

# Acquisition Oversight as a Function of Program Office Capability Determined Using a Model-based Assessment



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# Background



- ▲ Rapid Improvement Team (RIT) Initiative
- ▲ RIT Pilots
- ▲ RIT Assessment Objectives

# Rapid Improvement Team Initiative



- ▲ Sponsored by OSD/NII
- ▲ Focused on reducing IT program cycle times
- ▲ Relief from “full-blown” acquisition system requirements
- ▲ Pilots distributed among components and Defense agencies
- ▲ Performance to be assessed for effectiveness

- ▲ Twelve pilots originally identified
- ▲ Significant differences in their characteristics
- ▲ No two pilots tried exactly the same set of concepts
- ▲ Pool of twelve decreased over time

# RIT Assessment Objectives



- ▲ Validate RIT initiative concepts
- ▲ Identify best practices
- ▲ Determine applicability of maturity models to acquisition organizations
- ▲ Pilot an assessment methodology that would provide “ground truth” about acquisition organizations and programs
  - ▶ Possible basis for establishing risk associated with “risk based oversight”

# Assessment Methodology



- ▲ Planning & Preparation
- ▲ Team Composition
- ▲ Nominal Schedule
- ▲ Model Selection

# Planning & Preparation



- ▲ Mutually agreeable date; at least six weeks in advance
- ▲ Program office selects model and approximately twelve Process Areas of interest
- ▲ Program office appoints focal point for planning & logistics
- ▲ Team is formed, including one program office member
- ▲ Detailed agenda is prepared and interviewees scheduled
- ▲ Documents are made available (preferably electronically)
- ▲ Interview questions are prepared

# Team Composition



- ▲ Lead Assessor
- ▲ OSD/NII representative
- ▲ Component/agency oversight organization representative
- ▲ Program office representative
- ▲ Sometimes more than one of the above categories (for orientation, familiarization, etc.)
- ▲ Split process areas in half for mini-team focus

# Nominal Schedule



- ▲ 72 hour elapsed time
- ▲ Begins after lunch on day one with in-brief, program manager interview, and team caucus
- ▲ Second day devoted to interviews and document reviews
- ▲ Third day allows for follow-up interviews & document reviews followed by findings preparation and validation, then briefing preparation
- ▲ Fourth day morning devoted to final review, out-brief to program office, and debrief

# Model Selection



- ▲ Focus is on acquisition organization, so program office permitted to choose between SEI's SA-CMM and FAA's iCMM
- ▲ No ratings of process areas or maturity levels
- ▲ Although focus was on process areas selected by the program office, findings were briefed if they applied to non-selected process areas
- ▲ Process area selection guided by the concepts being piloted by the particular program

# Typical Findings



- ▲ Strengths
- ▲ Improvement Opportunities

# Typical Strengths



- ▶ The team found evidence that when the customer expresses short term needs, the program office has been able to respond using agile spiral acquisition with rapid costing, reprioritizing, and delivery.
- ▶ It appears that making DOORS tool requirements data available on [a web site] is an effective way to involve industry and may constitute a RIT Best Practice.

# Typical Improvement Opportunities



- ▲ It appears that there are no plans for periodic post-implementation reviews of the evolving [ ] program.
- ▲ It appears that requirements are not connected explicitly to the high-level needs documented in the Mission Needs Statement (MNS) and Operational Requirements Document (ORD).

# What We Learned



## ▲ About Insight

- ▶ Program Office Level
- ▶ Component/Agency Oversight Level
- ▶ OSD Level

## ▲ About Acquisition -Focused Maturity Models

## ▲ About the Possibility of Risk-based Oversight

# Program Office Level Insight



- ▲ Every program office believes the results were worth the effort
- ▲ Became familiar with component/agency oversight level and OSD concerns
- ▲ Rare chance to step back and observe status and progress
- ▲ Several significant “saves:” problems identified with plenty of time to resolve them
- ▲ Program office team members remained behind as change agents

# Component/Agency Oversight Level Insight



- ▲ Able to observe day-to-day operations and meet program office personnel
- ▲ Insight at a depth not normally associated with periodic reviews of a day or less
- ▲ Able to bridge program office - OSD communication gap
- ▲ Exposure to functions and concerns not normally raised to headquarters level

- ▲ “Ground truth” available to OSD, as opposed to typical review of paper products filtered through several levels.
- ▲ Identified potential best practices for adoption across the community
- ▲ Able to bridge program office - OSD communication gap
- ▲ Exposure to functions and concerns not normally raised to OSD level
- ▲ Able to observe impact of policies and directives at the execution level

# Acquisition-focused Maturity Models



- ▲ Both SA-CMM and iCMM provide useful framework for appraising processes and procedures in an acquisition organization
- ▲ iCMM usable by both acquisition organization and development organization in an integrated product team environment
- ▲ Use of a maturity model to appraise an acquisition organization enables a repeatable, differentiable approach to risk-based acquisition oversight

# Risk-Based Oversight



- ▲ Use of a maturity model to appraise an acquisition organization enables a repeatable, differentiable approach to risk-based acquisition oversight
- ▲ The results of a model-based mini-assessment could be used to determine the appropriate level and frequency of oversight for information system programs
- ▲ The effort associated with periodic mini-assessments may entail no more person hours than traditional document-based oversight
- ▲ The output associated with periodic mini-assessments is significantly more useful than the output of traditional document-based oversight

# Summary



- ▲ 72-hour pilot mini-assessments provided benefits to all the stakeholders
- ▲ Acquisition focused maturity models can be useful to acquisition organizations as well as for oversight
- ▲ Disciplined periodic maturity model-based assessments of acquisition organizations can provide results that could serve as the basis of risk-based acquisition oversight

# Conclusion



- ▲ Acquisition focused maturity models should be supported, adopted, and evolved
- ▲ Mini-assessments based on acquisition focused maturity models could contribute to significantly enhanced acquisition oversight
- ▲ The effort associated with mini-assessments as an oversight methodology is no greater than, and may be less than, the effort associated with document-based oversight
- ▲ Risk-based oversight is possible using the results of mini-assessments as the basis for determining the risk associated with the program office's capability