



DAU CENTER FOR DEFENSE ACQUISITION

RESEARCH AGENDA 2020

This Research Agenda is intended to make researchers aware of the topics that are, or should be, of particular concern to the broader defense acquisition community within the federal government, academia, and defense industrial sectors. The center compiles the agenda annually, using inputs from subject matter experts across those sectors. Topics are periodically vetted and updated by the DAU Center's Research Advisory Board to ensure they address current areas of strategic interest.

The purpose of conducting research in these areas is to provide solid, empirically based findings to create a broad body of knowledge that can inform the development of policies, procedures, and processes in defense acquisition, and to help shape the thought leadership for the acquisition community. Most of these research topics were selected to support the DoD's Better Buying Power Initiative (see <http://bbp.dau.edu>). Some questions may cross topics and thus appear in multiple research areas.

Potential researchers are encouraged to contact the DAU Director of Research (research@dau.edu) to suggest additional research questions and topics. They are also encouraged to contact the listed Points of Contact (POC), who may be able to provide general guidance as to current areas of interest, potential sources of information, etc.

Competition POCs

- John Cannaday, DAU: john.cannaday@dau.edu
- Salvatore Cianci, DAU: salvatore.cianci@dau.edu
- Frank Kenlon (global market outreach), DAU: frank.kenlon@dau.edu

Measuring the Effects of Competition

- What means are there (or can be developed) to measure the effect on defense acquisition costs of maintaining the defense industrial base in various sectors?
- What means are there (or can be developed) to measure the effect of utilizing defense industrial infrastructure for commercial manufacture, and in particular, in growth industries? In other words, can we measure the effect of using defense manufacturing to expand the buyer base?
- What means are there (or can be developed) to determine the degree of openness that exists in competitive awards?
- What are the different effects of the two best value source selection processes (trade-off vs. lowest price technically acceptable) on program cost, schedule, and performance?

Strategic Competition

- Is there evidence that competition between system portfolios is an effective means of controlling price and costs?
- Does lack of competition automatically mean higher prices? For example, is there evidence that sole source can result in lower overall administrative costs at both the government and industry levels, to the effect of lowering total costs?
- What are the long-term historical trends for competition guidance and practice in defense acquisition policies and practices?

- To what extent are contracts being awarded noncompetitively by congressional mandate for policy interest reasons? What is the effect on contract price and performance?
- What means are there (or can be developed) to determine the degree to which competitive program costs are negatively affected by laws and regulations such as the Berry Amendment, Buy American Act, etc.?
- The DoD should have enormous buying power and the ability to influence supplier prices. Is this the case? Examine the potential change in cost performance due to greater centralization of buying organizations or strategies.

Effects of Industrial Base

- What are the effects on program cost, schedule, and performance of having more or fewer competitors? What measures are there to determine these effects?
- What means are there (or can be developed) to measure the breadth and depth of the industrial base in various sectors that go beyond simple head-count of providers?
- Has change in the defense industrial base resulted in actual change in output? How is that measured?

Competitive Contracting

- Commercial industry often cultivates long-term, exclusive (noncompetitive) supply chain relationships. Does this model have any application to defense acquisition? Under what conditions/circumstances?
- What is the effect on program cost, schedule, and performance of awards based on varying levels of competition: (a) “Effective” competition (two or more offers); (b) “Ineffective” competition (only one offer received in response to competitive solicitation); (c) split awards versus winner take all; and (d) sole source.

Improve DoD Outreach for Technology and Products from Global Markets

- How have militaries in the past benefited from global technology development?
- How/why have militaries missed the largest technological advances?
- What are the key areas that require the DoD's focus and attention in the coming years to maintain or enhance the technological advantage of its weapon systems and equipment?
- What types of efforts should the DoD consider pursuing to increase the breadth and depth of technology push efforts in DoD acquisition programs?
- How effectively are the DoD's global science and technology investments transitioned into DoD acquisition programs?
- Are the DoD's applied research and development (i.e., acquisition program) investments effectively pursuing and using sources of global technology to affordably meet current and future DoD acquisition program requirements? If not, what steps could the DoD take to improve its performance in these two areas?
- What are the strengths and weaknesses of the DoD's global defense technology investment approach as compared to the approaches used by other nations?
- What are the strengths and weaknesses of the DoD's global defense technology investment approach as compared to the approaches used by the private sector—both domestic and foreign entities (companies, universities, private-public partnerships, think tanks, etc.)?
- How does the DoD currently assess the relative benefits and risks associated with global versus U.S. sourcing of key technologies used in DoD acquisition programs? How could the DoD improve its policies and procedures in this area to enhance the benefits of global technology sourcing while minimizing potential risks?

- How could current DoD/U.S. Technology Security and Foreign Disclosure (TSFD) decision-making policies and processes be improved to help the DoD better balance the benefits and risks associated with potential global sourcing of key technologies used in current and future DoD acquisition programs?
- How do DoD primes and key subcontractors currently assess the relative benefits and risks associated with global versus U.S. sourcing of key technologies used in DoD acquisition programs? How could they improve their contractor policies and procedures in this area to enhance the benefits of global technology sourcing while minimizing potential risks?
- How could current U.S. Export Control System decision-making policies and processes be improved to help the DoD better balance the benefits and risks associated with potential global sourcing of key technologies used in current and future DoD acquisition programs?

Comparative Studies

- Compare the industrial policies of military acquisition in different nations and the policy impacts on acquisition outcomes.
- Compare the cost and contract performance of highly regulated public utilities with nonregulated “natural monopolies” (e.g., military satellites, warship building).
- Compare contracting/competition practices between the DoD and complex, custom-built commercial products (e.g., offshore oil platforms).
- Compare program cost performance in various market sectors: highly competitive (multiple offerors), limited (two or three offerors), monopoly.
- Compare the cost and contract performance of military acquisition programs in nations having single “purple” acquisition organizations with those having Service-level acquisition agencies.