

Advisory Panel on Streamlining and Codifying Acquisition Regulations



Section 809 Panel Interim Report

May 2017

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SECTION 809 PANEL

The Section 809 Panel is pleased to submit the enclosed interim report.

The Department of Defense spends nearly \$300 billion annually acquiring systems, goods, and services in support of the nation's defense. A successful acquisition system is critical to providing warfighting and defense capability.

Section 809 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92), as amended by Section 863(d) of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328), established an independent Advisory Panel on Streamlining and Codifying Acquisition Regulations—the Section 809 Panel. By statute, the panel was formed to

- Review the acquisition regulations applicable to the Department of Defense with a view toward streamlining and improving the efficiency and effectiveness of the Defense acquisition process and maintain defense technology advantage and
- Make recommendations for the amendment or repeal of such regulations that the panel considers necessary to
 - establish and administer appropriate buyer and seller relationship in the procurement system,
 - improve the functioning of the acquisition system,
 - ensure the continuing financial and ethical integrity of defense procurement programs,
 - protect the best interests of the Department of Defense, and
 - eliminate any regulations that are unnecessary for the above purposes.

To date, the 18 panel commissioners have organized into working groups focused on key challenges facing decision-makers in Congress and DoD with respect to the defense acquisition system. Commissioners and panel professional staff are looking at all aspects of that system to enhance DoD's agility to acquire what it needs to meet threats posed by a more fluid geopolitical environment, promote cost savings without shortchanging readiness, and simplify an antiquated system wedded to practices that challenge the workforce and push away marketplace innovators.

Commissioners and panel staff have already met with more than 200 government and industry representatives to discuss new approaches to defense acquisition. Outreach includes not just meeting with acquisition leaders, practitioners, and marketplace representatives, but also communication with the larger interested public through an active web presence and direct in-person interaction.

Although the Section 809 Panel is just beginning its work, the focus of our efforts is to *put mission first* and recognize the *importance of timeliness* in the face of a rapidly evolving threat.

The Section 809 commissioners and professional staff look forward to hearing from you as we move toward developing comprehensive reform proposals with actionable recommendations for statutory and regulatory changes.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Deidre', followed by a horizontal line extending to the right.

Deidre Lee
Chair, Section 809 Panel

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ACRONYM LIST

ABCT	Armored Brigade Combat Team
DFARS	Defense Federal Acquisition Regulation Supplement
DoD	Department of Defense
ECSS	Expeditionary Combat Support System
ERK	Electronic Record Keeping
FAR	Federal Acquisition Regulation
FY	Fiscal Year
FYDP	Five Year Defense Plan
GAO	Government Accountability Office
JLTV	Joint Light Tactical Vehicle
MRAP	Mine-Resistant Ambush Protected
NDAA	National Defense Authorization Act
OECD	Organisation for Economic Cooperation and Development
OMB	Office of Management and Budget
R&D	Research and Development
RDTE	Research, Development, Test, and Evaluation
RFP	Request for Proposals
SAP	Simplified Acquisition Procedures
USD	U.S. Dollars
UTC	United Technologies Corporation

EXECUTIVE SUMMARY

THE DEMAND FOR FUNDAMENTAL CHANGE

The Section 809 Panel was established by Congress in the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2016 to address a fundamental problem: The way the Department of Defense (DoD) buys what it needs to equip its warfighters is from another era, one in which the global strategic landscape was entirely different. Today the United States' ability to maintain technological, military, and economic superiority is being challenged because its adversaries are rapidly modernizing their militaries with an eye toward exploiting U.S. vulnerabilities and negating traditional U.S. advantages.¹ DoD has not fully adjusted to the pace of this environment, nor has it adjusted to a marketplace that bears no resemblance to that of just a few decades ago.

In short, both the strategic and marketplace realities, as described in this report, require a degree of agility that DoD is not currently able to deliver. The nation's strategic needs must drive the business model, not the other way around.

In the last 50 years, there have been more than 100 reports, studies, and analyses of how DoD acquires goods and services. From these reports, the lesson learned is clear: Tinkering and incremental approaches to acquisition reform have not provided the necessary results and are especially ineffective in today's rapidly changing environment. In fact, incremental approaches have exacerbated problems with the acquisition system by adding more layers of sign off, mountains of paperwork, and hundreds of additional regulations. DoD must

implement bold approaches and bold solutions to produce true reform.

The Section 809 Panel's Objectives

From its beginning, the Section 809 Panel's overarching objective has been to make recommendations that, if adopted, will enable DoD to more consistently buy what it needs in a timely and cost-effective manner—whether that be commercial items, information technology, services, weapon systems, or the full range of tools and equipment on which warfighters depend.

For the purposes of this report, the *acquisition system*—which is conditioned by statute, regulations, executive orders, directives, policies, and procedures—is the overall process by which DoD buys goods and services. The process includes requirements, budgeting, production, testing, deployment, and sustainment.

The acquisition system, when viewed as a whole, creates obstacles to getting the needed equipment and services because it makes DoD an unattractive customer to large and small firms with innovative, state-of-the-art solutions. The system creates additional impediments because suffocating bureaucratic requirements make the pace at which it proceeds simply unacceptable in today's rapidly changing technological environment. DoD must replace this system, designed for buying equipment for the Cold War, with one that takes advantage of technologies and methodologies available in the current marketplace. Essential equipment needed on the ground may be either unavailable to the department or egregiously

¹ John McCain, *Restoring American Power: Recommendations for the FY 2018–FY 2022 Defense Budget*, accessed January 27, 2017, https://www.mccain.senate.gov/public/_cache/files/25bff0ec-481e-466a-843f-68ba5619e6d8/restoring-american-power-7.pdf.

tardy, leading to genuine threats to the nation's security. DoD does not have the luxury to wait.

These ideas are not new. The 1986 Packard Report made a similar point.

Excellence in defense management cannot be achieved by the numerous management layers, large staffs, and countless regulations in place today. It depends ... on reducing all of these by adhering closely to basic, common sense principles: giving a few capable people the authority and responsibility to do their job, maintaining short lines of communication, and holding people accountable for results.²

As compared to 1986, there are far more layers at DoD, to include even larger staffs, and too many regulations to count. The inescapable conclusion when viewing DoD acquisition as a whole, due to no one's intentions or actions in particular, is that *process* wins out over *results*. In addition, too frequently ancillary public policy objectives, often driven by statutes or executive orders, receive equal or greater priority than mission.

Data-Driven, Actionable Recommendations

The Section 809 Panel final report will provide specific, data-driven recommendations that, if implemented, will do the following:

- Enable DoD to be more adaptable in the face of a rapidly changing threat environment.
- Make DoD a more attractive customer in the new, dynamic defense marketplace.
- Enable DoD to use scarce resources allocated to procurement more efficiently.

- Simplify the acquisition process so goods and services can be purchased in a timely manner without unnecessary burden.
- Encourage and incentivize the workforce to make sound, mission-driven decisions.

The Section 809 Panel's recommendations will focus both on streamlining the process and putting forth new approaches that adopt techniques from the way private-sector business is conducted in the 21st century. These recommendations will form a method of buying that is simple, understandable, and easy to execute and that results in timely, cost-effective acquisition.

Section 809 Panel commissioners and staff already have spoken to high-level representatives from dozens of companies, including those that sell to DoD, those that do not but would like to, and even those that will not consider competing for contracts. The message is clear: A process that features excessive layers, tremendous amounts of paperwork, and timeframes that do not fit the way most firms do business is off-putting to firms in the marketplace. DoD must develop the ability to be a savvy customer in the real-world marketplace, so it is able to purchase the technology and equipment it needs.

Its enabling legislation requires the Section 809 Panel to report findings by August 2018. By that time, the panel will make recommendations that comprehensively strip away the regulatory underbrush that hampers the department's ability to maintain a competitive advantage in the face of the country's enemies. In addition, the panel will put forth

² President's Blue Ribbon Commission on Defense Management, *A Quest for Excellence, Final Report to the President*, accessed April 17, 2017, http://usacac.army.mil/cac2/CSI/docs/Gorman/06_Retired/01_Retired_1985_90/07_86_PackardCommission_FinalReport/01_PackardCommission_FinalReport.pdf.

recommendations, supported by specific statutory and regulatory implementing language, to change the way the department approaches the marketplace in its efforts to purchase the whole range of goods and services needed to equip its warfighters. As it stands, the process has left the acquisition workforce stymied in its good faith efforts to deliver the right goods in a timely manner. Although change is never easy, and at times it can be painful, the status quo is unacceptable.

THE INTERIM REPORT

This interim report sets forth the Section 809 Panel's framework for the need for acquisition reform. This framework, addressed in the five main sections of the report, will guide the panel's future work and recommendations.

Adapt at the Speed of a Changing World

The United States is operating in a global environment that is more fluid, more interconnected, and faster evolving than at any point in history. To adapt to this reality, the acquisition process must be agile enough to respond to rapidly evolving threats, and fast enough to develop and deliver new capabilities within the arc of emerging threats.

Leverage the Dynamic Defense Marketplace

The defense industrial base has changed, and to maintain technological advantage, DoD increasingly must leverage the commercial marketplace. To be successful in this broader marketplace requires a fundamental change in the DoD–commercial relationship. DoD must become an attractive customer with which commercial firms want to do business. This need requires DoD to be a more sophisticated

buyer that is responsive to market dynamics, company interests, and the greater economic landscape.

Allocate Resources Effectively

The U.S. military faces multiple threats posed by increasingly capable adversaries and uncertain domains of warfare. It also contends with constrained defense budgets. To more effectively and efficiently allocate resources, DoD must better align and coordinate how it budgets, sets requirements, and acquires what it needs, to include not only major weapon systems, but also the services and low-dollar items that make up more than half of DoD contract spending.

Simplify Acquisition

Some of the regulations and statutes governing defense acquisition are outdated or no longer applicable and should be amended or repealed to make the system more effective and efficient, and expand the number of companies willing to do business with DoD.

Enable the Workforce

The current acquisition laws and regulations are overly complex, difficult to understand and implement, and contain requirements that result in people making suboptimal decisions and being risk-averse. DoD needs an acquisition system that is simple, understandable, and executable by people operating in an environment that empowers and incentivizes them to make decisions that lead to positive outcomes.

ADAPT AT THE SPEED OF A
CHANGING WORLD

The United States is operating in a global environment that is more fluid, more interconnected, and faster evolving than at any point in history. To adapt to this new reality, the acquisition process must be agile enough to respond to rapidly evolving threats and fast enough to develop and deliver new capabilities within the arc of emerging threats.

DoD needs an acquisition system that can shift and adapt as quickly as the strategic landscape. As former Chairman of the Joint Chiefs General Martin Dempsey wrote in the 2015 National Military Strategy, “Today’s global security environment is the most unpredictable I have seen in 40 years of service.”³ DoD’s acquisition system must be capable of nimbly moving among, or simultaneously pursuing, fundamentally different capabilities on different timelines. For example, the system must accommodate, at the same time, delivering mine-resistant ambush protected (MRAP) vehicles to support ongoing operations, developing and acquiring cyber warfare capabilities, and fostering the cutting-edge capabilities of the future. The faster technology changes, the more flexible acquisition must be.

THE NATURE OF THE STRATEGIC THREAT

With respect to U.S. security, the geopolitical landscape has been generally stable. For the first few decades of the 20th century, the lens

through which the strategic threat was viewed focused on Europe. For nearly 50 years after World War II, the strategic threat emanated from a Cold War perspective, which was followed by a period after the 1991 Soviet collapse when U.S. military and economic dominance remained relatively unchallenged.

Currently, the emergence of peer competitors, midtier regional adversaries, and nonstate actors capable of threatening U.S. interests and lives has created an unstable geopolitical landscape.⁴ These adversaries are learning how to offset traditional U.S. military advantages. Russia and China have embarked on rapid modernization efforts and are aggressively challenging U.S. interests around the world and testing U.S. resolve, alliances, and military capabilities.⁵ At the same time, nonpeer adversaries are becoming more capable and lethal as advanced military hardware becomes more accessible and innovative technologies with military applications become more abundant, cheap, and available.

The United States must now contend with potential adversaries that are not just rising global powers but also are important trading partners. These adversaries threaten areas of vital strategic importance for the United States, as well as its allies and partners that have shared interest and values.⁶ The threats are more numerous, geographically diverse (or, in the case of nonstate actors or cyber warfare,

³ Joint Chiefs of Staff, *The National Military Strategy of the United States of America: The United States Military’s Contribution to National Security*, accessed April 17, 2017, http://www.jcs.mil/Portals/36/Documents/Publications/2015_National_Military_Strategy.pdf.

⁴ General James Mattis, Senate Armed Services Committee Nomination Hearing Statement, accessed April 24, 2017, https://www.armed-services.senate.gov/imo/media/doc/Mattis_01-12-17.pdf.

⁵ Dmitri Trenin, “The Revival of the Russian Military: How Moscow Reloaded,” *Foreign Affairs*, May/June 2016, <https://www.foreignaffairs.com/articles/russia-fsu/2016-04-18/revival-russian-military>. Department of Defense, *Annual Report to Congress: Military and Security Developments Involving the People’s Republic of China 2016*, accessed April 17, 2017, <https://www.defense.gov/Portals/1/Documents/pubs/2016%20China%20Military%20Power%20Report.pdf>.

⁶ *The State of the World: Hearing before the U.S. House of Representatives Committee on Armed Services*, 115th Cong. (2017), (statement of David H. Petraeus), accessed April 17, 2017, <http://docs.house.gov/Committee/Calendar/ByEvent.aspx?EventID=105509>.

potentially without a geographic location), and unpredictable.⁷ New threats emerge faster, and different threats require fundamentally different, and often multivariate, responses.⁸ All of these factors have combined to create a world where the geopolitical strategic environment is more fluid, complex, and unpredictable than ever.⁹

TECHNOLOGY AND INNOVATION

The technology of warfare had remained static for extended periods, punctuated by short bursts of innovation-driven development of new warfare technologies and capabilities, such as gunpowder, ironclad ships, combustion engines, airpower, and drones. The current acquisition system is predicated on a more stable and predictable context instead of today's dynamic environment with constantly changing and emerging technology.

For example, the 3½-inch floppy disk, introduced in 1987, held a mere 1.44 MB.¹⁰ Just 30 years later, it was replaced by the 1 TB flash drive, which can house more information than

728,177,000 floppy disks.¹¹ Like storage capacity, computing power is increasing quickly as well. The processing power of an iPhone 6 is 120,000,000 times faster than the computers used to put a man on the moon.¹² Technology innovation also enabled the U.S. military to go from its first use of the Predator unmanned autonomous vehicle for surveillance in battle in 1995 to the weaponized Predator by 2001.¹³

Technological innovation in the late 20th and early 21st centuries was a catalyst for the current speed of weapons development.¹⁴ DoD is now in a period during which the time a particular technology is a dominant force on the battlefield is getting increasingly shorter, disruptive technologies are emerging at a faster pace, and these technologies are more widely dispersed. DoD has benefited from disruptive technologies and been able to incorporate these innovations, from netcentric warfare to unmanned vehicles.¹⁵ To fully incorporate existing and future technologies requires organizational shifts that will allow DoD to

⁷ H.R. McMaster, "Harbingers of Future War: Implications for the Army with Lieutenant General H.R. McMaster" (presentation at Center for Strategic and International Studies, May 4, 2016), accessed April 17, 2017, <https://www.csis.org/events/harbingers-future-war-implications-army-lieutenant-general-hr-mcmaster>.

⁸ Department of Defense, *Quadrennial Defense Review 2014*, accessed April 17, 2017, http://archive.defense.gov/pubs/2014_Quadrennial_Defense_Review.pdf.

⁹ Council on Foreign Affairs, *Preventive Priorities Survey: 2017*, accessed February 3, 2017, <http://www.cfr.org/conflict-assessment/preventive-priorities-survey-2017/p38562>. Department of Defense, *Quadrennial Defense Review 2014*, accessed April 17, 2017, http://archive.defense.gov/pubs/2014_Quadrennial_Defense_Review.pdf.

¹⁰ "Floppy Disk: Background," McGill College, accessed April 18, 2017, http://cs.mcgill.ca/~rwest/wikispeedia/wpcd/wp/f/Floppy_disk.htm.

¹¹ "How Many Floppy Disks Can You Fit in a Terabyte?" Landmark Technologies, accessed April 18, 2017, <https://www.lmktec.co.uk/blog/how-many-floppy-disks-can-you-fit-terabyte>.

¹² "Your Smartphone is Millions of Times More Powerful Than All of NASA's Combined Computing in 1969," ZME Science, accessed March 16, 2017, <http://www.zmescience.com/research/technology/smartphone-power-compared-to-apollo-432/>.

¹³ John David Blom, *Unmanned Aerial Systems: A Historical Perspective* (Fort Leavenworth, KS: Combat Studies Institute Press, 2010), 93, 107.

¹⁴ Committee on Homeland and National Security of the National Science and Technology Council, *A 21st Century Science, Technology, and Innovation Strategy for America's National Security*, accessed April 17, 2017, http://www.defenseinnovationmarketplace.mil/resources/National_Security_ST_Strategy_2016_FINAL.PDF.

¹⁵ Ben FitzGerald, Alexandra Sander, and Jacqueline Parziale, Center for a New American Security, *Future Foundry: A New Strategic Approach to Military-Technical Advantage*, accessed April 17, 2017, <https://s3.amazonaws.com/files.cnas.org/documents/CNAS-Report-FutureFoundry-final.pdf>.

access and incorporate them faster than potential competitors.¹⁶

In a world with rapidly changing technology, time is a valuable resource that must not be taken for granted. It is difficult to predict what capabilities DoD will need 5 to 10 years from now—biotechnology, nanotechnology, artificial intelligence, robotics, or a new technology area not even known today. It also is unclear on what plane the military will conduct warfare—traditional battlefields, space, cyberspace, or some other domain.¹⁷ The current acquisition system lacks the agility needed to adapt to new paradigms.

Achieving technological dominance is not simply a matter of developing and acquiring the most advanced technology. Deputy Secretary of Defense Robert Work has emphasized that it also requires “operational and organizational constructs” that allow DoD to interact with new technologies and effectively integrate them into a strategic framework.¹⁸ As Chairman of the Joint Chiefs of Staff Gen. Joseph Dunford stated, “Keeping pace with the speed of war means changing the

way we approach challenges, build strategy, make decisions and develop leaders.”¹⁹ Systems and capabilities must be developed, deployed, and integrated into operations within the arc of the threat, not after the threat has passed or after DoD has spent billions of dollars on technologies or capabilities that already are obsolete or will be obsolete by the time they are deployed. The private sector now drives much of the technological innovation, which makes it difficult for DoD to keep pace.²⁰

Although making the acquisition system operate faster would help to a degree, it is not enough. The acquisition process, including requirements definitions and budgeting, must be flexible enough to deliver the needed capabilities. Instead of being so rigid and convoluted, the acquisition system should be shaped to fit the required capabilities. Such a process may require multiple acquisition pathways that can be tailored to specific requirements and timeframes, depending on whether the need is to prototype new systems; buy commercial off-the-shelf items; or modify off-the-shelf technologies into deployable, limited-production programs.²¹

¹⁶ Barry Watts, Center for Strategic and Budgetary Assessments, *The Maturing Revolution in Military Affairs*, accessed April 17, 2017, <http://csbaonline.org/uploads/documents/2011.06.02-Maturing-Revolution-In-Military-Affairs1.pdf>.

¹⁷ Department of Defense, *Quadrennial Defense Review 2014*, accessed April 17, 2017, http://archive.defense.gov/pubs/2014_Quadrennial_Defense_Review.pdf.

¹⁸ Sydney J. Freedberg, Jr., “Air Force Leading Way to 3rd Offset: Bob Work,” *Breaking Defense*, September 21, 2016, <http://breakingdefense.com/2016/09/air-force-ops-centers-lead-way-to-3rd-offset-bob-work/>.

¹⁹ Jim Garamone, “Dunford: Speed of Military Decision-Making Must Exceed Speed of War,” *DoD News*, January 31, 2017, <https://www.defense.gov/News/Article/Article/1066045/dunford-speed-of-military-decision-making-must-exceed-speed-of-war/>.

²⁰ Committee on Homeland and National Security of the National Science and Technology Council, *A 21st Century Science, Technology, and Innovation Strategy for America’s National Security*, accessed April 17, 2017, http://www.defenseinnovationmarketplace.mil/resources/National_Security_ST_Strategy_2016_FINAL.PDF.

²¹ Ben FitzGerald, Alexandra Sander, and Jacqueline Parziale, Center for a New American Security, *Future Foundry: A New Strategic Approach to Military-Technical Advantage*, accessed April 17, 2017, <https://s3.amazonaws.com/files.cnas.org/documents/CNAS-Report-FutureFoundry-final.pdf>.

LEVERAGE THE DYNAMIC DEFENSE MARKETPLACE

The nature of the defense industrial base has changed, necessitating a fundamental change in the relationship between DoD and the commercial marketplace. For the purposes of the Section 809 Panel's work, this report will refer to the broader marketplace as the *dynamic defense marketplace*. To successfully leverage the dynamic defense marketplace, the department must become a savvy, attractive customer with which firms want to do business. This need requires DoD to be a more sophisticated buyer—one that understands and is responsive to market dynamics, company interests, and the greater economic landscape.

CHANGES TO THE DEFENSE INDUSTRIAL BASE

The defense acquisition system is primarily predicated on a post-World War II conception of the global economy, commercial marketplace, and management practices that no longer holds true.²² The era of the traditional defense industrial base is over. The number of firms exclusively manufacturing defense products in the United States is declining, and the firms that are defense-oriented are relying more on subcontractors.²³ DoD increasingly turns to and relies on a marketplace of boutique defense companies and nondefense firms

defined not by the industrial age but by the technologies, services, or unique capabilities they provide.²⁴

The traditional defense industrial base—manufacturing companies that primarily operate in the defense sector—has diminished substantially. According to DoD, the last major defense downturn in the late 1980s and early 1990s resulted in more than 300 prime contractors, platform providers, and subtier companies merging to form the five *mega-primes* of today: Boeing, Lockheed Martin, Northrop Grumman, Raytheon, and General Dynamics.²⁵

Defense industry senior executives believe defense mergers and acquisitions will accelerate through the end of the decade, with more consolidation still to come.²⁶ One factor driving this trend is that the defense sector is less robust than in the past. In the 1960s, the Fortune 100 included 15 defense firms that represented 30 percent of the revenue for the group.²⁷ In 2017, the Fortune 100 includes only four defense firms, representing barely 3 percent of the revenue for the group.²⁸

²² Defense Business Board, *Innovation: Attracting and Retaining the Best of the Private Sector*, accessed April 18, 2017, <http://dbb.defense.gov/Portals/35/Documents/Reports/2014/DBB-FY14-02-Innovation%20report%20%28final%29.pdf>.

²³ Andrew Hunter, Center for Strategic and International Studies, *Defense Acquisition Trends 2015: Acquisition in an Era of Budget Uncertainty*, accessed April 18, 2017, <https://defense360.csis.org/acquisition-and-beyond/>.

²⁴ Ben FitzGerald, Alexandra Sander, and Jacqueline Parziale, Center for a New American Security, *Future Foundry: A New Strategic Approach to Military-Technical Advantage*, accessed April 17, 2017, <https://s3.amazonaws.com/files.cnas.org/documents/CNAS-Report-FutureFoundry-final.pdf>.

²⁵ Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, *Annual Industrial Capabilities: Report to Congress for 2015*, accessed April 18, 2017, <http://www.acq.osd.mil/mibp/resources/2015%20AIC%20RTC%2010-03-16%20-%20Public%20Unclassified.pdf>.

²⁶ "Defense Outlook 2017: A Global Survey of Defense-Industry Executives," John Dowdy and Elizabeth Oakes, McKinsey and Company - accessed April 18, 2017, <http://www.mckinsey.com/industries/aerospace-and-defense/our-insights/defense-outlook-2017-a-global-survey-of-defense-industry-executives>.

²⁷ Thomas Davis, "The Incredible Shrinking Defense Industrial Base," *SIGNAL Magazine*, June 16, 2015, <http://www.afcea.org/content/?q=Blog-incredible-shrinking-defense-industrial-base>.

²⁸ "Fortune 500 List," Fortune.com, accessed April 24, 2017, <http://beta.fortune.com/fortune500/list>.

One of these companies, Boeing, receives less than half of its revenue from DoD.²⁹ Many companies that previously focused primarily on the defense market are now diversifying their client base, turning to nondefense clients for revenue.³⁰

AN EVOLVING MARKETPLACE

The dynamic defense marketplace is vastly different from the defense-centric marketplace of the past in which DoD could set the rules of acquisition. To effectively benefit from and compete in the dynamic defense marketplace, DoD must understand where it fits into the current business environment and adapt to this new reality. DoD needs to be a more sophisticated buyer, one that understands market dynamics, interests of companies (including cash flow, profit motive, and opportunity costs), and the broader economy.

One of the challenges presented by DoD's increasing reliance on the commercial market is

its limited influence in that market. DoD no longer dominates many sectors that it once did. For example, although DoD previously accounted for more than 90 percent of all U.S. semiconductor purchases, by 1990, purchases throughout the entire U.S. government represented less than 2 percent of the global market.³¹ Today, that market share has dropped to less than 0.5 percent of all semiconductors made in the world.³² DoD-financed R&D is playing a less important role in innovation and development, which further diminishes DoD's influence. In 1960, federal defense-related R&D accounted for an estimated 49 percent of all R&D expenditures in the United States, and 35 percent of G-7 expenditures.³³ By 2013, federal defense-related spending was just 16 percent of U.S. R&D expenditures and 9 percent of those within the G-7.³⁴

Given DoD's diminishing influence in the current marketplace, many companies have little incentive to accommodate the long lead

²⁹ "Boeing: Products & Business Segments," AeroWeb, accessed April 24, 2017, <http://www.fi-aeroweb.com/Boeing.html>.

³⁰ Thomas Davis, "The Incredible Shrinking Defense Industrial Base," *SIGNAL Magazine*, June 16, 2015, <http://www.afcea.org/content/?q=Blog-incredible-shrinking-defense-industrial-base>.

³¹ Falan Yinug, Semiconductor Industry Association (SIA), email to Section 809 Panel, March 6, 2017.

³² Ibid.

³³ In 1960, U.S. federal R&D spending, as reported by OMB in unadjusted dollars, was \$5.9 billion for defense and \$1.4 billion for nondefense; see OMB, *Table 9.7, Summary of Outlays for the Conduct of Research and Development: 1949–2017*, accessed April 24, 2017, <https://obamawhitehouse.archives.gov/sites/default/files/omb/budget/fy2017/assets/hist09z7.xls>. In 1960, estimated U.S. nonfederal R&D spending, as reported by the National Science Board in unadjusted dollars, was \$4.8 billion; see "Appendix Table 4-6: U.S. R&D Expenditures, by Source of Funds and Performing Sector: 1953-2013," National Science Foundation, *National Science Board, Science & Engineering Indicators 2016*, accessed April 24, 2017, <https://www.nsf.gov/statistics/2016/nsb20161/uploads/1/7/at04-06.pdf>. Non-U.S. G-7 spending in 1960 is extrapolated from Graham R. Mitchell, *The Global Context for U.S. Technology Policy*, U.S. Department of Commerce, accessed April 18, 2017, <https://usa.usembassy.de/etexts/tech/nas.pdf>. The non-U.S. G-7 countries at the time included Canada, the United Kingdom, France, Italy, Japan, and West Germany (now Germany). According to the report, the United States accounted for 70.6 percent of R&D expenditures from these countries—which, extrapolating based on the OMB and NSB figures cited above, produces an unadjusted dollar total of about \$5.0 billion.

³⁴ In 2013, U.S. federal R&D spending, as reported in unadjusted dollars, was \$71.1 billion for defense and \$61.4 billion for nondefense. See OMB, *Table 9.7, Summary of Outlays for the Conduct of Research and Development: 1949–2017*, accessed April 24, 2017, <https://obamawhitehouse.archives.gov/sites/default/files/omb/budget/fy2017/assets/hist09z7.xls>. The estimated U.S. nonfederal R&D spending in 2013 is extrapolated from data published by the Organisation for Economic Cooperation and Development, which reported \$433.2 billion in U.S. R&D spending in 2013—indicating \$300.8 billion in nonfederal R&D spending. See "Main Science and Technology Indicators, Gross Domestic Spending on R&D - Total, Million U.S. Dollars, 1981 – 2021," OECD, accessed April 24, 2017, <http://stats.oecd.org>. The 2013 data on R&D spending by non-U.S. G-7 countries is also provided in the OECD database: \$24.6 billion for Canada, \$54.0 billion for France, \$94.8 billion for Germany, \$26.1 billion for Italy, \$153.5 billion for Japan, and \$39.0 billion for the UK.

times, restrictive contract terms, and onerous regulations associated with government contracting. The market for small arms illustrates this point well. In the United States alone, small arms companies produce more handguns in one month than the Army will buy in the next 25 years.³⁵

In 2005, the U.S. military set out to choose a new handgun to replace the decades-old M9 Beretta pistol.³⁶ After 10 years of developing and rewriting requirements, the Army issued a request for proposal (RFP) to industry in the fall of 2015. Even after 10 years, the Army did not identify key requirements, such as caliber or the specific ammunition for the new handgun.³⁷ The Army's first draft RFP exceeded 350 pages, not counting 23 attachments.³⁸ The paperwork alone added an estimated \$15 million or 20 percent to procurement cost.³⁹ Some in industry balked at the process and complexity for a simple handgun purchase. For

example, Ruger, a leading handgun manufacturer, chose not to compete due to the administrative costs to comply with the requirements.⁴⁰

THE GROWING GLOBAL MARKETPLACE

DoD increasingly relies on companies operating in a fluid global economic ecosystem, marked by mergers, acquisitions, spinoffs, joint ventures, outsourcing, and combinations. Boutique firms, with both corporate and government clients, may bid on defense contracts one year and not the next.⁴¹ Boeing and Lockheed Martin competed fiercely on the F-35 Joint Strike Fighter program, yet partnered on the Long Range Strike-Bomber program, and Bell Helicopter partnered with Boeing on the V-22 Osprey helicopter, yet competed against Boeing for the Army's Future Vertical Lift program of helicopter modernization.⁴²

³⁵ United States Department of Justice, Bureau of Alcohol, Tobacco, Firearms, and Explosives, *Firearms Commerce in the United States: Annual Statistical Update 2014*, accessed April 24, 2017, <https://www.atf.gov/file/3336/download>.

³⁶ Commerce Business Daily, *Joint Combat Pistol Solicitation*, accessed April 24, 2017, <http://www.cbd-net.com/index.php/search/show/893436>. Loren Data's FBO Daily, Joint Combat Pistol (JPC) System, accessed April 24, 2017, <http://www.fbodaily.com/archive/2005/12-December/04-Dec-2005/FBO-00943889.htm>. Federal Business Opportunities, Joint Combat Pistol (JPC) System, accessed April 24, 2017, https://www.fbo.gov/index?s=opportunity&mode=form&id=9f67b094636a104ae0bd1068f6ca672a&tab=core&_cview=1.

³⁷ Rowan Scarborough, "Army Misfires on Pistol Upgrade Effort, Confuses Gun Makers with Complex Requirements," *Washington Times*, October 28, 2015, <http://www.washingtontimes.com/news/2015/oct/28/army-misfires-on-pistol-upgrade-effort-confuses-gu/>.

³⁸ Ibid. Former Secretary of Defense Robert Gates, when asked about the difficulty in buying a new handgun, commented how senior leaders of the military should be asked, "why has it taken you guys 10 years? This is absurd.... Why is it a 350-page RFP? It's a handgun, for God's sake." *The Future of Defense Reform: Hearings before the U.S. Senate Committee on Armed Services, Session 1*, 114th Cong., (2015), accessed <https://www.gpo.gov/fdsys/pkg/CHRG-114shrg20923/pdf/CHRG-114shrg20923.pdf>.

³⁹ Rowan Scarborough, "Army Misfires on Pistol Upgrade Effort, Confuses Gun Makers with Complex Requirements," *Washington Times*, October 28, 2015, <http://www.washingtontimes.com/news/2015/oct/28/army-misfires-on-pistol-upgrade-effort-confuses-gu/>.

⁴⁰ Jahner, Kyle, "McCain slams Army's wasteful plan for a new service pistol," *Army Times*, October 29, 2015, <https://www.armytimes.com/story/military/careers/army/2015/10/29/mccain-army-trade-blows-over-handgun-replacement-program/74834518/>.

⁴¹ Ben Fitzgerald, Alexandra Sander, and Jacqueline Parziale, Center for a New American Security, *Future Foundry: A New Strategic Approach to Military-Technical Advantage*, accessed April 17, 2017, <https://s3.amazonaws.com/files.cnas.org/documents/CNAS-Report-FutureFoundry-final.pdf>.

⁴² Alex Lockie, "Boeing Smells Blood in the Water and is Coming for Lockheed Martin's F-35 Business," *Business Insider*, March 31, 2017, <http://www.businessinsider.com/boeing-vs-lockheed-martin-f-18-advanced-super-hornet-f-35c-navy-2017-3>. Andrew Clevenger and Lara Seligman, "Boeing Protests Northrop's Long-Range Strike Bomber Contract," *Defense News*, November 6, 2015, <http://www.defensenews.com/story/defense/2015/11/08/boeing-protests-northrops-long-range-strike-bomber-contract/75225206/>. Ryan Mass, "Bell-Boeing Contracted for V-22 Sustainment and Upgrade Planning," *UPI*, February 15, 2017, <http://www.upi.com/Defense-News/2017/02/15/Bell-Boeing-contracted-for-V-22-sustainment-and-upgrade-planning/6321487191850/> and Jen Judson, "Joint Multi-

A number of these companies, and their employees, are not dependent on DoD for future revenue or growth. They flow in and out of the defense-contracting world at multiple tiers and in different combinations. This fluid ecosystem of companies is the hallmark of the new globalized economy in which the defense industrial base is not, in fact, a stable base of defense-oriented industrial companies. It is instead a constantly shifting group of companies that align and realign for temporary periods to deliver integrated capabilities.⁴³

During the wars in Iraq and Afghanistan, DoD relied extensively on contractors to provide such critical wartime support as force protection, fuel delivery and storage, transportation of troops and equipment, translation services, and construction and maintenance of facilities. Contractors performing these vital services, most of whom were foreign, sometimes outnumbered the U.S. military personnel in Iraq and Afghanistan.⁴⁴

The globalized nature of the current defense industry also extends to manufacturing and supporting weapons systems. The F-35 Joint Strike Fighter, the U.S. military's latest fifth-generation fighter, is being built in Texas,

Japan, and Italy.⁴⁵ The F-35 supply chain consists of more than 300,000 parts manufactured by 1,400 suppliers around the world.⁴⁶ Among the nations that produce F-35 parts, eight foreign nations have at least 10 major suppliers for F-35 production.⁴⁷ The F-35 is not an isolated example. Today, nearly every major U.S. military weapon system contains foreign parts.⁴⁸

The global and integrated nature of the dynamic defense marketplace, in which DoD now does business, necessitates that DoD no longer rely solely on purely U.S.-based companies, or unilaterally dictate to, or control decisions by, its suppliers. Consider the example of Sikorsky Aircraft Corporation, which manufactures the military's UH-60 helicopter (and many of its derivatives and modified aircraft), as well as helicopters to transport the president of the United States. Sikorsky had been a long-time subsidiary to United Technologies Corporation (UTC) until 2015 when UTC, at the time one of the top 10 defense companies in the world,⁴⁹ sold Sikorsky, a helicopter manufacturer.⁵⁰ The \$9 billion purchase of Sikorsky by Lockheed Martin required regulatory approval from multiple national and international jurisdictions

Role Demonstrators in Race to Starting Line," *Defense News*, April 28, 2016, <http://www.defensenews.com/story/defense/show-daily/aaaa/2016/04/28/joint-multi-role-demonstrators-race-starting-line/83611932/>.

⁴³ Ben FitzGerald, Alexandra Sander, and Jacqueline Parziale, Center for a New American Security, *Future Foundry: A New Strategic Approach to Military-Technical Advantage*, accessed April 17, 2017, <https://s3.amazonaws.com/files.cnas.org/documents/CNAS-Report-FutureFoundry-final.pdf>.

⁴⁴ Commission on Wartime Contracting in Iraq and Afghanistan, *Transforming Wartime Contracting: Controlling Costs, Reducing Risks*, accessed April 18, 2017, https://cybercemetery.unt.edu/archive/cwc/20110929213820/http://www.wartimecontracting.gov/docs/CWC_FinalReport-lowres.pdf.

⁴⁵ "Building the F-35: Combining Teamwork and Technology," Lockheed Martin, accessed April 18, 2017, <https://www.f35.com/about/life-cycle/production>.

⁴⁶ Ibid.

⁴⁷ Lockheed Martin Government Relations, email to Section 809 Panel, March 11, 2017.

⁴⁸ Jacques Gansler, "Acquisition Challenges to Provide More For Less," AFCEA Defense Acquisition Modernization Symposium (August 5, 2014), accessed April 18, 2017, <http://www.afcea.org/events/modernization/14/documents/GanslerAcquisitionChanges.pdf>.

⁴⁹ "Top 100 for 2016," *Defense News*, accessed April 18, 2017, <http://people.defensenews.com/top-100/>.

⁵⁰ Lewis Krauskopf, "With Sikorsky Sale Done, United Technologies Eyes Acquisitions," *Reuters*, July 20, 2015, <http://www.reuters.com/article/sikorsky-ma-unitedtechnologies-idUSL1N10019H20150720>.

including Japan, South Korea, and even China.⁵¹

NEW RELATIONSHIPS

To maintain technological dominance, DoD must expand beyond the traditional defense industrial base and its own internal R&D efforts. The consolidating defense industrial base, DoD's limited influence in the commercial marketplace and in R&D, and the changes to the global economy require DoD to actively tap the commercial marketplace. Leveraging this marketplace, however, is not easy when, in many instances, DoD needs the commercial market more than the commercial market needs DoD. According to Paul Francis, a former managing director at Government Accountability Office (GAO),⁵²

Commercial investment in R&D now dwarfs DoD's by several factors. DoD still needs to sponsor defense-unique R&D. But the real gain will be the extent to which it can take advantage of the vast R&D going on in the private sector. The answer is not to spend our way out of it. DOD has to find a way to adapt to new relationships with the commercial sector.

DoD and Congress have not fully adjusted to this reality. Too often DoD acts as if it can dictate terms to industry, driving many companies to opt out of the defense market.⁵³ Company representatives have told the Section 809 Panel that their organizations have decided not to do business with DoD because of overly complex federal laws and DoD-specific regulations. DoD should adapt its acquisition processes—which are conditioned by statute, regulations, executive orders, directives, policies, and procedures—to industry approaches, rather than expecting companies to accommodate DoD.

⁵¹ Andrea Shalal, "Lockheed Says U.S. Approves Its \$9 Billion Takeover of Sikorsky," Reuters, September 24, 2015, <http://www.reuters.com/article/us-sikorsky-m-a-lockheed-idUSKCN0RO1FN20150924>.

⁵² Paul Francis, former managing director, Government Accountability Office, email to Section 809 Panel, April 6, 2017.

⁵³ Ben FitzGerald, Alexandra Sander, and Jacqueline Parziale, Center for a New American Security, *Future Foundry: A New Strategic Approach to Military-Technical Advantage*, accessed April 17, 2017, <https://s3.amazonaws.com/files.cnas.org/documents/CNAS-Report-FutureFoundry-final.pdf>. Andrew Hunter, Center for Strategic and International Studies, *Defense Acquisition Trends 2015: Acquisition in an Era of Budget Uncertainty*, accessed April 18, 2017, <https://defense360.csis.org/acquisition-and-beyond/>.

ALLOCATE RESOURCES
EFFECTIVELY

The U.S. military faces multiple threats posed by increasingly capable adversaries and uncertain domains of warfare. It also contends with constrained defense budgets.⁵⁴ DoD cannot afford to be tied to processes that waste limited resources that could be invested in capabilities, readiness, force structure, or other requirements.⁵⁵ To more effectively and efficiently allocate resources, DoD must better align and coordinate how it budgets, sets requirements, and acquires what it needs, to include not only major weapons systems, but also the services and low-dollar items that make up more than half of DoD contract spending.⁵⁶

EROSION OF U.S. DEFENSE SPENDING-ADVANTAGE

The United States has the largest military budget in the world, but other countries are closing the gap. From 2000 to 2015, adjusted for inflation, DoD spending increased about 40 percent.⁵⁷ During that period, the military budget of China reportedly quintupled.⁵⁸

In the same period, Russia and Saudi Arabia (which have military budgets on par with one another) both about tripled their military spending.⁵⁹ According to SIPRI's data (all in 2014 USD), Russian military spending increased from \$29 billion in 2000 to \$91 billion in 2015—more than a 200 percent increase. Saudi

⁵⁴ John McCain, *Restoring American Power: Recommendations for FY 2018-2022 Defense Budget*, accessed January 27, 2017, https://www.mccain.senate.gov/public/_cache/files/25bff0ec-481e-466a-843f-68ba5619e6d8/restoring-american-power-7.pdf.

⁵⁵ Office of the Under Secretary of Defense (Comptroller)/Chief Financial Officer, *United States Department of Defense Fiscal Year 2015 Budget Request Overview*, March 2014, accessed April 19, 2017, http://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2015/fy2015_Budget_Request_Overview_Book.pdf. John McCain, *America's Most Wasted: Indefensible \$13 Billion Spent on Incapable Ships, Bad-Behaving Pentagon Employees, African Rats & More*, accessed April 19, 2017, https://www.mccain.senate.gov/public/_cache/files/9f435670-9a18-4362-9ff0-294540a13cb7/americas-most-wasted-indefensible-12-19-16.pdf.

⁵⁶ Based on Section 809 Panel analysis of FY 2016 Federal Procurement Data System data, using product and service code definitions: As of April 21, 2017, service and R&D contract obligations for FY 2016 were reportedly \$149.6 billion, or 50.2 percent of all contract obligations. "Federal Procurement Data System – Next Generation," General Services Administration, accessed April 21, 2017, <https://www.fpds.gov>. General Services Administration, *Federal Procurement Data System Product and Service Codes Manual, August 2015 Edition*, accessed April 21, 2017, https://www.fpds.gov/downloads/top_requests/PSC_Manual_FY2016_Oct1_2015.pdf. Also see Congressional Research Service, "Defense Acquisitions: How and Where DOD Spends and Reports Its Contracting Dollars," accessed April 21, 2017, <https://fas.org/sgp/crs/natsec/R44010.pdf>, and Center for Strategic and International Studies, *Defense Acquisition Trends, 2016: The End of the Contracting Drawdown*, accessed April 21, 2017, https://csis-prod.s3.amazonaws.com/s3fs-public/publication/170309_Ellman_AcquisitionTrends2016_Web.pdf?EOHx.4yzTSKOdaa9FMLs3KStHUSrIO5Q.

⁵⁷ National defense outlays for FY2015, as calculated by OMB, were \$590 billion (\$607 billion in FY2017 USD). Outlays for FY2000 were \$294 billion (\$434 billion in FY2017 USD). See national defense outlays at "Office of Management and Budget Historical Tables, Table 3.2—Outlays by Function and Subfunction: 1962–2021," National Archives and Records Administration, accessed March 3, 2017, <https://obamawhitehouse.archives.gov/omb/budget/Historicals>. See inflation adjustments at Department of Defense, *National Defense Budget Estimates for FY2017, Table 5-1: Department of Defense and Selected Economy-Wide Indices* ("Total Department of Defense" deflators used for calculations), accessed March 3, 2017, <http://comptroller.defense.gov/Budget-Materials>.

⁵⁸ "SIPRI Military Expenditure Database," Stockholm International Peace Research Institute, accessed March 3, 2017, <https://www.sipri.org/databases/milex>. Officially, the Chinese military spending figure for 2015 (including both central government and local governments) was about \$140 billion. The Department of Defense's 2016 report on China-related military developments provides an estimated figure of \$180 billion, and an estimate from the Stockholm International Peace Research Institute (SIPRI) puts the figure at \$214 billion. The 400 percent increase between 2000 to 2015 is based on SIPRI's reported figures (all in constant 2014 USD) of \$43 billion in 2000 and \$214 billion in 2015—an increase of 396 percent.

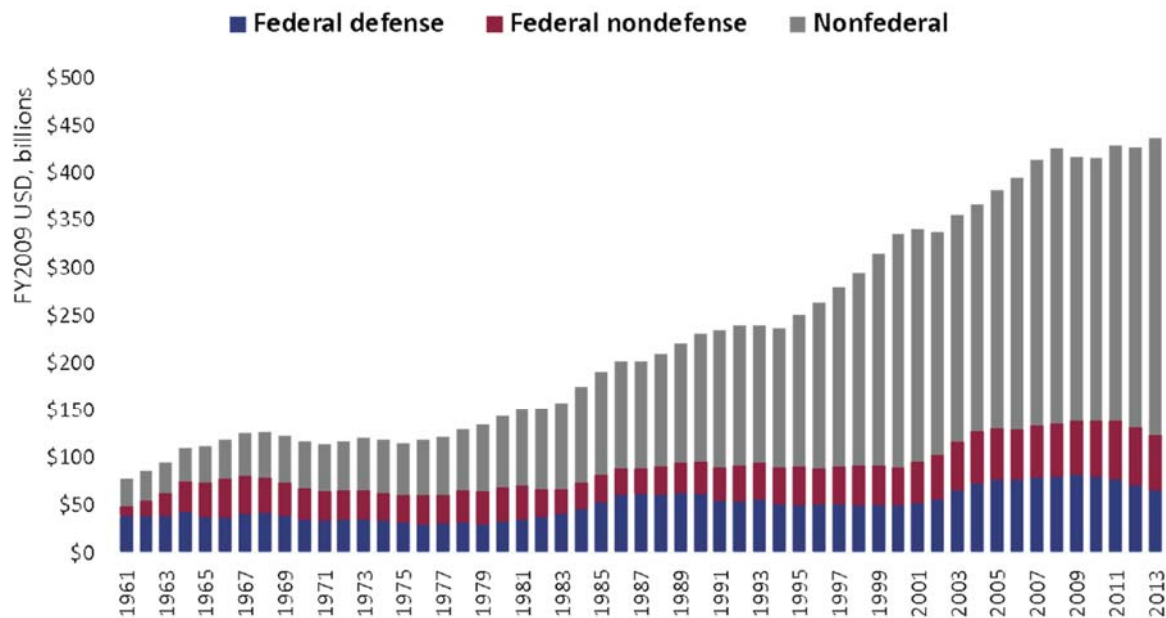
⁵⁹ "SIPRI Military Expenditure Database," Stockholm International Peace Research Institute, accessed March 3, 2017, <https://www.sipri.org/databases/milex>.

spending increased from \$30 billion to \$85 billion—about a 180 percent increase.⁶⁰

Trends within the U.S. defense budget are squeezing funding available for acquisition, R&D, and force structure.⁶¹ In its FY 2017 budget submission, DoD emphasized efforts to protect the investments in research, development, test, and evaluation (RDT&E) to ensure the U.S. maintains its technological edge.⁶² The Center for Strategic and Budgetary Assessments (CSBA) projects, however, that

over the course of the Five Year Defense Plan (FYDP), there will be a 7.1 percent decrease of RDT&E spending from FY 2017 to FY 2021.⁶³

Although DoD R&D spending growth is slowing, R&D investments by private industry and foreign nations are increasing substantially. Between 1960 and 2013 defense spending on R&D doubled (adjusted for inflation), yet nondefense U.S. government R&D spending



Source: Federal spending from Office of Management and Budget, Table 9.7—Summary of Outlays for the Conduct of Research and Development: 1949–2017, <https://obamawhitehouse.archives.gov/omb/budget/Historicals>. Nonfederal spending based on “All Performers” R&D spending minus “Federal Total” R&D spending, from National Science Board, Science & Engineering Indicators 2016, Appendix Table 4-6, <https://www.nsf.gov/statistics/2016/nsb20161/uploads/1/7/at04-06.pdf>.

Figure 1. U.S. R&D Spending – 1961 to 2013 (FY2009 USD)

⁶⁰ Ibid.

⁶¹ Department of Defense, *Defense Budget Priorities and Choices*, Fiscal Year 2014, Accessed April 24, 2017, <http://archive.defense.gov/pubs/DefenseBudgetPrioritiesChoicesFiscalYear2014.pdf>.

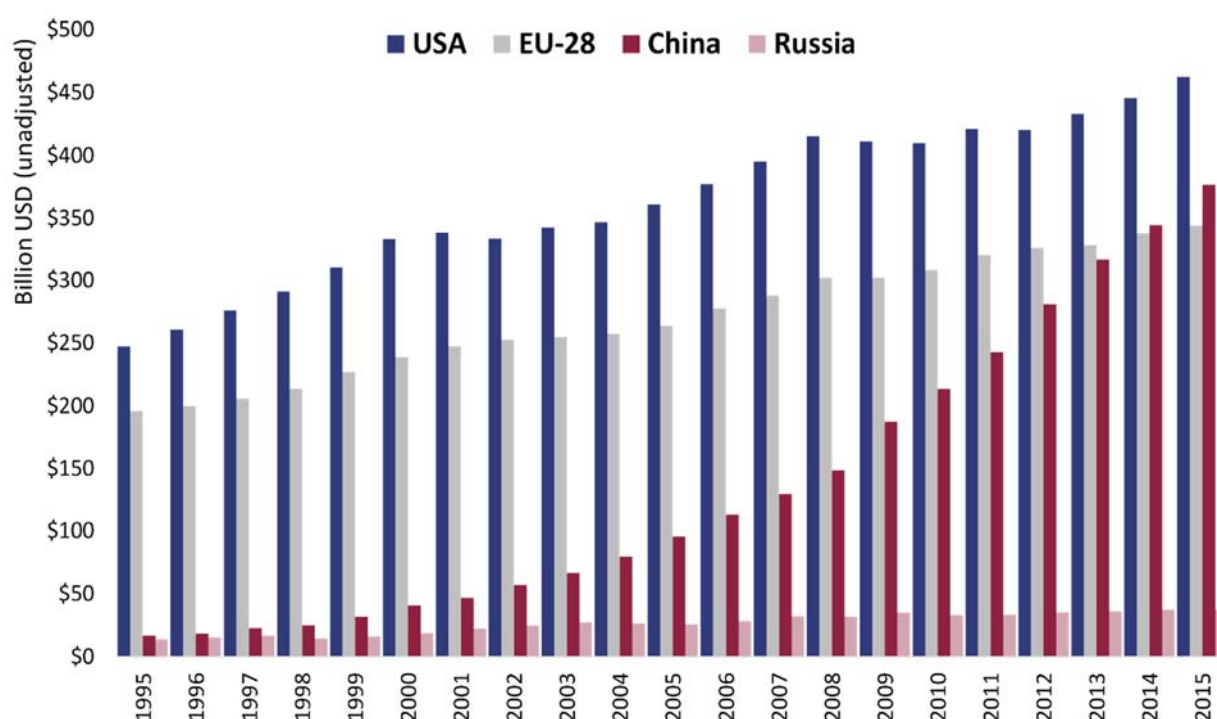
⁶² Department of Defense, *Defense Budget Overview February 2016*, accessed April 24, 2017, http://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2017/FY2017_Budget_Request_Overview_Book.pdf.

⁶³ Katherine Blakely, *Analysis of the FY2017 Defense Budget and Trends in Defense Spending*, Center for Strategic and Budgetary Assessments, accessed April 24, 2017, http://csbaonline.org/uploads/documents/CSBA6196-2017-Budget-Analysis_PRINT.pdf, 34.

increased more than sevenfold.⁶⁴ This combined federal spending has been dwarfed by an elevenfold increase in all other U.S. spending on R&D (which includes the private sector, universities, and nonprofit organizations).⁶⁵

U.S. R&D investment growth rates have fallen behind those of peer competitors. China has increased its R&D expenditures at a rapid pace to become the second-largest funder of R&D

among nations.⁶⁶ Between 1995 and 2015, U.S. annual R&D investment increased in unadjusted-dollar terms by an estimated 87 percent.⁶⁷ During the same period, R&D investment (both privately and publicly funded) increased in Russia by about 160 percent and in China by more than 2,000 percent.⁶⁸ The United States remains the world's single largest funder of R&D, spending 23 percent more than the next highest funder



Source: Chart generated using information from "Gross domestic spending on R&D," Organisation for Economic Cooperation and Development, <https://data.oecd.org/rd/gross-domestic-spending-on-r-d.htm>, accessed March 13, 2017.

Figure 2. Gross Domestic Expenditures on R&D – 1995 to 2015

⁶⁴ "Office of Management and Budget Historical Table 9.7, "Summary of Outlays for the Conduct of Research and Development: 1949–2017," National Archives and Records Administration, accessed April 24, 2017, <https://obamawhitehouse.archives.gov/omb/budget/Historicals>.

⁶⁵ Nonfederal spending data from National Science Foundation, *National Science Board, Science & Engineering Indicators 2016, Appendix Table 4-6: Science & Engineering Indicators 2016*, accessed April 24, 2017, <https://www.nsf.gov/statistics/2016/nsb20161/uploads/1/7/at04-06.pdf>.

⁶⁶ "Gross Domestic Spending on R&D," Organisation for Economic Cooperation and Development, accessed April 17, 2017, <https://data.oecd.org/rd/gross-domestic-spending-on-r-d.htm>.

⁶⁷ Ibid.

⁶⁸ Ibid. For similar conclusions, see "Science & Engineering Statistics 2016," National Science Foundation, accessed April 17, 2017, <https://www.nsf.gov/statistics/2016/nsb20161/#/data>.

(China) in 2015; however, the Organisation for Economic Cooperation and Development (OECD) has predicted China's R&D spending will exceed that of the United States around 2019.⁶⁹

DoD cannot rely on outspending competitors and industry in R&D. Other countries are closing the technology gap by acquiring and adapting products available in world markets, conducting industrial espionage and intellectual property theft, and pursuing focused R&D. If DoD is to maintain a technological and readiness edge, it must more efficiently and effectively deploy its resources. Every dollar counts.

EFFECTIVE EXPENDITURES

DoD could garner more from its funds if it functioned in a flexible system that allowed more effective resource allocation. An opportunity cost arises each time DoD makes a spending choice that could have been invested in developing other capabilities, delivering more units, or funding other critical requirements. In some cases, DoD spent billions

on major programs it never fielded.⁷⁰ One example is the Air Force's Expeditionary Combat Support System (ECSS) information technology (IT) system, for which a billion dollars were spent, with no useful results, before the program was cancelled.⁷¹ The issue is not cancelling a program. Poor programs may need to be cancelled, but in such cases, the decision should happen earlier and before spending so much money.

Requirements, budgeting, and acquisition strategies that are not aligned and coordinated can cost billions of dollars. The Army is planning to acquire 180 Armored Multi-Purpose Vehicles, 45 M1 Abrams and 92 M2 Bradleys annually for the Armored Brigade Combat Team (ABCT) program over the next few decades.⁷² Under current contractual production rates, the combined annual baseline per-unit cost within the ABCT program is \$19.5 million. If the Army acquired vehicles at the rate of two brigades annually, however, the production efficiencies would save approximately \$11 billion during the life of the program.⁷³

⁶⁹ "China headed to overtake EU, US in science & technology spending, OECD says," Organisation for Economic Co-operation and Development, accessed February 24, 2017, <http://www.oecd.org/newsroom/china-headed-to-overtake-eu-us-in-science-technology-spending.htm>. Organisation for Economic Co-operation and Development, *OECD Science, Technology, and Industry Outlook 2014*, accessed April 24, 2017, http://www.keepeek.com/Digital-Asset-Management/oecd/science-and-technology/oecd-science-technology-and-industry-outlook-2014_sti_outlook-2014-en#page4.

⁷⁰ Patrick Clowney, Jason Dever, and Steven Stuban, "Department of Defense Acquisition Program Terminations: Analysis of 11 Program Management Factors," *Defense Acquisition Research Journal*, 23, no. 3 (2016): 298-328.

⁷¹ The Air Force's Expeditionary Combat Support System (ECSS), a program to develop an integrated enterprise resource planning solution to manage global logistics, was cancelled after spending \$1.1 billion over 8 years (from 2004 to 2012), without ever being deployed. Chris Kanaracus, "Air Force scraps massive ERP project after racking up \$1B in costs," *Computerworld*, Nov 14, 2012, accessed April 24, 2017, <http://www.computerworld.com/article/2493041/it-careers/air-force-scraps-massive-erp-project-after-racking-up--1b-in-costs.html>. According to an Army report, between 1996 and 2010, the Army directed more than \$1 billion each year to programs that were eventually canceled. For a 6-year period (2004-2010) 35-42 percent of the Army's annual development test and evaluation funding was spent on canceled programs; 2010 Army Acquisition Review, *Army Strong: Equipped, Trained, and Ready: Final Report of the 2010 Army Acquisition Review*, accessed April 24, 2017, <http://breakingdefense.sites.breakingmedia.com/wp-content/uploads/sites/3/2011/07/213465.pdf>.

⁷² U.S. Army Program Executive Office – Ground Combat Systems, email to Section 809 Panel, March 29, 2017.

⁷³ Ibid. Under current program guidelines, the annual baseline costs for the ABCT program are \$3.5 million for AMPVs, \$13 million for M1s and about \$3 million for Bradleys. Under a two-brigade purchasing system, annual baseline costs would decline for each vehicle to

When alignment and coordination occur, DoD may see cost savings. For example, the Joint Light Tactical Vehicle (JLTV) is a joint Army and Marine Corps program that provides vehicles capable of performing multiple mission roles. According to the Army, the program's innovative acquisition approach resulted in a total cost savings of \$11.3 billion and cost avoidance of \$17 billion.⁷⁴ The JLTV acquisition strategy was built around

- consistent engagement with industry, other potential DoD customers (e.g., Air Force, Navy, Special Operations Command), and potential foreign military sales customers;
- a source selection approach that incorporated a tiered evaluation of proposals that allowed for negotiations based on potential contractors' ability to meet key systems attributes; and
- an evolutionary process that allowed for timely delivery as capabilities matured.⁷⁵

This flexible approach enabled DoD to be a more sophisticated buyer and to gain more capabilities within budget constraints.

CASE STUDY: Saving Money by Updating Legislation

Fuel Storage

By law,* DoD can award contracts for "storage facilities for, or the storage, handling, or distribution of, liquid fuels or natural gas" for a maximum of 5 years, with option years of no more than 20 years in total. The 20-year contract life was originally established in 1956, when storage technology and environmental requirements were different. Modern fuel storage infrastructure is capable of operating for up to 30 years without any operational interruption.♦

The 20-year contract limit in 10 U.S.C. § 2922 no longer reflects the reality of the fuel infrastructure system. Extending the maximum Section 2922 timeframe from 20 years to 30 years for both new and existing contracts would address this problem in a more cost-effective manner. This approach could achieve substantial savings in the near term.■ Congress should extend the maximum length of Section 2922 fuel storage contracts to 30 years and authorize the 30-year maximum to be applied to existing contracts.

* Liquid Fuels and Natural Gas: Contracts for Storage, Handling, or Distribution, 10 U.S.C. § 2922.

♦ Regulatory Recommendation: Update to DoD 4140.25-M, Volume II, "DoD Management of Bulk Petroleum Products, Natural Gas, and Coal," Chapter 8: Management of Storage and Distribution Facilities, June 22, 1994, accessed April 27, 2017, <http://www.dtic.mil/whs/directives/corres/pdf/414025-m-vol2-chapter8.pdf>.

■ Defense Logistics Agency Energy, response to questions posed by Section 809 Panel, March 16, 2017.

\$3.2 million for AMPVs, \$8.8 million for M1s and about \$1.9 million for Bradleys. Acquisition targets are currently presumed to be 2,897 AMPVs, 1,700 M1s and 2,668 Bradleys during the life of the ABCT program.

⁷⁴ "Dollars & Sense," *Army AL&T*, 117, April-June 2012, 117, accessed April 17, 2017, http://asc.army.mil/web/wp-content/uploads/2013/04/army_al_t_magazine_Final_April-June2012.pdf.

⁷⁵ Joint Program Office Joint Light Tactical Vehicle, *Joint Light Tactical Vehicle (JLTV) Acquisition Strategy Report for Milestone C, Version V5.AS*, accessed April 17, 2017, <https://www.dodtechipedia.mil> (requires DoD Common Access Card login).

SIMPLIFY ACQUISITION

Some of the regulations and statutes governing defense acquisition are outdated or no longer applicable. Others resulted from past acquisition reforms intended to improve the system. Successive waves of acquisition reform have added rules and regulations that produced the unintended consequence of adding to the existing mass of regulations and statutes.⁷⁶ The complexity of the system of regulations adds cost, and potentially creates a barrier to entry for firms contemplating engaging in business with DoD.⁷⁷ Some industry representatives have stated that amending or repealing such regulations and statutes could save money, improve the system, and expand the number of companies willing to do business with the federal government.⁷⁸

UNNECESSARILY COMPLEX SYSTEM

Federal contracting is governed by the Federal Acquisition Regulation (FAR) and, specific to defense, the Defense Federal Acquisition Regulation Supplement (DFARS). These requirements govern such issues as

- how DoD solicits, negotiates, awards, and administers contracts;

- what costs DoD will reimburse and how contractors must account for those costs to be reimbursed;
- the type of accounting systems used by contractors; and
- how contractors must comply with such rules as maintaining a drug-free workplace, and other public policy goals.⁷⁹

Many have posited that the sheer number and complexity of the statutes, regulations, executive orders, directives, policies, and procedures impede the acquisition process, reducing speed and efficiency by adding time, complexity, and cost to the process.⁸⁰

The Section 800 Panel⁸¹ sought to address such inefficiencies, with goals of reducing administrative costs, improving opportunity for small businesses, promoting efficiencies and economy in contracting, and avoiding unnecessary burdens for agencies and contractors for acquiring small-dollar requirements.⁸² One of the Section 800 Panel's recommendations increased the threshold for Simplified Acquisition Procedures (SAP). As the Simplified Acquisition Threshold continued to increase, the procurements that could use SAP increased in complexity.

⁷⁶ Business Executives for National Security, *Getting to Best: Reforming the Defense Acquisition Enterprise, A Business Imperative for Change from the Task Force on Defense Acquisition Law and Oversight*, July 2009, accessed April 17, 2017, <https://www.bens.org/document.doc?id=44>.

⁷⁷ Office of the Under Secretary of Defense, Acquisition, Technology, and Logistics, *Eliminating Requirements Imposed on Industry Where Costs Exceed Benefits*, Washington, DC, 2015, accessed April 17, 2017, <http://www.acq.osd.mil/fo/docs/Eliminating-Requirements-Imposed-on-Industry-Study-Report-2015.pdf>.

⁷⁸ Brian O'Keefe, "The Red Tape Conundrum: How the Wrong Kind of Regulation Is Strangling Business—And What To Do About It," *Fortune*, November 1, 2016, <http://fortune.com/red-tape-business-regulations/>.

⁷⁹ *Federal Government Contract Overview*, Find Law for Legal Professionals, accessed April 17, 2017, <http://corporate.findlaw.com/law-library/federal-government-contract-overview.html>.

⁸⁰ William Lucyshyn, "The New Acquisition Reform Effort: Back to the Future," *Defense News*, December 6, 2016, accessed April 27, 2017, <http://www.defensenews.com/articles/the-new-acquisition-reform-effort-back-to-the-future>.

⁸¹ The Section 800 Panel, formally known as the DOD Acquisition Law Advisory Panel, was established pursuant to Section 800 of the 1991 National Defense Authorization Act.

⁸² DOD Acquisition Law Advisory Panel, *Streamlining Defense Acquisition Law, Executive, Summary: Report of the DOD Acquisition Law Advisory Panel*, accessed April 24, 2017, <http://www.dtic.mil/get-tr-doc/pdf?AD=ADA264919>.

According to the FAR Clause Matrix, 431 clauses may apply to SAP contract solicitations—more than time and materials contracts, which are generally considered more risky to the government.⁸³ Contracting officers must review and determine the applicability of 344 *required if applicable* and 76 *optional* clauses based on their understanding of the requirements. As one contracting officer told the Section 809 Panel, it is time to “put ‘simplified’ back in simplified procurements.”⁸⁴

Burdensome document requirements slow the system and create hurdles for program management offices. For example, before getting to the final RFP for information technology services, buyers must complete 12 mandatory documents, requiring hundreds of pages of research and many hours of contractor consultation.⁸⁵

Table 1. FAR Part 52.301 FAR Matrix – Solicitation Provisions and Contract Clauses by Principal Type and Purpose of Contract

Principal Type and Purpose of Contract	Required	Req. if Applicable	Optional	Total
Indefinite Delivery	17	447	35	499
Fixed-Price Supply	21	418	42	481
Leasing of Motor Vehicles	18	404	43	465
Fixed-Price Service	19	384	31	434
Simplified Acquisition Procedures (excl. Micro-Purchase)	11	344	76	431
Fixed-Price Construction	22	369	30	421
Transportation	16	360	22	398
Communication Services	15	348	23	386
Dismantling, Demolition, or Removal of Improvements	17	344	22	383
Time and Material/Labor Hours	19	336	22	377
Cost-Reimbursement Supply	24	323	29	376
Fixed-Price Research and Development	16	327	32	375
Cost Reimbursement Service	22	330	23	375
Cost Reimbursement Construction	26	318	22	366
Cost Reimbursement Research and Development	20	318	23	361
Architect-Engineering	15	297	22	334
Facilities	16	296	22	334
Utility Services	23	273	22	318
Commercial Items	13	116	9	138

Source: “FAR 52.301, Solicitation Provisions and Contract Clauses,” https://www.acquisition.gov/far/html/52_301Matrix.html.

⁸³ Federal Acquisition Regulation 52.301, “Solicitation provisions and contract clauses (Matrix),” accessed April 17, 2017, https://www.acquisition.gov/far/html/52_301Matrix.html.

⁸⁴ Army contracting officers, round table conversation with Section 809 Panel professional staff, November 14, 2016.

⁸⁵ U. S. Army, “Acquisition Strategy Schedule Analysis and Lessons Learned,” provided to Section 809 Panel professional staff via email, January 18, 2017.

MISSION MUST COME FIRST

When a commercial company is buying goods and services for its business, it focuses the deal on *what* it is buying. When DoD buys, it must focus not only on *what*, but also *how* it will buy goods and services and *how* the seller will operate.

A number of statutes and regulations promote public policy goals. Some of the public policies promoted in the FAR or defense-specific regulations are intended to support the mission of DoD. Examples of such regulations include those aimed at preserving a domestic supply of critical defense articles and those aimed at promoting DoD's access to innovative technologies developed by small businesses.

Other public policy requirements do not directly support DoD's mission, but focus on how contractors operate. Taken individually, these statutes and regulations promote laudable public policies, while imposing marginal cost. Taken together, however, these requirements add substantial cost, as well as complexity, bureaucracy, and time, to the acquisition process—cost that DoD may no longer be able to afford when weighed against the public benefits.

Public policy requirements must be assessed to determine whether the costs, including time, outweigh the benefits to industry, government, and, in some cases, the regulations' intended beneficiaries. To support such an effort, the FAR should be amended to emphasize that the primary goal of the acquisition process is to support the agency mission, and that promoting public policy objectives is a secondary goal of the process.

CASE STUDY: Simplifying Acquisition

Recycled Paper

The 1998 NDAA put in place the 30 percent postconsumer-waste requirement for DoD. The FY 2017 NDAA repealed the requirement in statute, yet Executive Order (EO) 13693* and the related FAR parts and clause still stand. These regulations constitute an unnecessary contract clause requirement. Paper-use reduction has been achieved, with paper in landfills having decreased by 50 percent since 2003,[◆] through administrative changes such as increased use of electronic documentation, electronic recordkeeping, and mandated use of double-sided copying.[■] Executive Order 13693 should be revised. The guidance at FAR 4.3, Paper Documents, FAR 11.303, Special Requirements for Printing and Writing Paper, and the clause at FAR 52.204-4, Printed or Copied Double-Sided on Postconsumer Fiber Content Paper, should be changed, which would eliminate an unnecessary contract clause requirement.

* Executive Order 13693, Sec.3(i)(v), March 19, 2015.

◆ "Paper Recovery & Landfill," Paper Recycles, accessed April 24, 2017, <http://www.paperrecycles.org/statistics/paper-recovery-landfill>.

■ According to the National Archives website page "Why Federal Agencies Need to Move Towards Electronic Recordkeeping" at <https://www.archives.gov/records-mgmt/policy/prod1afn.html>, electronic recordkeeping (ERK) "provides long-term cost savings (reducing the need for parallel recordkeeping systems, i.e., paper and electronic). While there are costs associated with implementing and maintaining electronic recordkeeping, ERK can reduce or avoid costs for many areas associated with paper filing, including the costs for storage space, materials (e.g., paper, folders, cabinets), and labor."

CASE STUDY: Simplifying Acquisition

Texting While Driving

On October 1, 2009, President Barack Obama issued EO 13513, Federal Leadership on Reducing Text Messaging While Driving, which includes language to encourage contractors to employ practices and policies to ban texting while driving and resulted in the addition to the FAR of Subpart 23.11, Encouraging Contractor Policies to Ban Text Messaging While Driving. FAR Clause 52.223-18, Encouraging Contractor Policies to Ban Text Messaging While Driving, also includes this language, which must be in all solicitations and contracts and in all subcontracts exceeding the micro-purchase threshold. This requirement is no longer needed due to changes in state laws and DoD installation rules. DoD has issued directives to prohibit the use of cell phones while driving (with the exception of hands-free use) on all military installations.* Installation rules and regulations governing cell phone use are posted at installation entry points.♦ Furthermore, 46 states, D.C., Puerto Rico, Guam, and the U.S. Virgin Islands ban text messaging for all drivers.■ The FAR language should be revised to remove the contract clause requirement.

* DoD Traffic Safety Program, DODI 6055.04 (2013), enclosure 3 paragraph 6(d)(2).

♦ Insurance Institute for Highway Safety Highway Loss Data Institute, Cellphones and Texting, accessed April 18, 2017, <http://www.iihs.org/iihs/topics/laws/cellphonelaws>.

■ "DoD to Restrict Cell Phone Use on Military Bases," Department of Defense, accessed April 18, 2017, <http://archive.defense.gov/news/newsarticle.aspx?id=14689>.

○ Federal Acquisition Regulation 42.302(a)(39) states that a duty of the Administrative Contracting Officer is to ensure contractor compliance with contractual safety requirements. The texting while driving clause is one of those requirements.

CASE STUDY: Simplifying Acquisition

\$1 Coins

The Presidential \$1 Coin Act of 2005 requires that business operations performed on federal government premises provide for accepting and dispensing of existing and proposed dollar coins. The \$1 coin requirement in law, as implemented through the FAR, does not appear to have achieved the desired result. According to GAO, there is a lack of widespread acceptance of the coin by the public and adequate supply to meet the demand for 40 years.* Congress should amend the statutory requirement at 31 U.S.C. § 5112(p)(1). The FAR should be amended accordingly, which will remove a contract clause requirement.

* Government Accountability Office, *Coin Inventory Management Needs Better Performance Information*, GAO-14-110, accessed April 24, 2017, <http://www.gao.gov/assets/660/658599.pdf>.

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ENABLE THE WORKFORCE

DoD needs an acquisition system that is simple, understandable, and executable by people operating in an environment that empowers and incentivizes them to make good decisions.

Defense acquisition is a human activity dependent on the judgments, considerations, interests, and decisions of people operating in the real world. Regardless of how impressive policy initiatives look on paper, or how effective the acquisition system is in theory, the ultimate effectiveness and efficiency of defense acquisition depends on and is determined by the people who are responsible for all phases of acquisition.⁸⁶

People respond to prevailing norms and the culture in which they operate. Teams that are highly motivated, given a clear vision, properly empowered, and provided the right tools and training can achieve tremendous results.⁸⁷ A workforce that is sent conflicting messages, incentivized to make decisions that lead to suboptimal outcomes, mired in bureaucracy, and overburdened by complex and stifling

regulations will succumb to the mixed messages they receive.⁸⁸

Current statutes and regulations are overly complex and difficult to understand and implement, promote risk-averse behavior, and encourage decisions that produce suboptimal results. Former Secretary of Defense Robert Gates goes further by stating, “Fundamental to bureaucratic culture is risk avoidance: It is almost always safer for the public bureaucrat—and too often the business bureaucrat as well—to say no than yes. In a public environment of exposés, recrimination, faultfinding, and investigations both by officials and by the media, not acting is usually safer than acting—especially if the action involves something new or different.”⁸⁹

INCENTIVIZE EFFECTIVE DECISION-MAKING

Often, the incentives in the acquisition process encourage people to make decisions that result in suboptimal outcomes.⁹⁰ Without changing the incentives, appreciable improvement in

⁸⁶ Blue Ribbon Defense Panel, Department of Defense, *Report to the President and the Secretary of Defense on the Department*, 94, accessed April 24, 2017, file:///D:/User/My%20Documents/Downloads/AD0766055.pdf. A 2014 compilation of expert views on acquisition reform published by the Senate Committee on Homeland Security and Governmental Affairs (Permanent Subcommittee on Investigations) identified four themes, two of which deal exclusively with the acquisition workforce. According to the report “Nearly half of the experts feel that cultural change is required while over two-thirds believe improving incentives for the acquisition workforce is necessary for reform...Two-thirds of the contributors feel that training and recruiting of the acquisition workforce must be improved.” See U.S. Congress, Senate Committee on Homeland Security and Governmental Affairs, Permanent Subcommittee on Investigations, *Defense Acquisition Reform: Where Do We Go From Here?, A Compendium of Views by Leading Experts*, 2nd sess., 113th Cong., (2014) (staff-prepared report), accessed April 24, 2017, file:///D:/User/My%20Documents/Downloads/REPORT%20-%20DEFENSE%20ACQUISITION%20REFORM-A%20Compendium%20of%20Views%20(10-2-14)1.pdf.

⁸⁷ Chris McGoff, “The Primes,” (Hoboken: John Wiley and Sons, 2012).

⁸⁸ Len Schlesinger and Charlie Kiefer, “When Your Boss Gives You Conflicting Messages,” *Harvard Business Review*, November 27, 2014, <https://hbr.org/2014/11/when-your-boss-gives-you-conflicting-messages>.

⁸⁹ Robert M. Gates, *A Passion for Leadership: Lessons on Change and Reform from Fifty Years of Public Service*, (New York: Alfred Knopf, 2016), 16.

⁹⁰ J. Ronald Fox, *Defense Acquisition Reform 1960-2009: An Elusive Goal* (Washington, D.C.: Center of Military History, 2011), 197–199. Department of Defense, *Defense Acquisition Performance Assessment Report*, 5, accessed April 24, 2017, http://www.afei.org/research/Documents/DoD%20Documents/DAPA-Report-web_Jan2006.pdf. See Business Executives for National Security, *Getting to Best: Reforming the Defense Acquisition Enterprise: A Business Imperative for Change from the Task Force on Defense Acquisition Law and Oversight*, 3, accessed April 24, 2017, <https://www.bens.org/document.doc?id=44>.

defense acquisition is unlikely to occur.⁹¹ The thousands of decisions made every day by people at the operational level play a critical role in determining acquisition outcomes. These critical decisions extend beyond the acquisition workforce to those who are part of the greater acquisition process, such as individuals responsible for requirements, budgets, and human resources.⁹²

Processes such as developing requirements, contracting, making investments, or obligating money are often driven not by a sound business case, but by arbitrary deadlines and outside pressures. As one program manager noted, the general rule of thumb is not to plan to sign new contracts in the first 3 months of a fiscal year (to guard against effects of continuing resolutions) or the last 3 months of a fiscal year (to guard against unexpected delays beyond the control of the program that may result in expiration of funds or DoD pulling back money for failing to meet obligation benchmarks).

Agencies that find themselves with funds at the end of the fiscal year may then rush to spend

these funds. The greatest amount of spending occurs in the last month of the fiscal year, with an especially prominent spike in the final week. In the last week of FY 2016, for instance, DoD contract obligations were about 3.5 times greater than the annual weekly average.⁹³ This so-called *use it or lose it* mentality—which could be associated with spending categories (*colors of money*) in appropriations law, OMB apportionment processes, or internal DoD decision-making—represents inefficient allocation of limited DoD resources.⁹⁴

Both written rules and performance norms incentivize making decisions that lead to suboptimal outcomes. Senior defense officials, both past and current, acknowledge that program advocates have strong incentives to underestimate program acquisition costs.

Contractors sometimes use unrealistically low cost estimates to win contracts; program representatives use low estimates to argue for approval of the system against competing systems.⁹⁵ Such optimism in cost, schedule, and performance often leads to cost overruns,

⁹¹ J. Ronald Fox, *Defense Acquisition Reform 1960-2009: An Elusive Goal* (Washington, D.C.: Center of Military History, 2011), 190. This point was reiterated in Secretary Frank Kendall's guidance on implementing the Better Buying Power initiatives, which stated "Policies and processes are of little use without acquisition professionals who are experienced, trained, and empowered to apply them effectively. At the end of the day, qualified people are essential to successful outcomes and professionalism, particularly in acquisition leaders, drives results more than any policy change." Implementation Directive for Better Buying Power 2.0 - Achieving Greater Efficiency and Productivity in Defense Spending, Memorandum from Office of the Under Secretary of Defense (2013).

⁹² Robert F. Hale, Center for Strategic and Budgetary Assessments, *Promoting Efficiency in the Department of Defense: Keep Trying, Be Realistic*, 20, accessed April 24, 2017, <http://csbaonline.org/uploads/documents/2002.01.25-DoD-Efficiency.pdf>.

⁹³ Based on Section 809 Panel professional staff analysis of daily DoD data from Federal Procurement Data System, <https://fpds.gov>.

⁹⁴ Former DoD Comptroller Robert Hale wrote in September 2016 that "year-end spending pays for lower-quality and lower-priority projects." See Robert Hale, "Why DoD's Year-End Spending Needs to Change," *Breaking Defense*, September 23, 2016, <http://breakingdefense.com/2016/09/why-dods-year-end-spending-needs-to-change>. A 2013 study found that for recent U.S. government information technology contracting projects, there was a statistically significant correlation between funding obligated at the very end of the fiscal year and comparatively low quality of project outcomes. See Jeffrey B. Liebman and Neale Mahoney, National Bureau of Economic Research, *Do Expiring Budgets Lead to Wasteful Spending? Evidence from Federal Procurement*, accessed April 24, 2017, <http://www.nber.org/papers/w19481.pdf>.

⁹⁵ This state of affairs has existed for decades. In 1981, Frank C. Carlucci, deputy secretary of defense at the time, testified that low cost estimates "are fueled by optimistic contractor proposals to win competitions and program managers who want to see their programs funded." Almost 30 years later, John Young, then-under secretary of defense for acquisition, technology, and logistics echoed this sentiment, stating "The enterprise will often pressure acquisition teams and industry to provide low, optimistic estimates to help start programs." See: *House of Representatives Armed Services Committee: Hearings, Sess. 1, 97th Cong., 1st Sess.*, Volume 11, 1981. Op. Cit.

schedule slips, and capability gaps or shortfalls.⁹⁶ One example is the Navy's Littoral Combat Ship. GAO found, "Ships were not delivered quickly to the fleet at low cost. Rather cost, schedule, and capability expectations degraded over time. In contrast, a sound business case would have balanced needed resources—time, money, and technical knowledge—to transform a concept into the desired product."⁹⁷ Incentives are needed that promote more candor in presenting programs to Congress and senior leaders in DoD.

AUTHORITY AND ACCOUNTABILITY

Authority and accountability are critical elements in building an effective workforce. According to the Packard Report, "We must give acquisition personnel more authority to do their jobs. If we make it possible for people to do the right thing the first time and allow them to use their common sense, then we believe that the Department can get by with far fewer people."⁹⁸ Without authority, even the most skilled and incentivized professionals cannot effectively run and manage acquisition.

Many regulations can remove or dilute authority and accountability. Regulations that dictate contract type can deprive acquisition personnel of the discretion needed to get the best deal for the government. Additionally, the management structure and decision-making process within DoD are too bureaucratic and encumbered by numerous layers of review. Successive reviews do not necessarily add substantive value, but they do add time to the process and add to the number of people who can say *no* or influence a program, including people who do not have a stake in the outcome of the acquisition. Because nobody holds actual authority to manage a program, there is no one to hold accountable. The Quadrennial Defense Review Independent Panel concluded, "The fundamental reason for the continued underperformance in acquisition activities is *fragmentation of authority and accountability for performance*."⁹⁹

The process for reviewing and approving an acquisition strategy can exceed the time it takes to create the strategy. In one instance, the time to review, adjudicate, and approve the acquisition strategy for an Army enterprise

p. 883, 1086 John J. Young, Jr., *Reasons for Cost Changes for Selected Major Defense Acquisition Programs (MDAPs)*, Memorandum, January 30, 2009.

⁹⁶ See: *House of Representatives Armed Services Committee: Hearings, Sess. 1, 97th Cong.* John J. Young, Jr., *Reasons for Cost Changes for Selected Major Defense Acquisition Programs (MDAPs)*, Memorandum, January 30, 2009. The Navy estimated the cost of the CVN-78 at \$10.5 billion—an optimistically low number that matched the budget cap set by Congress rather than reflecting the more realistic estimate provided by the shipbuilder, which was 22 percent higher. The Navy now estimates the procurement costs at \$12.9 billion. See Paul L. Francis, Government Accountability Office, *Ford Class Aircraft Carrier: Poor Outcomes Are the Predictable Consequences of the Prevalent Acquisition Culture*, accessed April 24, 2017, <http://www.gao.gov/assets/680/672877.pdf>. Ronald O'Rourke, Congressional Research Service, *Navy Ford (CVN-78) Class Aircraft Carrier Program: Background and Issues for Congress*, accessed April 24, 2017, <https://fas.org/sgp/crs/weapons/RS20643.pdf>.

⁹⁷ Paul L. Francis, Government Accountability Office, *Littoral Combat Ship and Frigate: Congress Face with Critical Acquisition Decisions*, accessed April 14, 2017, <http://www.gao.gov/assets/690/681333.pdf>.

⁹⁸ The Packard Report, for example, stated "We must give acquisition personnel more authority to do their jobs. If we make it possible for people to do the right thing the first time and allow them to use their common sense, then we believe that the Department can get by with far fewer people." President's Blue Ribbon Commission on Defense Management, 1986 Packard Commission Report on Defense Management, accessed April 24, 2017, <http://www.documentcloud.org/documents/2695411-Packard-Commission.html>.

⁹⁹ U.S. Institute for Peace, *The QDR in Perspective: Meeting America's National Security Needs in the 21st Century: The Final Report of the Quadrennial Defense Review Independent Panel*, 85, accessed April 24, 2017, <https://www.usip.org/sites/default/files/qdr/qdrreport.pdf>.

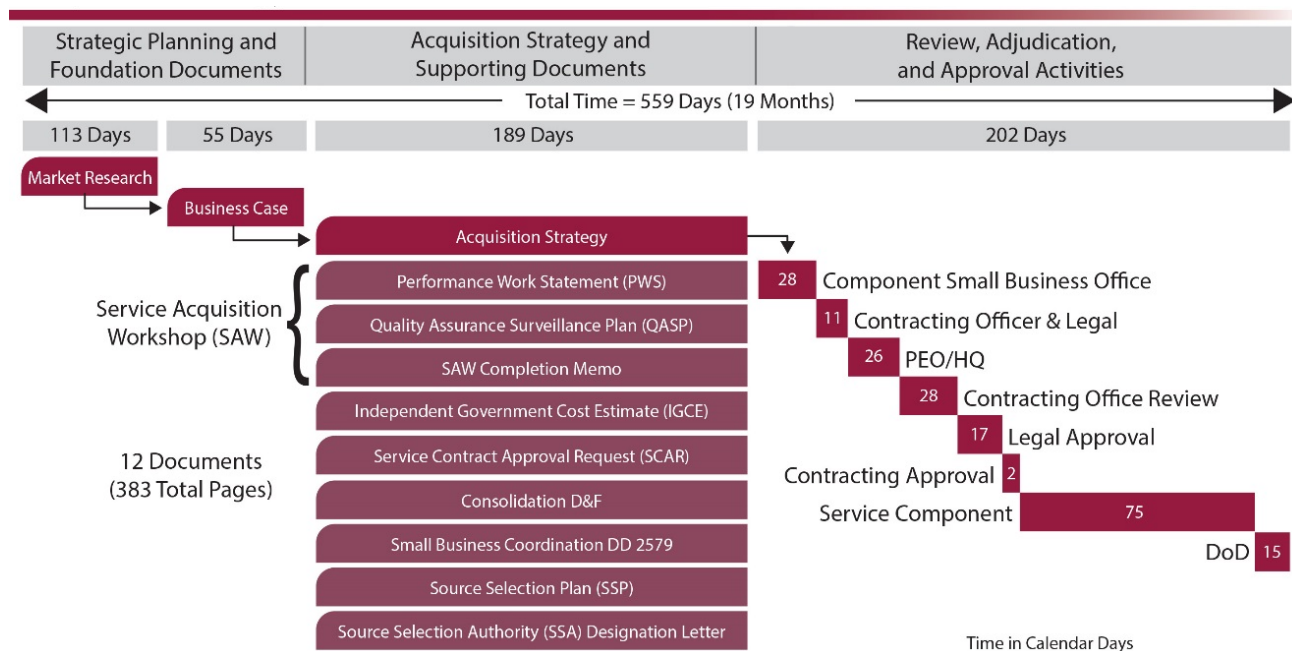
resource planning program took more than 6 months—longer than the time it took to create all 383 pages that comprised the acquisition strategy and required supporting documents (see Figure 3). In another example, the process of getting to the full deployment decision for the Army’s global combat support system required a total of 33 documents, amounting to 1,076 pages for the main documents and 17,604 pages for annex documents—a final product that was more than 14 times the length of Tolstoy’s *War and Peace*, but not as well written. Altogether, this documentation took 1,853 calendar days (more than 5 years) to complete.¹⁰⁰

The acquisition process must be simple, understandable, and executable to support a culture that promotes good outcomes. Such a culture includes ensuring that people are given

clear authority to make decisions and are held responsible for the consequences of the decisions they make.

SUPPORT THE WORKFORCE

One of the most important ingredients to achieve acquisition reform is a transformation in the culture of DoD and Congress. Rules and regulations alone, however, can no more foster the right culture than legislation can force good management. The workforce of today understands the message that has been sent to it through multiple layers of bureaucratic review, budget cuts, hiring freezes, salary freezes, furloughs, continuing resolutions, damning congressional hearings, and press releases and speeches castigating government workers as overpaid and underperforming.



Source: U.S. Army PEO/AESIP, “Acquisition Strategy Schedule Analysis and Lessons Learned,” Army-produced PowerPoint presentation, August 2014.

Figure 3. Acquisition Strategy Schedule - Actual

¹⁰⁰ U. S. Army (n.d.), “Army Acquisition, Logistics, and Technology Documentation Deep Dive,” Army-produced PowerPoint presentation.

All these events exact a toll on the morale of the acquisition workforce. At some point people, motivated by their desire to serve the country and the men and women defending it, feel frustrated in their efforts to make a difference and do not feel empowered with respect to work processes.¹⁰¹ The workforce deserves a better system.

Working for government should be lauded, not denigrated. The United States and the people who dedicate their careers to serving it deserve better. Congress and the administration must take a leadership role in challenging people to aspire to public service, making government service a career that attracts the best and brightest the country has to offer.

¹⁰¹ Office of Personnel Management, *2016 Federal Employee Viewpoint Survey*, accessed April 19, 2017, <https://www.fedview.opm.gov/>.

THE PATH FORWARD

Although the current acquisition system has produced success, it cannot consistently deliver what DoD needs given the speed of change in the new dynamic defense marketplace. As the Section 809 Panel explores ways to forge a modern acquisition system, it will put forth recommendations that will address the root causes of systemic acquisition problems, rather than just their symptoms.

DoD's focus must be on mission readiness and performance results. The current acquisition system is designed to achieve too many competing ancillary *good* policies, sacrificing innovation¹⁰² and technological dominance yet adding complexity, cost, and time. We are asking BOLD questions that will guide us in the path forward:

- What are the characteristics that make programs successful, and how can these best practices be replicated?
- What is the effect of the clarity and quality of the requirements description in the buying process?
- Is there a *right* balance between performance results and policy initiatives? What is the cost/value of social policies, and can they be achieved through other means?
- What complexities can be eliminated from buying?
- Does fiscal fluidity affect buying?
- What barriers discourage new ideas and discourage new entrants from transacting with DoD?
- What can be done to systematically eliminate outdated, unclear, or peripheral requirements in DoD regulations, policies and practices, as well as federal law?
- Is competition in the 21st century aligned with the Competition in Contracting Act?
- How does DoD better access the commercial market as a savvy buyer?
- How well does the protest process serve government and industry?
- What is the role of small business, and what is the most effective way to support small businesses in the United States?
- What data are needed, what are collected, and how are they used?
- Which oversight/approval requirements bring value, and which ones take away value?
- How can DoD accelerate decision-making to buy quicker?

The Section 809 Panel is committed to proposing recommendations to make the acquisition system more responsive, innovative, and cost effective. The time for superficial conversation and insubstantial changes to regulations and statutes has passed. The global threat is rapidly changing, the relevance of the unique defense industrial base is waning, the processes for acquisition are no longer efficient or effective, and implementing these processes is left to a workforce that is mired in constricted thinking and risk aversion.

¹⁰² Frank Kendall, *Getting Defense Acquisition Right* (Fort Belvoir, VA: Defense Acquisition University Press, 2017).

The Section 809 Panel has no interest in putting patches on a broken system. Our recommendations will be crafted to create a new way of doing business that will be flexible enough to respond to current and future needs. In addition, it will incentivize innovation, creativity, and risk-taking, shaping a flexible

acquisition workforce that delivers the desired outcomes. We intend to take a big bite into real change, rather than just nibble around the edges. To do otherwise is to put our military's mission and our nation's safety and security at risk.

Think **BOLD**

Section 809 Panel *Streamlining & Codifying Acquisition*
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APPENDICES

APPENDIX A: ENABLING LEGISLATION

Section 809 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92), as amended by section 863(d) of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114-328), provides:

**SEC. 809. ADVISORY PANEL ON STREAMLINING AND CODIFYING
ACQUISITION REGULATIONS.**

(a) **ESTABLISHMENT.**—The Secretary of Defense shall establish an independent advisory panel on streamlining acquisition regulations. The panel shall be supported by the Defense Acquisition University and the National Defense University, including administrative support.

(b) **MEMBERSHIP.**—The panel shall be composed of at least nine individuals who are recognized experts in acquisition and procurement policy. In making appointments to the advisory panel, the Under Secretary shall ensure that the members of the panel reflect diverse experiences in the public and private sectors.

(c) **DUTIES.**—The panel shall—

(1) review the acquisition regulations applicable to the Department of Defense with a view toward streamlining and improving the efficiency and effectiveness of the defense acquisition process and maintaining defense technology advantage; and

(2) make any recommendations for the amendment or repeal of such regulations that the panel considers necessary, as a result of such review, to—

(A) establish and administer appropriate buyer and seller relationships in the procurement system;

(B) improve the functioning of the acquisition system;

(C) ensure the continuing financial and ethical integrity of defense procurement programs;

(D) protect the best interests of the Department of Defense; and

(E) eliminate any regulations that are unnecessary for the purposes described in subparagraphs (A) through (D).

(d) **ADMINISTRATIVE MATTERS.**—

(1) **IN GENERAL.**—The Secretary of Defense shall provide the advisory panel established pursuant to subsection (a) with timely access to appropriate information, data, resources, analysis, and logistics support so that the advisory panel may conduct a thorough and independent assessment as required under such subsection.

(2) **INAPPLICABILITY OF FACA.**—The requirements of the Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the advisory panel established pursuant to subsection (a).

(3) **AUTHORITIES.**—The panel shall have the authorities provided in section 3161 of title 5, United States Code.

(e) **REPORT.**—

(1) **PANEL REPORT.**—Not later than two years after the date on which the Secretary of Defense establishes the advisory panel, the panel shall transmit a final report to the Secretary.

(2) ELEMENTS.—The final report shall contain a detailed statement of the findings and conclusions of the panel, including—

(A) a history of each current acquisition regulation and a recommendation as to whether the regulation and related law (if applicable) should be retained, modified, or repealed; and

(B) such additional recommendations for legislation as the panel considers appropriate.

(3) INTERIM REPORTS.—(A) Not later than 6 months and 18 months after the date of the enactment of this Act [Nov. 25, 2015], the Secretary of Defense shall submit a report to or brief the congressional defense committees on the interim findings of the panel with respect to the elements set forth in paragraph (2).

(B) The panel shall provide regular updates to the Secretary of Defense for purposes of providing the interim reports required under this paragraph.

(4) FINAL REPORT.—Not later than 30 days after receiving the final report of the advisory panel, the Secretary of Defense shall transmit the final report, together with such comments as the Secretary determines appropriate, to the congressional defense committees.

(f) DEFENSE ACQUISITION WORKFORCE DEVELOPMENT FUND SUPPORT.—The Secretary of Defense may use amounts available in the Department of Defense Acquisition Workforce Development Fund established under section 1705 of title 10, United States Code, to support activities of the advisory panel under this section.

APPENDIX B: PANEL ACTIVITIES

Monthly Full-Panel Meetings

September 20-21, 2016	
Identifying the “Big Rocks” to Improving Defense Acquisition and Maintaining Defense Technology Advantage	▪ BG David Ehrhart, USAF (Ret.), Lockheed Martin Corp. ▪ Susan Warshaw Ebner, ABA Public Contract Law
AIA Perspectives	▪ Jason Timm, Aerospace Industries Association
Updating the Regulatory Source Code	▪ Andrew Hunter, Center for Strategic and International Studies
Acquisition Transformation Project, Acquisition of the Future (AOF)	▪ Ann-Marie Johnson, ASI Government ▪ Dina Jeffers, Deputy Secretary of the Army, Procurement ▪ Kymm McCabe, Deloitte Consulting
OFPP Priorities and Category Management	▪ Anne Rung, OFPP, OMB
Perspectives on Acquisition Reform, Lessons Learned from Research	▪ Dan Chenok, IBM Center for Business of Government
Acquisition Reform to Enable Military Effectiveness	▪ Lou Kratz, Lockheed Martin Corp.
Industry Roundtable (cohosted by U.S. Chamber of Commerce and Professional Services Council)	▪ Christian Zur, U.S. Chamber of Commerce ▪ Scott Amey, Project on Government Oversight ▪ Brian Collins, Business Executives for National Security (BENS) ▪ Susan Maybaumwisniewski, BENS ▪ Mandy Smithberger, Center for Defense Information ▪ Roger Waldron, Coalition for Government Procurement
November 15-16, 2016	
Expert Presentations to the Panel	▪ Chris Gunderson, U.S. Air Force ▪ Louis Kratz, Lockheed Martin Corp. ▪ Wendy Ginsberg, Congressional Research Service
December 14, 2016	
Expert Presentations to the Panel	▪ Soraya Correa, U.S. Department of Homeland Security ▪ Paul Francis, Government Accountability Office
January 24-25, 2017	
Major Defense Acquisition Programs	▪ Lt Gen Christopher C. Bogdan, F-35 Executive Officer ▪ VADM David Johnson, Principal Military Deputy ▪ Frank Kendall, Former USD, AT&L ▪ Gary Bliss, OUSD (AT&L)

February 21-22, 2017

Geopolitical Threat Environment	- Heather Conley, Center for Strategic and International Studies (CSIS) - Melissa Dalton, CSIS - Ben FitzGerald, Center for a New American Security (CNAS) - Lt Gen Anthony Ierardi, Joint Chiefs of Staff, J8
Acquisition of Services in DoD	- Ken Brennan, Defense Procurement and Acquisition Policy (DPAP) - James Meade, Naval Air Systems Command (NAVAIR) - Dan Helfrich, Deloitte Consulting LLP

March 21-22, 2017

Commercial Buying	- James Steggall, AIA - Janice Muskopf, AFMC - Joseph Fengler, AIA - Jon Etherton, Etherton & Associates - Paul Milenkowic, ACC-NJ, Picatinny Arsenal - Bill McNally, NASA - Tyler Merkeley, HHS, BARDA - Tim Applegate, DARPA - Scott Ulrey, DARPA
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April 25-26, 2017

Expert Panel: The Effects of Socio-Economic Policies on Defense Acquisitions	- James Galvin, PhD, DoD Small Business Programs - Kenneth Dodds, U.S. Small Business Administration - Donna Huneycutt, Wittenberg Weiner Consulting - Burt Ford, Lockheed Martin Corp.
Building a National Security Marketplace for Rapid Technology Discovery and Acquisition	Tim Greeff, NSTXL
Imagining a Post-Barriers World	Meagan Metzger, DCode42

Semi-Monthly Stakeholder Meetings

January 12, 2017

Think Holistically and Broadly About the Panel Mandate	Stan Soloway, Celero Strategies
State of Defense IT Acquisition Reform	- John Weiler, IT Acquisition Advisory Council (IT-AAC) - Marvin Langston, Langston Associates, LLC
PSC Research on DoD Task Order Awards Made Under IDIQ Contracts	- Alan Chvotkin, Professional Services Council (PSC) - Matthew Taylor, Professional Services Council (PSC)
IDIQ Discussion	- Jeff Koses, GSA, Office of Government-wide Policy - Roger Waldron, Coalition for Government Procurement

January 26, 2017

- | | |
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| Commercial Subcontract Flowdown;
Simplified Acquisition Procedures | ▪ Ron Smith, Ronald Smith Contracts |
| Acquisition Reform and Successful Programs | ▪ Jeff Wieringa, Navy International Programs Office (NIPO) |

February 23, 2017

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| Security Cooperation Reforms and the Impact
of FY17 NDAA | ▪ VADM Joseph Rixey, Defense Security Cooperation Agency |
| DoD's Use of Project Structure | ▪ Mike Morgan, Project Management Institute
▪ Charles Mahon, Project Management Institute
▪ John Driessnack, Project Management Institute |
| Successful Acquisition and Fielding of
Software in the DoD: Impediments and
Improvements | ▪ Matt Chandler, Palantir Technologies |
| Acquisition Workforce Study | ▪ Rene Thomas-Rizzo, Human Capital Initiatives, OUSD
(AT&L) |

March 9, 2017

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| Technology: How to Use and Buy More
Effectively | ▪ Jennifer Napper, ACT-IAC
▪ Lou Keresteszy, ACT-IAC
▪ Kenneth Allen, ACT-IAC |
| Doing Business with DoD: Small Business
Perspective | ▪ Bryson Bort, Grimm |
| Strategies for Contracting Digital Services | ▪ David Zvenyach, GSA, 18F |

March 23, 2017

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| Challenges Related to Government Practices
for Commercial Items and Services
Acquisitions | ▪ Danielle Berti, Johnson & Johnson
▪ Stephanie Gilson, Johnson & Johnson |
| The State of Public Procurement Metrics | ▪ Raj Sharma, Public Spend Forum |
| Organizational Culture and the Panel's
Mission | ▪ Lou Keresteszy, Gov Innovation |
| Acquisition of the Future (AOF) Model | ▪ Stan Soloway, Celero Strategies
▪ Kymm McCabe, Deloitte |
| DoD Acquisition | ▪ Mike Morgan, Project Management Institute
▪ Charles Mahon, Project Management Institute
▪ John Driessnack, Project Management Institute |

April 13, 2017

- | | |
|---|---|
| Software Concerns in DoD Acquisition: The
Opportunity Presented by Agile Development | ▪ Eileen Wrubel, Software Engineering Institute, CMU
▪ Alyssa Le Sage, Software Engineering Institute, CMU |
| Cloud and IT Acquisition Policy:
Recommendations and Next Steps | ▪ Richard Beutel, Cyrrus Analytics |
| Optimizing Acquisition: Procurement
Transformation and Category Management | ▪ David Shields, ASI Government
▪ Anne Laurent, ASI Government |

April 27, 2017

Regulations and Laws that Add Unnecessary Bureaucratic Obstacles to DoD Acquisitions	▪ Barbara Kinosky, Esq., Centre Law and Consulting
The Highly Regulated Federal Purchasing System: Implications and Alternatives	▪ Richard Dunn, Strategic Institute for Innovation in Government Contracting ▪ David Rothzeit, DIUx
Commercial Buying	▪ Shay Assad, Defense Procurement and Acquisition Policy

Team Meetings/Interviews

- (ISC)^2
- Aerospace Industries Association
- AFCEA
- Air Force Materiel Command
- Allen Federal Business Partners
- Amazon Business, Public Policy, and Web Services
- ANG Budget Division Chief
- Anser
- Army Tank and Automotive Command (TACOM)
- ASN (RDA), DASN Unmanned
- Ausco, Inc.
- BAE
- Bain Capital
- BMNT Partners
- Boeing
- Booz Allen Hamilton
- Buchanan & Edwards
- Coalition for Government Procurement
- Cpacket Networks
- Cyber Security Strategies, LLC
- Cymmetria
- DARPA, Contracts Management Office
- DAU
- DCode42
- Defense Contract Management Agency
- Defense Logistics Agency
- Deloitte
- Department of Commerce
- Department of Energy
- DFJ Venture
- DHHS, Biomedical Advanced Research and Development Authority (BARDA)
- DIUx
- DoD Military and Industrial Base Policy

- DSMC
- Etherton & Associates
- ForgeRock
- GAO, Acquisitions and Sourcing Management Office
- General Dynamics
- GSE Dynamics
- Hack4Defense
- Harvard Kennedy School of Bus
- HeartFlow
- Heritage Foundation
- HQDA/DASA P
- InfoReliance
- Information Systems Security Association
- Integrated Dual Use Commercial Companies (IDCC)
- Invensense
- ITAPS
- JLT Speciality USA
- Johnson & Johnson, Government Business Compliance
- Leidos
- Lockheed Martin
- Microsoft
- MITRE
- NASA Contracts and Grants Policy and Office of Procurement
- NDU/USCG
- NGC
- NOAA
- NRI Secure Technologies
- NSTXL
- Nyotron
- OASN(FM&C), FMB
- OFPP
- OPNAV, N9
- OSD-Comptroller
- Phillips Screw Company
- Precision Gear
- Prevalent
- Procurement Technical Assistance Center – Maryland and Virginia
- QCWare
- Raytheon
- Sandia National Laboratories
- Section 813 Panel
- Senator Collins Staff
- Seagate

- SS8
- Symantec
- Telefonica
- U.S. Army Contracting Command
- U.S. Army Corps of Engineers
- United Technologies
- University of Illinois at Urbana-Champaign; School of Information Sciences
- USD(AT&L), DPAP
- Varonis
- WING Venture Capital
- Wittenberg-Weiner Consulting
- Yaniv Strategies

APPENDIX C: PANEL TEAMS**FAR to Statute Baseline**

Team 1 is reviewing the acquisition regulations and statutes applicable to DoD to develop recommended changes or deletions that support timely acquisition of systems, services, and solutions supporting DoD mission. This effort includes a focus on recommendations to maintain the DoD's technological advantage and enhance access to emerging technologies.

**Streamlined Procurement Process**

Team 2 is researching options for substantially streamlining noncomplex acquisitions of less than \$15 million. Although the current acquisition system generally treats \$1 million contracts the same as \$1 billion contracts, the team is considering ways to enable DoD to meet its acquisition needs for smaller contracts.

**Commercial Buying**

Team 3 is focused on simplifying DoD's commercial buying practices to enable the department to have greater access to companies not currently selling to the department, and to be more adaptable and agile in its acquisition process.

**Barriers to Entry**

Team 4 is focused on removing regulatory, cultural, or bureaucratic barriers to entry to the DoD marketplace in an effort to attract companies interested in conducting business with DoD that have not done so previously. The team seeks ways to restructure DoD's business models support and maintain and increase technological dominance.

**Characteristics of Successful Programs**

Team 5 is identifying the attributes and qualities common to successful programs, with an eye toward techniques, tools, and practices that can be widely employed. The team will make recommendations for best practices, regulations, and statutes.



IT Acquisition

Team 6 is investigating how to best streamline the information technology (IT) acquisition process as DoD modernizes its use of IT, with a specific focus on defense business systems and IT services. The ultimate goal is to increase use of commercial best practices and business processes, delivering capability faster and keeping DoD's technology current and supportable.



Budget

Team 7 is considering the broader budgeting process in DoD—how you get money and how you spend it. The team aims to arrive at recommendations that will optimize budgeting policy and processes to maintain military technological superiority through the efficient flow of resources in the acquisition system.



Streamlining Regulations

Team 8 is identifying defense acquisition regulations that are no longer necessary. The team is packaging together comprehensive ideas that would substantially streamline the acquisition process.



Cost Accounting Standards

Team 9 is reviewing the administrative and accounting requirements of cost accounting standards (CAS), along with exemptions from CAS and thresholds for applying CAS to contracts. The team will make recommendations aimed at eliminating unnecessary or outdated requirements, increasing clarity, reducing administrative costs, and providing a consistent and fair basis of accounting for CAS-covered contracts.

APPENDIX D: COMMUNICATION WITH THE PANEL

Website

The Section 809 Panel seeks feedback from the diverse group of stakeholders that have interest in issues related to defense acquisition, including DoD officials, members of the DoD acquisition workforce at all levels, service members, industry officials from both large and small businesses, and U.S. citizens.

The panel offers two avenues for offering feedback on its website at <https://section809panel.org>. Stakeholders can submit general comments and questions about the Section 809 Panel by choosing the *General Comments* option under the *Contact Us* tab. Stakeholders who would like to suggest recommendations for the panel can do so by choosing the *Recommendations* option under the *Contact Us* tab.

Members of the public and media may attend open sessions at Section 809 Panel meetings. Information about upcoming meetings is available on the panel's website.

News Clips

The Section 809 Panel publishes a daily news clips publication that highlights current articles related to defense acquisition. Each business day the panel publishes the clips to its web site. Those interested in having the daily clips emailed to them should contact Katie Cook at katie.cook@dau.mil.

Social Media

For information related specifically to the panel, stakeholders can follow the Section 809 Panel on Twitter (@Section809Panel) or LinkedIn (Section 809 Panel).

Public Information

Organizations interested in hosting panel members for speaking engagements and media outlets interested in publishing or broadcasting items about the commission should contact Shayne Martin at shayne.martin@dau.mil.

APPENDIX E: PROFESSIONAL STAFF

Executive Staff

Moshe Schwartz
Executive Director

Col. Marvin Baugh, USAF
Chief of Staff

John Haskell, PhD
Research Director

Wendy LaRue, PhD
Communications Director

Legal Staff

Robert Cover
Legislative Drafter

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Sandy Hoe
Outside Counsel

Professional Staff

Lawrence Asch	Katie Cook	COL Harry Culclasure, USA	Shirley Franko
Darren Harvey	Jeremy Hayes	Dina Jeffers	Michelle Johnson, PhD
Maj. Sam Kidd, USAF	Jarrett Lane	CDR Michele LaPorte, USN	Michael Madsen
Shayne Martin	Jennifer McKinney	Martha Milan	Gabriel Nelson
Hannah Oh	Ryan Polk	Melissa Rider	Joshua Schneider
Jeanette Snyder	Jennifer Taylor	Nicolas Tsiopanas	

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