
Cost Control	Reduced cost of system with viable solutions
Number of Protests	Industry satisfaction with the process; clear and early feedback
Timely Performance	Contract performance resulting in shorter development and delivery timelines
Government/Contractor Relationship	• Partnership between government and contractor to solve technical problems in program delivery • Fewer technical changes or engineering change proposals, less rework • Positive impact on acquisition process • Confidence in the competitive process

Viability Assessments in Practice

- **Department of Homeland Security (DHS) Investigative Case Management (ICM) System**
 - Objective: Modernize and simplify ICM technology infrastructure to improve data integration and data sharing
 - New system technology: web-enabled, data warehouse, application interfaces, enterprise integration
- **Advisory Multi-Step Process (used FAR 15.202 reference)**
 - RFP released to industry – Statement of Objectives (SOO)
 - Step 1 – Operational Capabilities Demonstration
 - Evaluation Factor: Maturity of Offeror's system to meet OCD
 - Preplanned Scenario, with criteria and acceptable level of risk
 - Offeror conducts OCD; Government operators execute OCD tasks
 - Results of Step 1 – advisory down-select

“Offerors who are notified that they are unlikely to be a viable competitor are encouraged to evaluate their likelihood of receiving an award and decision to continue to Step 2.”

Viability Assessments in Practice

- **Investigative Case Management (ICM) System**

- Step 2 – Written Proposals, Performance Work Statement (PWS)
 - All offerors participating in Step 1 were eligible to participate in Step 2
 - Evaluation Factors: Technical Approach and Management Approach
 - Results of Step 2: Final award to one offeror for \$40M, with no protests

- **Step 1 conducted in 45 days**

- RFP released 2 May 2014
- OCD conducted 15-30 May 2014
- Advisory Down-Select Notices Sent to Offerors 16 June 2014

- **Step 2 conducted in 90 days**

- Proposals due 28 July 2014
- Award made 26 Sep 2014

Ref: Contract HSCETC-14-C-00002

https://www.fbo.gov/index?s=opportunity&mode=form&id=36fb3b697a2ccb4ec7084b4e0ec6cdb9&tab=core&_cview=1

What makes the difference?

Streamline the Acquisition Process and Accelerate Adopting New Technology

- **RFP used a SOO and required the offeror to write their own PWS**
 - Less specifications allowed offerors flexibility in solution
 - Allowed new technology to be addressed in scenario
- **OCD included government users in the scenario demonstration**
 - Hands on experience by the customer with user feedback
 - Users could understand the new technology and its capability
- **Short schedule, award in five months**
 - Quick feedback allowed vendors to provide optimum proposals
 - Normal lead time would have been nine months to a year
- **Award was made to a clear winner**
 - DHS intended to make a multiple award contract
 - OCD narrowed the playing field to the single most viable solution
 - No protest

Conclusions

- **Viability assessments as an appropriate acquisition approach:**
 - Improves government knowledge of the marketplace to refine requirements
 - Provides an ability to rapidly evaluate and adopt new technology
 - Allows industry to judge their ability to be successful with actual feedback and advice from their customer
 - Encourages early engagement between government and industry, which can lead to better proposals in the final evaluation process
 - Complements the OSD *Open Systems Architecture Contract Guidebook for Program Managers*, Version 1.1, May 2013, Chapter 10, Vendor Lock, by providing another method to evaluate viability of software before RFP phase

References

- 1. Challenge-Based Acquisition Handbook, The MITRE Corporation, Second Ed, PRS 13-3525**
- 2. DoD Source Selection Procedures, March 31, 2016**
- 3. Federal Acquisition Regulation (FAR) Part 7, Acquisition Planning**
- 4. FAR Part 10, Market Research**
- 5. Government Accountability Office (GAO) Reports: GAO-15-192; GAO-16410G**
- 6. Gilligan, John, President, Schafer Corp., “Shrinking pool of prospective bidders increases acquisition agility,” AFCEA *Signal Magazine*, November 2016**
- 7. Office of Federal Procurement Policy (OFPP) Myth-Busting Memo Series, 2011, 2012, 2017**
- 8. Office of the Secretary of Defense, *Open Systems Architecture (OSA) Contract Guidebook for Program Managers*, Version 1.1, May 2013. Appendix 10, Vendor Lock**