



Executive Roundtable: Achieving Efficiency, Affordability in Defense Sector

Carole Rickard Hedden
Washington DC
Feb 17, 2011

Leaders from across the aerospace and defense enterprise met Feb. 17 in Washington, DC, to discuss how to move beyond the rhetoric of talking acquisition reform and transformation and move toward a new process and model that will provide support to defense and security while also assuring an enterprise that can meet the needs of government customers as well as business shareholders.

Hosted by Kimberly Gavaletz, VP Global Sustainment for the F-35 Lightning II, Lockheed Martin Aeronautics Co., and Tony Velocci, editor-in-chief for Aviation Week, the meeting was sponsored by Dassault Systemes.

Aviation Week convened its first Executive Roundtable in November 2004 as a means for aerospace and defense leaders to come together in a non-competitive environment to discuss issues and challenges impeding program, business and government performance. In the past eight years, more than three dozen roundtables have been convened to define actions designed to support a healthy enterprise. The roundtable participants divide into small groups to identify challenges, discuss possible solutions and then provide an overview to the group. Attendees then select those areas seen as priorities.

Those attending the Feb. 17 meeting represented EADS N.A., Swift Engineering, Dassault Systemes, Parker Aerospace, Northrop Grumman, BAE Systems N.A., Charles River Associates Intl., Office Secretary of Defense, IBM, Boeing, Ball Aerospace, Force Protection, Lockheed Martin, Goodrich, Aurora Flight Sciences, DANANS and McKinsey.

SPONSORED BY



Key findings for the roundtable included:

- **Together, industry and the government customer must define a lean, efficient process for 18-month, seven-year and 30-year program efforts.**
 - Transformation/reform has resulted in additional process, not different or less.
 - Non-value added steps/time must be eliminated.
 - Define capabilities pre RFP, not requirements; allow time for capabilities to develop as part of stand-up effort process.
 - Include metrics as part of capabilities planning, not as an after-thought.
 - We need to achieve common and consistent practices across all acquisitions
- **Use rapid response efforts to test new business, acquisition models – share results.**
- **We need a quick win on these improvement efforts.**
- **During the current economic environment and necessary budget cuts, the defense enterprise has an opportunity borne of shared understanding and pain.**

Following are key points identified by each of the small groups. Small Group merged with small groups 4 and 5)

Small Group 2

The group examined what is needed to drive performance improvement across various acquisition models and the gaps that would prevent this type of operation. Key findings:

- Most organizations are not able to develop and deliver any capability within 18 months or to a seven-year model.
 - This type of model does not allow time to “fix” technologies as they mature; requires basic development elsewhere and/or acceptance of trial-and-error development.
 - Carries much higher risk for the innovator.
 - Question – does reduced time cut cost sufficiently to produce the capital needed to operate this type of model?
- Current acquisition model favors favorable or even unrealistic risk assessment.
- Government is perceived to have diminishing expertise needed to evaluate technological proposals.
- Mission creep, and thus requirements or capabilities creep, is a function of time; the opposition in our battle space finds a way around currently used capabilities/technologies.
- Industry nor government has adapted engineering or business processes to rapid response demand.
- Investment in technology needs to be stable, regardless of what is defined as current “need”; there is no way currently to pay the cost for an organization to carry this “off-the-shelf” or innovation inventory price.

- New systems need to leverage current and future technical interfaces; the example given was the iPhone and new applications, each predicated on a previous capability that now costs less, provides new robust capability and that has less learning curve. How can this approach be applied to weapon systems?
- Steps to accelerate the cycle:
 - Review/refine pre-proposal acquisition rules for more transparent discussion
 - Rework model for 18-month, seven-year and 30-year system life.
 - Stop writing specifications and state capabilities needed.

Small Group 3

Reviews and audits are a reality of spending taxpayer dollars. How can we assure that such reviews are not mere exercise? Key findings:

- Assure that the review process is defined before development begins and that the appropriate metrics are maintained throughout life of system.
- Metrics must have common definition to make useful on a broader, enterprise basis (e.g. affordability does not have a common definition and is being used in vastly different ways, depending on whom is speaking).
- Cost should be defined by what it “should” cost, what it “would” cost and what it “does” cost – reviews need to assess the gap between expectation and reality; this should be tracked over time.
- Rather than eliminating “white space” in a program effort, we (customer and industry) tend to fill the white space. .
- Industry needs to assess what it is replicating, passing along, imposing on the supply chain.
- The 80% solution is another term widely misunderstood and misapplied; if all sub-components delivered at 80%, the overall system might be dramatically altered, for instance. The 20% margin needs to be identified and used in trading capability, time, cost.
- Each change of personnel results in reinvention of process, metrics and, to some degree, capabilities. Need to address how to avoid loss of continuity and traction.
- There is no real forum for advancing concerns – we speak but are we getting to the heart of the issues?
- What can industry do to drive out cost? Most already have eliminated pension programs, driven out personnel variable costs, eliminated facilities/square footage where possible, gained efficiencies through insourcing and outsourcing.
- Need to re-examine best model for SPOs and staffing. For every government person, someone in industry is identified to support and respond.

Small Group 4

This group examined capabilities and requirements in terms of process and modeling.

Key findings:

- Today’s budget is sufficient to support national defense.
- Processes abound in regimenting the work, but do we follow and is the process correct versus adding on to what already existed?

- The warfighter speaks in terms of capability, not requirement. Simply stated, s/he wants a watch but doesn't care what is in that watch—only cares whether it is ticking in the environment where s/he is operating.
 - By defining capability too early, we're leaving innovation on the floor.
 - We need method to sequence and filter all the possibilities into a defined set of capabilities and thus RFP and response.
 - How do we Lean the oversight process to deliver the intended information?
- Rapid response (18-month) usually relies on existing technology that is applied; the risk lies in the lack of test in the field. Who is paying for that technology sitting somewhere? How is this paid for?
- We, as an enterprise, must apply Lean and Six Sigma to acquisition models and kill what is not valued.
- We are applying metrics to everything, but what is the most important metric – does it work?

Small Group 5

The group examined how to maximize return on investment for the government customer, as well as for the business to assure a healthy industrial base moving forward.

Key findings:

- It will be easier to fix smaller, rapid acquisition than larger system acquisition
- Everything about today's acquisition model is based on "exquisite" responses to capability demand; our structures feed this addiction versus response to need.
- Participants believe industry needs to collaboratively develop and propose change in system because the changes in government leadership occur more frequently.
- Fixing the process important to delivering capability but also in terms of attracting expertise and talent for the future.
- Need to assess and make transparent integration of government investment in research (DARPA, MDA, etc.)

Dassault Systèmes delivers Product Lifecycle Management (PLM) solutions for Aerospace and Defense (A&D) companies and their suppliers to accelerate the development of innovative products. As a world leader in 3D and Product Lifecycle Management (PLM) solutions, Dassault Systèmes brings value to more than 115,000 customers and more than 300 A&D customers in 80 countries - including Airbus, Bell Helicopter, Boeing, Bombardier, EADS and Piaggio Aero. A&D companies rely on DS solutions for real-time integration of geographically dispersed work teams and the supply chain. A pioneer in the 3D software market since 1981, DS applications provide a 3D vision of the entire product lifecycle from conception to maintenance to recycling.

The DS portfolio: **Six Brands, One Company:** 3DVIA * **Online 3D lifelike experiences** CATIA * **Virtual product design** DELMIA * **Virtual production** ENOVIA * **Global collaborative lifecycle management** SIMULIA * **Realistic simulation** SolidWorks * **3D mechanical design**

Discover our solutions and references: www.3ds.com/aerospace