Acquisition Reform Issue:
Performance Measurement of the Acquisition System

Second Acquisition Reform Event
July 29, 2014
(Detailed Version)

These are working papers and do not necessarily represent the views of NDIA, its staff, or members.
Issue Area & Problem Statement

Issue Area: Performance Measurement of the Acquisition System

Problem Statement: While the DoD acquisition system incorporates many valuable performance metrics and mechanisms for measurement of the Acquisition System, some critical performance attributes are currently not sufficiently addressed. The working group focused on three key shortfalls:

1. The Acquisition System emphasizes collection and measurement of performance data by acquisition category, reducing the ability to gain insights into lower cost acquisition spending and enterprise resource trade-offs

2. Industry is reluctant to get involved in government contracting due to cost prohibitive factors, reducing the introduction of innovation and competition into the government bidding process

3. Program managers and the acquisition community work in a system that tends to prioritize process compliance and multiple reporting requirements over program management fundamentals, analysis, and streamlined reporting
Root Cause Analysis

Subtask 1 Root Causes – Enterprise Reporting and Analysis

- Using acquisition category (ACAT) as primary or sole value metric
  - ACAT dollar thresholds used as shorthand metric for operational value, so emphasis placed on ACAT dollar thresholds rather than delivery of useful capabilities
  - Less performance information available for programs below ACAT IA for enterprise level decisions (i.e., does not account for ACAT II/III program failures, ACAT II/III performance prior to replacing failed ACAT I programs, or ACAT II upgrades to ACAT I like M109A6 Paladin)
  - Incongruous analytical and reporting requirements across ACATs, resulting in more stringent reporting and analysis requirements for ACAT I and IA programs. However, the total max constant dollar thresholds of ACAT IA is below total constant dollar thresholds for ACAT II programs (i.e., $520m for FY2014 constant dollars vs. $825m for ACAT II). Special interest programs also only cover some of the acquisition spending below ACAT IA programs
  - Inhibits ability to assess acquisitions by functional categories
- All programs keep data on their programs, but not in a centralized system of record or in consistent formats (i.e., structured vs. unstructured data elements). DAMIR does not contain data for anything below ACAT IA
- There are disparate responsibilities and reporting mechanisms across Components and for different levels of ACATs, resulting in less attention placed on rollup of acquisition performance metrics at the enterprise level for a large portion of acquisition spending.
- Risks to smaller acquisition programs culminate into larger enterprise risks and ignoring smaller acquisition programs risks becomes entrenched in culture

Subtask 2 Root Causes – USG Bid Process

- USG less attractive than commercial bid process
  - Overly restrictive policy environment prohibits competition and contributes to decline in U.S. industrial base capabilities
  - High cost associated with government bid process
- Insufficient detail and time to respond to requests for proposal limits industry’s ability to properly plan and deliver products the government needs.
  - Difficulty presenting the USG with new and innovative products
  - Inhibits internal business investment in much needed domestic capabilities
  - Limits participation by small and medium sized US companies in bid process
- Some companies lack awareness of the avenues to present new and innovative products to the USG or are prohibited from competing in an overly restrictive policy environment, which can (A) inhibit internal business investment in much needed domestic capabilities and/or (B) undermine the incentives for industrial base participation in USG contracts (i.e., the prospects for a vendor making a viable business case to its investors are diminished)

Subtask 3 Root Causes – Program Management Fundamentals

- Program reporting has become an exercise in process compliance, whereby multiple “sub-reports” will likely be generated for any given issue area
  - Typically, an industry contractor is required to provide reports to the Government on a host of topics to an array of Government communities
  - In-depth or innovative cost analysis not prioritized
  - Heavy regulatory or reporting burden slows programs, diverts resources away from fundamental analysis, and adds costs
- While those in uniform likely have deep operational experience, they may not have similarly extensive acquisition experience before serving in program management positions. There is a lack of exposure to industry program management practices for most DoD program managers
- USG becomes locked into process and less able to introduce industry information and program management practices that may improve efficiency and effectiveness
Solution Proposal: Subtask 1

Where not already implemented:

- **Rethink value metrics by assessing CONOPs contributing to COCOM mission objectives.** Consider relevance to the warfighter in concert with acquisition spending categories. Existing data and processes can be used, such as the JCTD business model, cost avoidance metrics, CONOPs viability metrics, and/or CONOPS utility metrics addressing mission objectives of COCOMs.

- **Phase in expansion of complementary non-MDAP information collection and reporting to Congress.** Consolidate program information below ACAT IA at the enterprise level, leveraging existing acquisition master lists and enterprise business intelligence systems, where possible. Equipped with the right information, tradeoffs such as reduction in spending of lower cost high risk programs over higher cost high risk programs could occur, as could trade-offs between lower cost low risk and high risk programs.

- **Reform enterprise acquisition analysis:**
  - Phase in, by frequency and by ACAT, expansion of DAES to programs other than ACAT I and special interest programs
  - Refocus DAES as an independent or evidence-based validation of current PM self-assessments

- **Emphasize metrics insight, not metrics oversight with enterprise performance evaluation.** Collect relevant and content-rich performance data upfront. Identify the right metrics, level of detail, and periodicity of reporting.
  - **Continue to apply and refine Service Acquisition Directorate role for services acquisitions**
  - **Use the DAES baseline performance metrics for assessment of all acquisitions**, and identify critical performance metrics that are different across program types to include with those programs in the DAES
    - **Leverage existing baseline performance metrics that crosscut all programs.** Collect baseline metrics in the same format, covering the same criteria, and with the consistent periodicity of DAES (i.e., structured data to assess operational viability once a quarter, etc.). This allows comparative analysis
    - **Identify additional critical performance metrics that are different across program types.** Some performance metrics are unique to a program type, phase, and level of complexity. Ensure reporting and collection of these metrics (i.e., services, IT, etc.).

- **Build upon the Services Acquisition Directorate and PEO roles and responsibilities**, including performance metrics, scorecards, and ERP

- **Reuse existing business intelligence systems for additional reporting requirements.** Encourage institutionalization of consistent program reporting at Component and Enterprise levels—and establish a foundation for big data analytics in the future—by expanding usage of existing systems of record, like DAMIR, for non-MDAP and MAIS programs

- **Enhance centralized roles and responsibilities for ACAT II program performance, much like the Services Acquisition Directorate.** Integrate performance measurement responsibilities of ACAT II programs, and possibly ACAT III programs, at the enterprise level
Solution Proposal: Subtask 2

Where not already implemented:

- **Baseline RFP Content.** Experts from each major USG acquisition organization will meet to establish/propose a new baseline for RFP content and timing within existing regulations. They will develop “best practices” that can be implemented across the USG.

- **Reform RFP Process.** Experts from each major USG acquisition organization will meet to identify areas within the RFP process that will reduce the cost and time to bid and fulfill USG contracts.

- **Open/Modular System Initiatives.** Similarly, further adoption by the USG of open/modular systems for procurement initiatives may reduce the burdens associated with the bid process by raising the number of vendors qualified to bid on systems design/build contracts, among other benefits.

- **Harmonize USG-Industry Methodologies.** Experts from each major USG acquisition organization will meet to document and harmonize industry outreach and education methodologies to more effectively avail vendors of programmatic/ACAT procurement timelines, requirements, and anticipated demand levels.

- **Success Stories.** Review agency procurement success stories that enhance industry awareness of opportunities to present new and innovative products to the USG.

- **Re-evaluate Licensing and Vendor Qualifications Protocols.** Review licensing policy and vendor qualification designation protocols to identify overly restrictive policies and programs.
Solution Proposal: Subtask 3

Where not already implemented:

- **Cost-benefit analysis of reporting requirements to streamline reporting**: To assess what information is most valuable, the Government should, in concert with the contractor, conduct a brief business case analysis to justify the need for each report and its value, including data elements that are necessary for which stakeholders and in what format. If the report provides little value based on a program’s circumstances, then it should not be used (if it doesn’t yield any dollar savings or mitigate/avoid any risks)

- **Focus on the end product, recognize that time has value**. Both the government acquisition team and the contractor acquisition team should be incentivized to deliver the end product as expeditiously as possible. Financial incentives for contractors to beat schedule milestones help achieve this goal. For government personnel, those who fail should be held accountable and those who succeed should be rewarded. Establish faster promotions and financial bonuses for government staff who focus on efficiently delivering the end product.

- **Expand training with industry programs for Government personnel**. Among the most effective means of exposing future program managers to defense acquisition is through training with industry programs, such as the Secretary of Defense Corporate Fellows Program and the Army Training with Industry program. These programs give Government personnel an understanding of the issues facing industry and the challenges of doing business with the Government. At the same time, these training programs also give industry a better perspective of the military’s operational needs. Such training programs also serve to educate future program managers on the differences between commercial best practices and the defense acquisition system’s cumbersome regulatory and reporting system. To ensure future Government program managers are as well trained as possible, training with industry experience should be encouraged, if not mandated, for all Government program managers. Such guidance could be made through a DoD Instruction.

- **Emphasize insight, not oversight**. Rather than continuing with well-intentioned, but heavier burden of regulations and overlapping reporting requirements to the defense acquisition system, the Government program management team should request contractor data that helps them understand the program, identify how program performance can be improved, and address potential problem areas as soon as possible.

- **Earned Value Management System modification**. DFARS 234.201, EVMS, should be reassessed to determine if $20M is the correct contract value threshold (for cost or incentive type contracts) for EVMS reporting (along with associated Contract Performance Reports and Integrated Master Schedule Reports). In some instances with contract values under $20M, the value of EVMS reporting may not be worth the time and cost associated with operating an EVMS system. Potential solutions are to: 1) raise the $20M threshold and/or; 2) implement EVMS reporting at the Government's discretion only after the Contractor has missed schedule or cost milestones.

- **Develop uniform T&E reporting standards**. DoD Test and Evaluation community should develop uniform standards across all Services for assessing, testing, and requiring contractor reporting on civil-to-military qualification standards. Currently, each Service's test and evaluation teams have different standards, different test procedures, and different contractor reporting requirements for qualifying civil equipment for military use. By harmonizing these standards, the Government can leverage the work and knowledge already performed by some T&E staff and share that across DoD. In addition, a simplified civil-to-military test and reporting process will reduce costs for industry and speed the introduction of new systems.
Prior Studies

Subtask 1 – Enterprise Reporting and Analysis

• GAO Report 06-585T: “Actions Needed to Get Better Results on Weapons Systems Investments”
• GAO Report 13-103 from December 2012 on the analysis of 11 weapon systems
• DoD Weapon System Acquisition Reform Product Support Assessment (November 2009)
• Each service has implementing instructions that provide greater detail as to the roles and responsibilities of the PEO/PMs. In the Air Force AFI 63-101 provides responsibilities for both the PM and PEO in chapter 3, subpart 3.14 and 3.16. In the Air Force the CAE nominates PEOs/PMs for ACAT 1 programs. The PEOs recommend PMs for ACAT I selection. The Army’s implementation guidance is AR 70-1 and the Navy’s is SECNAVINST 5400.15C CH-1 DoN R&D, Acquisition, Life-Cycle Mgmt Responsibilities Dec 2011
• Performance of the Defense Acquisition System, 2013 Annual Report, USD AT&L

Subtask 2 – USG Bid Process

• 2013 Department of Commerce “Deep Dive Industrial Base Assessment” (see findings later in the presentation)
• ODNI Study, Space Universal Modular Architecture (SUMO) as an example of open/modular systems, March 2014
Current Law

Open source research included:

Subtask 1 – Enterprise Reporting and Analysis

- MDAPs: 10 USC §2432 and 10 USC §2440
- MAIS programs as governed by 10 U.S.C. 2445c
- Legislation on weapons systems can be found with the Weapon Systems Acquisition Reform Act of 2009 (Reform Act)
Current Regulation, Guidance, or Policy

Open source research included:

**Subtask 1 – Enterprise Reporting and Analysis**
- MDAPs and MAIS program assessments in the DAES, as governed by “Operation of the Defense Acquisition System, DoD Instruction 5000.02”
- Applicable reports, analysis, and databases: Defense Acquisition Management Information Retrieval (DAMIR) system of record, 2013 Acquisition Review, quarterly and annual Selected Acquisition Reports (SARs), MAIS Annual and Quarterly Reports to Congress (MARs), and Unit Cost Reports (UCRs).
- Acquisition reform laws, regulations, and policies are oriented to major acquisition spending - The Defense Acquisition Guidebook, Chapter 1, Section 1.4 notes that “MDAPs and MAIS programs have the most extensive statutory and regulatory reporting requirements. Some elements of the defense acquisition system only apply to weapon systems, some elements only apply to automated information systems, and some elements apply to both.”
- Reporting requirements - Defense Acquisition Management Information Retrieval (DAMIR) system of record “identifies various data sources that the Acquisition community uses to manage Major Defense Acquisition Programs (MDAP) and Major Automated Information Systems (MAIS) programs and provides a unified web-based interface through which to present that information.” This requires reporting for MDAPs and MAIS programs to inform reports like the 2013 Acquisition Review, quarterly and annual Selected Acquisition Reports (SARs), Defense Acquisition Executive Summaries (DAES), MAIS Annual and Quarterly Reports to Congress (MARs), and Unit Cost Reports (UCRs). Systematic ACAT II and ACAT III program data collection and analysis does not exist at the enterprise level as exist for MDAPs and MAIS programs.
- DoD 5000.2-R, Appendix I and Part 6 paragraph 6.1, Defense Acquisition Executive Summaries (DAES) Report
- CJCSI 3170.01 Joint Capabilities Integration and Development System, Jan 10, 2012
- AFI 10-601, Operational Capability Requirements Development, Jul 12, 2010
- Joint Capabilities Integration and Development System Website
- Selected Acquisition Reports

**Subtask 3 – Program Management Fundamentals**
- There are an array of Government communities receiving program office generated reports, to include but not limited to the specific program management office and associated contracting staffs, test and evaluation organizations, DCAA, DCMA, to include: Applicable program reporting: Cost Accounting Standards and Practices reports, cost data reports, subcontractor and small business reports, Earned Value Management reports, Government Property Inventory reports, Product production status, configuration, retrofit and materials reports, Product performance, parts fill rate and operational availability reports, Maintenance system reports, Test and Evaluation reports, Integrated Master Schedule reports, Hazardous material reports, and Veterans employment reports
- “Department of the Army Advanced Civil School (ACS) and Training with Industry (TWI) Policy and Procedures,” Feb 10, 2012
- See DFAR and FAR regulation findings at end of presentation

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Legislative, Regulatory, or Other Action

Proposed Legislative Language (i.e., appropriations bill language)
- Collect complementary value metrics. Examples include employment of JCTD business model, cost avoidance metrics, and CONOPs viability or utility metrics addressing the mission objectives of COMOs.
- Reform enterprise acquisition analysis:
  - Phase in, by frequency and by ACAT, expansion of DAES to programs other than ACAT I and special interest programs
  - Refocus DAES as an independent or evidence-based validation of current PM self-assessments
- Mandate collection and analysis of operational utility performance metrics for acquisition programs. Examples include employment of JCTD business model, CONOPs viability metrics, and/or CONOPS utility metrics addressing mission objectives of combatant commands.

Proposed Regulatory Action
- Establish/propose a new baseline for RFP content and timing within existing regulations
- Identify areas within the RFP process that will reduce the cost and time to bid and fulfill USG contracts
- Review licensing policy and vendor qualification designation protocols to identify overly restrictive policies and programs

Proposed Modifications to DoD Instruction
- Expand training with industry programs for Government personnel, like the Secretary of Defense Corporate Fellows Program and the Army Training with Industry program

Proposed Modifications to DoD Directive
- Build upon the Services Acquisition Directorate and PEO roles and responsibilities, including performance metrics, scorecards, and ERP
- Enhance centralized roles and responsibilities for ACAT II program performance, much like the Services Acquisition Directorate.

Proposed DoD Internal Memo Content
- Conduct a brief business case analysis to justify the need for each report and its value, including data elements that are necessary for which stakeholders and in what format. If the report provides little value based on a program’s circumstances, then it should not be used (if it doesn’t yield any dollar savings or mitigate/avoid any risks)
- Phase in collection of non-MDAP lists of programs and reuse of existing business intelligence systems, where possible
- Use the DAES baseline performance metrics for assessment of all acquisition categories, and identify critical performance metrics that are different across program types to include with DAES assessment and reporting
- Review agency procurement success stories that enhance industry awareness of opportunities to present new and innovative products to the USG.
- Document and harmonize industry outreach and education methodologies to more effectively avail vendors of programmatic/ACAT procurement timelines, requirements, and anticipated demand levels
- Encourage further adoption by the USG of open/modular systems for procurement initiatives
- Emphasize focus on why cost growth occurs (analysis) while still reporting critical cost data like breaches
- Identify metrics for keeping government personnel accountable and reward those who succeed with faster promotions and financial bonuses that effectively and efficiently deliver the end product.

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‘Deep Dive’ Survey Findings: Subtask 2

- Respondents to a 2013 Department of Commerce (DOC) industrial base survey reported that a lack of clarity in regards to contract requirements and specificity in designs made the bid process more costly and increased delays in production.
  - 346 respondents requested more information on government procurement guidelines.
  - 134 of 346 requesting additional information (39%) listed the government acquisition process as a major obstacle to their organization.
- Respondents also noted in the survey that the lack of information made forecasting and planning difficult for them, often with adverse effects.
- 99 respondents to the DOC survey stated that they were capable of providing, but not willing to provide “specialty, low-volume, or one-time, space-related products/services to the U.S. Government at a reasonable cost,” with many commenting that the process was too burdensome.
- 201 respondents commented on a need for reduced regulatory and administrative requirements in USG contracts.
  - Representative respondent comment: “Small companies like mine cannot afford all the regulatory requirements or certifications required by the government for some of their projects.”
- 864 respondents to the DOC survey identified “Government Regulatory Burden” as one of their primary obstacles to long term viability, with many respondents commenting that regulations reduced their interest in even competing for USG contracts.
  - Two-thirds of these respondents were Very Small or Small businesses, who often do not have the resources to efficiently comply with contract requirements.
  - Of the 605 respondents with ~100% compatibility between their commercial and USG product lines, 511 (84%) still identified the USG acquisition process as one of their five biggest obstacles to their long term viability.
- Increased variability in USG demand for systems and affiliated products and services reduces the incentive for industry’s participation in USG contracts, particularly among smaller vendors.
  - 27 survey respondents reported that variability in USG demand results in contract requirements and bidding processes that are too difficult to adhere to.
  - 43 respondents commented that resource planning is adversely affected by variability in USG demand.
  - 80 respondents said that variability in USG demand resulted in a need to diversify or refocus their customer base.
- 597 primarily smaller respondents to the DOC survey cited “difficulty presenting new, innovative products to the USG” as one of the five biggest obstacles to long term viability.
  - Over one-third of respondents focused primarily on R&D found they had difficulty presenting new and innovative products to the USG, as did over one-quarter of those whose primary business lines were Product and Design Engineering, Information Technology, or Integration.
  - 49% of the Very Small respondents (less than $10 million in average annual net sales) whose primary business line was R&D found they had difficulty presenting new, innovative products to the USG.

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Overview of Deep Dive Survey Respondents

<table>
<thead>
<tr>
<th>Respondents by Type of Organization</th>
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<tbody>
<tr>
<td>Commercial Companies</td>
<td>3,585</td>
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<tr>
<td>Universities</td>
<td>125</td>
</tr>
<tr>
<td>Non-Profit Organizations</td>
<td>49</td>
</tr>
<tr>
<td>U.S. Government Agencies</td>
<td>21</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>3,780</strong></td>
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62% of respondents are small businesses, as defined by the Small Business Administration

<table>
<thead>
<tr>
<th>Respondents by Average Annual Net Sales (2009-2012)</th>
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<tbody>
<tr>
<td>Very Small (Less than $10M)</td>
<td>1,648</td>
</tr>
<tr>
<td>Small ($10 – 50M)</td>
<td>929</td>
</tr>
<tr>
<td>Medium ($50 – 250M)</td>
<td>498</td>
</tr>
<tr>
<td>Large ($250M – 1B)</td>
<td>234</td>
</tr>
<tr>
<td>Very Large (Greater than $1B)</td>
<td>165</td>
</tr>
<tr>
<td>No Sales</td>
<td>306</td>
</tr>
</tbody>
</table>

Commercial Companies
- 4:5 privately held
- 1:4 business unit/division-level

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Involvement in Market Segments

% of Respondents

<table>
<thead>
<tr>
<th>Segment</th>
<th>% of Respondents</th>
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<tbody>
<tr>
<td>Space</td>
<td>52%</td>
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<tr>
<td>Aircraft</td>
<td>50%</td>
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<tr>
<td>Electronics</td>
<td>48%</td>
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<tr>
<td>Energy</td>
<td>35%</td>
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<tr>
<td>C4ISR</td>
<td>33%</td>
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<tr>
<td>Missiles</td>
<td>32%</td>
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<tr>
<td>Ships</td>
<td>29%</td>
</tr>
<tr>
<td>Ground Vehicles (Military)</td>
<td>28%</td>
</tr>
<tr>
<td>Healthcare</td>
<td>27%</td>
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Support for USG Agencies*

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Reporting Requirements in the FAR and DFAR

FAR
- 4.1703 Service Contracts Inventory; Reporting requirements
- 19.202-5 Policies; Data collection and reporting requirements
- 19.704 (a)(10) The Small Business Subcontracting Program; Subcontracting plan requirements
- 25.302-4 (a) Contracts Performed Outside the United States; Policy
- 27.202-1 Patents and Copyrights; Reporting of royalties.
- 27.302 (e) Patent Rights under Government Contracts; Policy
- 42.1106 Production Surveillance and Reporting; Reporting Requirements
- 52.204-10 Reporting Executive Compensation and First-Tier Subcontract Awards.
- 52.204-14 Service Contract Reporting Requirements.
- 52.204-15 Service Contract Reporting Requirements for Indefinite-Delivery Contracts.
- 52.215-23 (c) Limitations on Pass-Through Charges.
- 52.219-9 (c) Small Business Subcontracting Plan
- 52.219-25 (c) Small Disadvantaged Business Participation Program—Disadvantaged Status and Reporting.
- 52.222-38 Compliance with Veterans’ Employment Reporting Requirements.
- 52.223-5 (c) Pollution Prevention and Right-to-Know Information
- 52.227-11 (f) Patent Rights—Ownership by the Contractor.
- 52.230-2 Cost Accounting Standards.

DFARS
- 225.72 Reporting Contract Performance Outside the United States
- 222.101-3 Reporting labor disputes.
- 242.1106 Production Surveillance and Reporting; Reporting requirements.

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Questions?

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