

The appearance of external hyperlinks does not constitute endorsement by the United States Department of Defense (DoD) of the linked websites, or the information, products or services contained therein. The DoD does not exercise any editorial, security, or other control over the information you may find at these locations.

February 18, 2025
AIRC 2024-2025 Innovation Project

Identifying Novel Ways to Incentivize Industry in Defense Acquisition

John G. (Jerry) McGinn, Ph.D., George Mason University Edward Hyatt, Ph.D., George Mason University

CLEARED For Open Publication

Mar 28, 2025

Department of Defense
OFFICE OF PREPUBLICATION AND SECURITY REVIEW

Partner: Dr. Reid Melville
Integrated Capabilities Directorate
Air Force Research Laboratory

Cleared for Public Release.

The views, findings, conclusions, and recommendations expressed in this material are solely those of the authors and do not necessarily reflect the views or positions of the United States Government (including the Department of Defense (DoD) and any government personnel), the Stevens Institute of Technology, or George Mason University.



Executive Summary

The objective of this innovation project was to explore current and emerging Department of Defense (DoD) models for industry engagement and develop some novel ways to incentive industry throughout the defense acquisition process. In particular, this project focused on how the federal government can better work with traditional industry in non-traditional ways, and how to work with venture capital- and private equity-backed firms in the defense marketplace. By design, this innovation project had a very short period of performance. As a result, some of these recommendations are directional in nature and require follow-on analysis and actions to facilitate implementation.

The research team conducted a literature review and held discussions with numerous senior government officials and industry executives from traditional, private equity-backed, and venture capital-backed firms under Chatham House rules. The research summarized several of the most well-known traditional and emerging practices of industry engagement in the defense industrial base. On the traditional end of the spectrum, these include the industry engagement plans and key resources provided by DoD offices, request for proposals (RFP), and industry days. In the past decade, DoD has fostered emerging practices to strengthen industry partnerships through roundtable discussions and workshops, public-private partnerships, consortia, and even same-day contracts at "pitch days."

Based on these efforts, the team derived six main findings:

- 1. Greater investment transparency drives industry engagement
- 2. There is a mutual need for better understanding of government and industry "business" cycles
- 3. The lack of security clearances and access to classified information can stymie new entrants
- 4. Industry time horizons and incentive structures vary by the type of business
- 5. Industry engagement activities across DoD are stove-piped and difficult to navigate
- 6. Improving industry engagement activities will have an important and positive impact, but changing incentive structures will have a step-function increase in government-industry collaboration

From these findings, the research team developed recommendations to

- Advance DoD's approach to industry engagement. These focus on practical measures for DoD strategic level **agenda-setters** and more tactical level **buyers**:
 - Use reverse industry days to gain a clearer industry perspective
 - Increase opportunities for new entrants to gain clearances and access to classified workspaces
 - Increase the use of classified road mapping sessions
 - Convene regular roundtable sessions to help better shape future acquisition efforts
 - Establish a workable approach for improving the visibility of industry engagement activities
- <u>Change incentive structures</u> for industry to spur new entrants, competition, and greater private sector investment. These focus on actions that agenda-setters and buyers can take to change industry behavior in fundamental ways. Some of these would require policy or legislative change:
 - Maximize the impact and attractiveness of SBIR/STTR



- Increase incentives for private capital investment
- (Potential) Revitalize IRAD reviews

Some of these recommendations can be implemented immediately, particularly those focused on industry engagement. Many of the recommendations focused on incentivizing industry, on the other hand, are more directional in nature. They will require additional analysis to flesh out the concepts and then subsequent actions by senior level DoD officials and Congress. These recommendations differ somewhat in their applicability for traditional defense contractors, small businesses, private equity-backed firms, and venture capital-backed firms, but most are applicable to companies across the defense industrial base.



Objective

The primary objective of this study was to examine current and emerging DoD models for industry engagement in the acquisition process and to identify novel ways to incentivize more effective government-industry collaboration in the acquisition lifecycle.

Approach

The study team first assessed existing government resources and practices (e.g., industry days) used to increase the number and types of potential industry partners. This was accomplished by reviewing existing literature and government resources. This activity was followed by a series of discussions with key government officials and industry executives. The team used these interviews to explore the viability of novel ways to engage with industry and to incentivize industry outside of traditional means.

The research focused on two key aspects of industry engagement:

- 1) How to work with traditional industry in non-traditional ways;
- 2) How to work with new partners in the commercial capital ecosystem, namely venture capital (VC) and private equity (PE) firms.

Questions examined during the discussions included the following:

- What does "successful industry engagement" mean to you? How would you define it, or what are the outcomes of a "successful" engagement between industry and government?
- What are the most effective government/industry engagement practices you have witnessed?
- Is there a specific government/industry engagement practice you have witnessed that you would call "novel" or "innovative"? What was it, and how did it work in practice?
- Is there a particular engagement practice that you think would be more successful only for traditional industry companies, as opposed to VCs and private equity?

The following report first briefly details current and emerging engagement practices, then it presents findings from the subject matter expert sessions and finally makes some recommendations for new ways to engage with or incentivize industry partners, both traditional and non-traditional.

Traditional and Emerging Industry-Government Engagement Practices

The study team conducted a brief literature review of existing traditional industry engagement practices. Below is a brief description of some of the more common U.S. government practices.



Traditional Practices

Existing Engagement Offices and Plans

Industry engagement is an important topic for the federal government. Its importance is reflected in the number of existing offices with industry engagement plans and their various resources or portals for industry partners to access.

Examples of offices that are currently utilizing industry engagement plans include the International Trade Administration, Office of Industry Engagement; the U.S. Department of State, Bureau of Overseas Buildings Operations, Industry Engagement; Defense Logistics Agency (DLA) Industry Engagement Plan; DLA Energy, Industry Engagement; and the Office of the Under Secretary of Defense for Acquisition & Sustainment, Deputy Assistant Secretary of Defense for International and Industry Engagement, Industrial Base Policy. Many of the developed industry plans include strategic areas of focus and descriptions of government-led engagements or high-level activities meant to foster strong partnerships with industry and industry associations. Figure 1 provides an example of DLA's priorities for increased industry engagements. Some plans also provide extensive information on proposed investment timelines or steps for how to engage with DoD.

An important government resource website for strategies, practices, and technologies that promote meaningful industry communication can be found at the Department of Homeland Security Acquisition Innovations in Motion (AliM) website. Several techniques located on this site and discussed below include acquisition innovation roundtables, reverse industry days, and strategic industry conversations that focus on broad-level topics rather than specific procurements or components. Additionally, several practical guides for program managers and requirements owners to reference when engaging with industry are provided on the DHS Industry Engagement Resources site.

Examples of resource sites or portals for industry include the PEO Digital (U.S. Navy), "Steps to engage with PEO Digital;" the U.S. Space Command, Industry Engagement Portal; the U.S. Army Cyber Command, Industry Engagement; and information regarding the PEO MLB (Navy) Initial Capability Discussion meetings. These websites are designed to provide information on department goals, missions, and priorities, and many provide contact details or outline the steps for possible engagement with government staff.

acqirc.org/innovation 4 acqirc.org

¹ https://www.trade.gov/about-us/office-industry-engagement

² https://www.state.gov/industry-engagement

³ https://www.dla.mil/Info/Strategic-Plan/Industry-Engagement-Plan/

⁴ https://www.dla.mil/Energy/Business/Industry-Engagement/

⁵ https://www.businessdefense.gov/icie/

⁶ https://www.dhs.gov/acquisition-innovations-motion

⁷ https://www.dhs.gov/publication/industry-engagement

⁸ https://www.peodigital.navy.mil/Industry/

⁹ https://www.spacecom.mil/Partnerships-and-Outreach/Industry-Engagement-Portal/

¹⁰ https://www.arcyber.army.mil/Information/Industry-Engagement/

¹¹ https://www.peomlb.navy.mil/Industry-Engagement/



Figure 1: DLA Focus Areas for Industry Engagement



Source: Defense Logistics Agency, Industry Engagement Plan, 2022¹²

Request For Proposal (RFP) / Draft Request for Proposal (DRFP)

The most common form of formal industry-government engagement involves the RFP, a document produced by the government when a need has been identified and is to be contracted. The RFP typically describes in detail the product or service to be acquired, and it comprises the formal mechanism for inviting and receiving offers from qualified contractors to provide the product or service. Dollar thresholds often dictate the use of an RFP as opposed to other, less formal mechanisms of purchase. RFPs, or at least a notification of the opportunity to respond, are often sent to prospectives industry bidders identified by the government buying entity at the outset as likely responders. RFPS are sometimes preceded by a Request for Information, which invites market players to submit information on a topic being considered for a future RFP. Contractors are inherently incentivized to respond to RFPs since this is the most frequent contracting mechanism with the U.S. government and therefore a source of revenue, even though contractors often find better returns with commercial contracts. ^{13,14,15}

¹²

https://www.dla.mil/Portals/104/Documents/Headquarters/StrategicPlan/IndustryEngagement/IndustryEngagementPlan2 022.pdf

¹³ James, Margaret. RFP: What a Request for Proposal Is, Requirements, and a Sample. *Investopedia.com*. June 18, 2024. https://www.investopedia.com/terms/r/request-for-proposal.asp

¹⁴ Defense Acquisition University. "Glossary Term - Draft Request for Proposal". https://www.dau.edu/glossary/draft-request-proposal

¹⁵ Defense Acquisition University. "The Industry Perspective – 8. Incentives and Motivations, November 2019". WSM 016 Understanding Industry Workshop slide presentation.

 $[\]frac{\text{https://dau365.sharepoint.com/:p:/r/sites/Home/Shared\%20Repository/Workshop\%20Content/WSM/WSM\%20016/Instructor\%20Content/5\%20Lesson\%20Plans/8\%20Incentives/Incentives.pptx?d=wf2586e269e7b46539ad3ccead9ea9eb8\&csf=1&e=QMsjsv$



Industry Days

Industry days comprise another common form of interaction between industry and government. An industry day is an event that provides for in-person interaction between government program/procurement officers and prime contractors and provides additional opportunities for networking with future potential partners. Through this type of event, the government can forecast their needs and future contracting opportunities to industry. Industry days work best when they have clear objectives and purposes, a structured agenda, interactive sessions like panel discussions and workshops, and feedback mechanisms. Industry Days often have a focus or theme, for example on small and mid-sized businesses, to provide especially relevant information and to address concerns that may affect a specific segment of industry. Although there is a chance for information transfer both ways, industry days are mainly about the government explaining upcoming acquisitions, capability gaps, mission needs, and rationale for contractor support. Industry days represent a chance for industry to learn about an Agency's procurement strategy and to obtain information about future contracting opportunities.

Businesses perceive the success or failure of industry days through the prism of information and dialogue. If DoD offices present specific information that can help inform business investment decisions and engage in dialogue with senior leaders and program managers through group sessions and one-on-one meetings, industry days can be very successful. When there is a lack of substantive information exchange and dialogue, on the other hand, they are sometimes regarded as a waste of time. 16,17,18,19

Emerging Practices

Roundtable Discussions and Workshops

In advance of a specific procurement opportunity, some DoD offices at both the strategic and tactical levels have started to proactively engage with industry to help better develop their requirements and understand the capabilities available to address their respective problems. One example of this approach was the series of "deliberative thinking" sessions convened by Army Futures Command (AFC) to discuss the future of Army command and control. Industry was invited to join in a series of roundtable conversations with AFC leadership to help collaborate on macro-level future requirements and potential design solutions in the frontend before any detailed specifications were written by government.

acqirc.org/innovation 6 acqirc.org

¹⁶ Defense Acquisition University. "Proposal Development – Industry Day." https://acqnotes.com/acqnote/tasks/industry-day.

¹⁷ Sherr, Ryan M. Win More Contracts at Industry Day: Insider Tips for Successful Networking with Federal Agencies. *FEDBIZACCESS*. February 8, 2023. https://fedbizaccess.com/agency-industry-days-networking-tips-for-government-contractors/

¹⁸ University Industry Demonstration Partnership (UIDP). Industry Days – Quick Guide. *UIDP.org.* January 2022. https://uidp.org/wp-content/uploads/documents/UIDP-Quick-Guide-Industries-Days.pdf

¹⁹ American Council for Technology-Industry Advisory Council (ACT-IAC). Industry Day Best Practices – Small Business Alliance. March 2018. https://www.actiac.org/system/files/Industry%20Day%20Best%20Practices.pdf



Such collaborative sessions can provide useful insight for the development of documents like a Capability Needs Statement to be used in the planning phase of software acquisitions. ²⁰ In a similar vein is the Next Generation Command and Control Capability Characteristics of Need statement, a second version which was recently issued by Army PEO C3N.²¹ It authors purposely avoided writing "hyper prescriptive requirements documents" 22 and instead focused on design principles and high-level guiding concepts. Industry feedback figured heavily in the development and update of the document, including an RFI and roughly 85 one-on-ones with industry. Thus, more direct involvement from industry in the form of roundtable sessions or one-on-ones can be fruitful in the pre-solicitation phases of acquisition efforts.

Beyond DoD, roundtable workshops such as the National Science, Technology, and Security Roundtable represent a chance for open exchange of scientific and technical information and to discuss important topics. These workshops enable industry professionals to learn from defense leaders and to gain insight into challenges facing the military. 23,24 Another example of workshop engagement is the Acquisition Innovation Roundtables hosted by the Department of Homeland Security (DHS), described on their Acquisition Innovations in Motion (AliM) website as "small working groups of government and industry leaders who work together to make improvements in targeted business areas". 25 These type of workshops could be considered a form of interactive market research and a furtherment of vendor demonstrations and one on one meetings, both of which are included as practices in the acquisition techniques section of the Periodic Table of Acquisition Innovations.²⁶

Public-Private Partnerships

Public-private partnerships (PPPs) have become more common in recent years to facilitate better government-industry engagement. PPPs "describe the cooperative relationship between public and private organizations in which the two or more parties share costs, resources, and risk associated with the delivery of goods and services." ²⁷ They allow for more private sector participation than can be achieved through traditional means, and can be harnessed for a wide array of defense needs and priorities, including AI advancement, depot maintenance, efficient defense acquisitions, and many others. Private companies may also have access to additional sources of capital or revenues. For the federal government, PPPs offer several advantages, allowing

acqirc.org acqirc.org/innovation 7

²⁰ https://aaf.dau.edu/aaf/software/cns/

²¹ https://sam.gov/opp/7876c0fdb4dd4520b9e73cc3da1392ba/view; Note that a SAM.gov account is required to view and access the document.

²² https://federalnewsnetwork.com/army/2024/12/army-lays-out-high-level-concepts-for-next-gen-c2/

²³ National Academies of Sciences, Engineering, and Medicine. 2023. *Openness, International Engagement, and the* Federally Funded Science and Technology Research Enterprise: Proceedings of a Workshop—in Brief. Washington, DC: The National Academies Press. https://doi.org/10.17226/27091

²⁴ American Conference Institute. 2024. Defense & National Security Summits - Advancing and Educating the Defense Community. American Conference Institute. https://www.americanconference.com/conferences/defense-governmentsummits/

²⁵ https://www.dhs.gov/acquisition-innovations-motion

²⁶ https://acquisitiongateway.gov/periodic-table

²⁷ Athena Roumboutsos and Stéphane Saussier. 2014. "Public-Private Partnerships and Investments in Innovation: The Influence and the Contractual Arrangement." Construction Management and Economics 32(4): 349-61. https://doi.org/10.1080/01446 193.2014.895849.



the public sector to offset risk and acquire lower-cost, and providing more reliable services while also promoting economic growth and employment opportunities. PPPs typically require an agency to work with the private partners and to oversee the planning efforts. To establish a strong PPP, it is important that all parties commit to a long-term relationship, and that they bring complementary skillsets. All stakeholders should also be committed to resource sharing in support of PPP objectives.

DoD has increasingly focused on PPPs as contractual arrangements to elicit more participation from industry, especially to collaborate on innovations that benefit Pentagon strategy and operations. One major example has been the creation of DoD Manufacturing Innovation Institutes (MIIs). These MIIs focus on areas such as additive manufacturing, flexible electronics, lightweight metals, and advanced textiles that leverage the commercial sector to promote innovations in manufacturing technologies that support the U.S. warfighter. PPPs can also leverage a wide array of different supporting agreements to support their intended goals. For example, PPPs can leverage assistance agreements (i.e., grants, cooperative agreements, and technology agreements), acquisition instruments (i.e., procurement contracts and research other transaction agreements), and other supporting instruments, which can include Memoranda of Agreements, Partnership Intermediary Agreements (PIAs), and Educational Partnership Agreements. If the chosen supporting agreement is well-aligned with the purpose, scope, and intended ecosystem for the PPP, it could substantially strengthen the PPP's ability to achieve its purpose.

Overall, PPPs are not a mechanism guaranteed to promote innovation in every scenario, and do entail transaction costs, but they constitute an impactful tool to facilitate greater DoD-industry collaboration. With over three-quarters of domestic R&D spending originating from the private sector, PPPs offer a pathway to onboard that innovation and capitalize on the resources of entrepreneurs through more close-knit collaboration.

Consortia²⁹

The consortia model is a powerful but specialized tool in the defense acquisition toolbox. From a single consortium in 2000, this method of fostering partnerships and collaboration has grown rapidly with at least 42 consortia by 2022. Membership has also expanded at a brisk pace with estimates of more than a fifteenfold increase from 2010 to 2019. When used appropriately alongside other acquisition methods, it fosters innovation, expands the industrial base, and accelerates procurement. The key to maximizing its potential lies in maintaining flexibility, improving data transparency, and ensuring the government workforce remains skilled in both traditional and alternative acquisition pathways.

Consortia offer numerous benefits to both government and industry. First, they can aid federal acquisition efforts by promoting government—industry collaboration resulting in early engagement and open discussion which can translate into better-defined requirements and innovative solutions. Second, consortia can

8

acqirc.org

²⁸ https://www.manufacturingusa.com.

²⁹ This section relies heavily on Moshe Schwartz and Stephanie Halcrow, *The Power of Many: Leveraging Consortia to Promote Innovation, Expand the Defense Industrial Base, and Accelerate Acquisition*. Baroni Center Report No. 2, July 18, 2022. https://business.gmu.edu/news/2022-07/power-many-leveraging-consortia-promote-innovation-expand-defense-industrial-base-and.



facilitate industry partnerships and collaboration which can occasionally be missing in government contracting while also creating new links in defense supply chains. Third, it can help expand the defense industrial base as the majority of members are often non-traditional contractors and small businesses, segments of the defense ecosystems that DoD is actively trying to recruit. Fourth, consortia can provide vital surge capacity by furnishing a collection of primed potential supplies while also increasing resources available to help manage and navigate the complexities and nuance of federal procurement. Lastly, consortia can help provide federal program offices with experience and necessary skills that may be absent in the existing workforce.

Instant Contracts at "Pitch Days"

Former Assistant Secretary of the Air Force Will Roper led the Air Force's first-ever pitch day on March 6-7, 2019 in New York City. For this event, businesses were asked to submit a small pitch deck detailing innovative ideas that could help address key Air Force problems. Program executive officers selected 60 proposals from the initial set of 417 that were received to make their pitch live. In this instance the goal was to walk out the same day with a contract, so industry was highly incentivized to participate. While this was a splashy event, it is not clear if this is a repeatable event for DoD acquisition organizations.

Subject Matter Expert Discussion Findings

The study team spoke with eighteen subject matter experts in government and industry for this project. Interview participants were senior government officials from the Office of the Secretary of Defense, the Department of the Air Force, the Department of the Army, and the Department of Homeland Security, as well as senior industry executives from three categories of companies: traditional, private equity, and venture capital. All discussions were conducted using Chatham House rules so individuals will not be identified. The following are some of the high-level findings from these discussions, organized based on topics that apply to both traditional and non-traditional (i.e., venture capital and private equity) industry and some that apply to only the latter.

Greater investment transparency drives industry engagement

One of the themes that emerged from conversations with the industry representatives regardless of whether they were traditional, venture, and private equity was a desire for greater transparency from the government. What they meant by transparency was greater insight into actual funding intentions. It was stated that it would be helpful if program offices could say what was a rock-solid requirement that will most likely be funded, and what might be at risk. The Replicator program and the Space Development Agency series of advertised tranches were highlighted as good examples of effective demand signals when DoD provided a forward-looking estimate of certain needs and funding. Also, industry days without access to classified information or explicit investment intentions were called out as not being not very helpful.

g acqirc.org

³⁰ Amy Hudson, "Instant Contracts." *Air & Space Forces Magazine*. April 14, 2019. https://www.airandspaceforces.com/article/instant-contracts/



There is a mutual need for better understanding of government and industry "business" cycles

Another topic highlighted by interview participants was that while efforts to connect with small businesses and traditional primes are well established, connections with VC and PE are not as mature and might be attributable to neither party fully understanding how the other one operates. To that end, better training and understanding could be fostered on both ends. For government, officials could stand to understand the business horizons, timing, and cycles involving venture capital to understand what information and resources they need to best operate. Examples offered were how a million-dollar injection for a Series A company can make a large difference and how earnings reports can be severely impacted by seemingly small delays in contract execution. For VCs, a better understanding of the limitations of government in terms of funding cycles and how much information can be offered in advance would help create a more realistic picture of what it means to be a DoD supplier. Examples here included how a continuing resolution means money for new contracts is not available until months after expected, which also impacts a program's ability to communicate reliable timelines and extends the time to execute contracts.

In short, government often doesn't understand commercial (and more so venture capital) reporting cycles, while commercial industry often doesn't fully comprehend DoD's complex funding cycles. To address that, trade associations were mentioned several times as potentially offering an effective way to bridge the gap in understanding both ways as they frequently touch both worlds. They could even act as intermediators in setting up reverse industry days or panels at existing conferences so that conversations between government and companies can alleviate any misunderstandings or misinterpretations about business processes on either end.

The lack of security clearances and access to classified information can stymie new entrants

Relevant to both small businesses of all stripes and for VC firms, the difficulty of obtaining clearances for handling classified material was mentioned several times as a barrier for potential contractors. Many smaller business and venture capital firms do not have the credentials to engage in conversations involving classified information or CUI. These credentials are needed to receive classified information in meetings, roundtables, and strategic roadmap sessions, and to access classified facilities. However, these clearances require engagement on a classified project, which many VC firms lack, or are too costly for a small business to set-up. Additionally, the process for granting clearances is too long; one participant mentioned how little sense it makes to sign a new company to an eight-month contract when the process for security clearances takes equally long.

Industry time horizons and incentive structures vary by the type of business

Traditional firms, VC, and PE companies have different time horizons when considering investments. Therefore, several interview participants said that a one-size-fits-all approach to providing information won't work well. The respective timelines of non-traditional industry players still need to be considered. Typical information that might satisfy a traditional company, especially near-term contract or investment strategies, might not be sufficient for PE and VC companies that are looking into the future five years or more.

Some themes highlighted by the venture capital and private equity interview participants are worth mentioning. One of the clearest messages expressed by these participants was that these types of businesses have different time horizons of concern than traditional businesses. Large traditional businesses, whether they



are publicly traded or privately held, are primarily concerned with near-term contracts. Because of their size, however, they have the backlog of existing business to develop longer-term opportunities and navigate government processes. Private equity-backed firms, meanwhile, typically have a five-to-eight-year horizon. They are focused more on income and look to grow and position their companies for eventual transaction.

Venture capital firms, however, typically have a ten-year horizon with their portfolio companies. VCs are more focused on growth so having visibility into future opportunities is of key importance to them. VCs look to invest in companies based on the potential addressable market, not necessarily the present value of a company. They value companies based on how big is the market in which the company can operate, which is why the transparency about a company's relative likely success in contracting in the future, not just the next year, is very important to VCs. That being said, like traditional company concerns, there is a greater desire for transparency of information from the government. More early conversations with venture capital firms would be a good idea so that they are more comfortable with unlocking their access to capital.

Industry engagement activities across DoD are stove-piped and difficult to navigate

Most industry days, workshops, and other DoD engagement activities are advertised individually through SAM.gov and there are few up-to-date clearinghouse sites. As a result, companies need to closely monitor a large number of sources to maintain visibility on potential opportunities. This is particularly difficult for smaller firms. Many discussants expressed frustration at the difficulties and uncertainties created by this lack of visibility.

Improving industry engagement activities will have an important and positive impact, but changing incentive structures will lead to a step-function increase in government-industry collaboration

The observations of industry executives from all types of businesses underscored an important, but not well recognized point about government-industry collaboration. Changing how DoD conducts industry engagement activities will have an important and positive impact. Improving, for example, new entrants' ability to get to security clearances, raising the visibility of industry engagement activities, and increasing the transparency of future business opportunities will create an environment that facilitates the involvement and, hopefully, growth of more companies in the defense ecosystem. Changing the incentive structures for businesses, however, will have an even larger potential impact. Increasing the opportunities for profit and creating incentives for greater private capital investment could fundamentally alter the defense marketplace.

Our recommendations will address actions in these two categories.



Recommendations

Based on this short-term Innovation Project, the study team has developed recommendations that

- 1) Advance DoD's approach to industry engagements at both the strategic and tactical levels
 - This set of recommendations focus on practical measures that DoD's strategic level agenda setters military department headquarters, requirements-developing organizations, the Office of the Secretary of Defense and more tactical level buyers program executive offices, innovation organizations, science and technologies organizations can take to improve government industry collaboration. Many of these recommendations apply to both agenda setters and buyers but would be executed in different ways.
- 2) Change incentive structures to spur new entrants, competition, and greater private sector investment
 - This set of recommendations focus on actions that could change industry behaviors in fundamental ways. These recommendations apply to both agenda setters and buyers, but some would require policy or legislative change.

Some of these recommendations can be implemented immediately, particularly those focused on industry engagement. Many of the recommendations focused on incentivizing industry, on the other hand, are more directional in nature. They will require additional analysis to flesh out the concepts and then subsequent actions by senior level DoD officials and Congress. These recommendations differ somewhat in their applicability for traditional defense contractors, small businesses, private equity-backed firms, and venture capital-backed firms, but most are applicable to companies across the defense industrial base.

New ways of engaging with industry

Use Reverse Industry Days to gain a clearer industry perspective (Buyers)

The concept of a reverse industry day was originally pioneered at the Department of Homeland Security in 2015, with the objective being for government employees to understand industry and their concerns. It is in effect a reversal of the typical industry day where the focus is on one-way communication of information from the government to industry; instead, it is an opportunity for the primary flow of information the other way. It is a chance for government officials to better understand industry views on issues such as deciding to bid (or not) on government contracts, the true value of kickoff meetings on projects, and differing industry perceptions of government intent in the use of a Performance Work Statement, Statement of Work, or Statement of Objectives.

Establishing a rhythm of reverse industry days would be a low impact, low cost, and potential high payoff activity to establish at any DoD acquisition office. Adopting this model on a consistent basis across various acquisition offices would greatly strengthen the DoD buyer's understanding of and perspective on industry and would help them craft better solicitations and acquisition approaches. A list of the topics that have been covered by previous DHS reverse industry days such as the value of kickoff meetings, the drivers of protest,

5 Marine View Plaza, Suite 501A | Hoboken, NJ 07030 acqirc.org



and business development lifecycles can be found on their website. 31 A couple trade associations, the Professional Services Council and the Homeland Security and Defense Business Council, also conducted reverse industry days prior to the COVID-19 pandemic.³²

Developing a reverse industry day program is relatively straightforward. The acquisition office could work with a local industry association to identify topics and set up a rhythm of half-day sessions over the course of a year. Several DoD organizations have already participated in internal DHS training sessions and some have held half-day reverse industry days on various issues.

The principal benefit of a reverse industry day is that it educates government officials on the industry perspective, independent of specific acquisitions or contracts. It is also a chance for industry to inform government officials about what actions they do or do not take that facilitate or hurt contractual relationships. Assessing the specific impact of reverse industry days is difficult to measure, but the anecdotal evidence from acquisition workforces that have used them is universally favorable.

Increase opportunities for new entrants to gain clearances and access to classified workspaces (Buyers)

Startups and early-stage VC-backed firms often struggle initially because they do not have credentials to engage in conversations involving classified information or CUI. These credentials are needed to gain further insight, but since you need to be on a classified project as a government contractor to obtain those credentials it sometimes becomes a catch-22 barrier for VC engagement. A possible solution is to set up a sponsorship program of sorts whereby existing primes with credentials can set up a contracting relationship to bring on board smaller companies or VCs that might not have credentials themselves, enabling them to have a seat at the table. This could enable recurring roundtable discussions or classified roadmap sessions with PE, VC, and smaller mentee firms that would otherwise not be able to participate.

Co-sharing classified facilities would also potentially be possible with a sponsored relationship. This would further help cover the start-up costs for smaller businesses and enable them to deal with classified information. Some buying commands have used or are considering using PIAs or Cooperative Research and Development Agreements (CRADAs) to create these kinds of relationships to give new firms access to opportunities. Buying organizations, in coordination with their Service or OSD sponsors, should work to create effective solutions that can be widely implemented to help position new entrants for success by establishing appropriate mechanisms for new entrants to access classified facilities and obtain clearances.

³¹ U.S. Department of Homeland Security, "Reverse Industry Days." Available at https://www.dhs.gov/publication/reverse- industry-day (accessed February 17, 2025).

³² Professional Services Council. "Reverse Industry Days." Available at https://www.pscouncil.org/ p/cr/Resource Centers/Reverse Industry Days.aspx (accessed February 17, 2025); Homeland Security and Defense Business Council. "Reverse Industry Days." Available https://www.homelandcouncil.org/reverse-industry-days (accessed February 17, 2025).



Increase the Use of Classified Road Mapping Sessions (Buyers and Agenda Setters)

Classified road mapping or threat-focused sessions are employed by buyers and agenda setters to convey to industry their perspective on the threat environment posed by the capabilities of U.S adversaries and, sometimes, longer-term acquisition issues. Increasing the frequency of these sessions and broadening their access to more firms would be an excellent means of relaying valuable information about future military requirements and potential opportunities to industry.

Boilerplate CRADAs could be developed to facilitate this type of classified roadmap session. These sessions could provide industry with information related to both longer-term strategies as well as shorter-term investment commitments. At the buyer level, one-on-one follow-on sessions would further increase the value of these sessions to both industry and government.

Convene regular roundtable sessions to help better shape future acquisition efforts (Agenda Setters)

Creating a rhythm of high-level DoD-industry roundtables in areas of particular focus for future acquisition programs will be incredibly beneficial for both government and industry. For example, the "deliberative thinking" sessions at AFC and the Department of the Air Force's engagement of industry during latter stages of the Next Generation Air Dominance study both respectively helped to inform the development of government requirements and the industry capabilities available and needed to address future threats. Rather than working in their own respective bubbles in the drop of an RFP/RFI, this kind of collaboration enables a focus on collaborative problem-solving in advance of the development of specific acquisition programs. This collaboration can extend to demonstrations like the Army's Convergence series of exercises and experiments.

Establish a workable approach for improving the visibility of industry engagement activities (Buyers and Agenda Setters)

Several discussion participants recommended establishing a clearinghouse website (i.e. a one-stop-shop) for all industry days, road mapping sessions, etc. rather than leaving it to companies to have to scour SAM.gov or individual department websites for opportunities because so many buyers and even agenda setters conduct these activities. More visibility of industry days by making a central repository of them would mean less work on industry's party to find them and attend them.

The key will be establishing *and* maintaining the currency of this information. Should it be done at a lower (e.g. PEO), Service, or DoD wide level? All these approaches have the positives and negatives, but it probably makes sense to start these efforts at lower levels, develop best practices, and grow from there.



New ways to incentivize industry

Focusing on changing incentive structures could have a step-function increase in the level of industry engagement and investment in the defense eco-system. One of these recommendations could be done at the buyer level, but most will require the involvement of agenda setters at the senior DoD level as well as Congress.

Maximize the impact and attractiveness of SBIR/STTR (Buyers and Agenda Setters)

SBIR/STTR are long-standing innovation programs across the U.S. government. Their attractiveness has grown substantially in recent years. DoD obligated almost \$3 billion in SBIR/STTR in FY2023, almost three times that in 2013. Still, their low initial values and struggles with transition discourage many small and VC-backed companies. One way that Air Force AFWERX increased its STTR submissions by 80% has been by raising STTR Phase II award amounts to \$1.8 million, which enabled small businesses to keep more money while still satisfying the requirement for a 30% share for its university partner. Transitioning from Phase II projects, AFWERX has developed the STRATFI/TACFI programs to help bridge the proverbial valley of death. ³³ These programs require various levels of matching funding that can from sponsor or private sources and have been widely lauded by VC-backed firms. Pursuing these types of approaches will help early-stage companies grow and scale rapidly.

The tracking of the impact of SBIRs, however, has been a longstanding issue because there is no straightforward current way to track the transition of SBIRs as they move out of Phase II. This hinders the ability of government to track the impact of SBIR funding, but it also affects the ability of both government and the private sector to track the impact of venture dollars in defense. In-Q-Tel developed a methodology for tracking the impact of venture dollars from its intelligence investments through PitchBook, so DoD should explore similar methodologies for its SBIR investments.

Increase incentives for private capital investment (Agenda Setters)

Increasing private sector investment in the defense has been a major focus of defense leaders for several years as DoD has focused on increasing production capacity in response to support to Ukraine and national security threats in the IndoPacific. Multi-year procurement programs in some munitions have helped create that kind of demand signal, but Congressional support for a major expansion of multi-year procurement is not readily apparent.

Another way to incentivize private capital investment, either through venture funding or traditional contractor's use of capital expenditures (CapEx) funding is through the establishment of credit guarantee programs, off-take agreements, or strategic supply agreements. Policymakers can establish credit guarantee programs that would help PE and traditional industry (and perhaps VC) derisk their investments in CapEx and other longer-term investments. Establishing loan guarantee program like the Department of Energy's would help

³³ https://afwerx.com/divisions/ventures/stratfi-tacfi/.



address that financing gap. ³⁴ This would be a natural follow on to the Office of Strategic Capital (OSC). While OSC is a great start, several participants noted that it is a tactically focused effort with limited scope focused on smaller businesses.

Alternatively, DoD could also increase the amount of depreciation allowed on CapEx or major investments. This will require Congressional legislation, but fortunately depreciation is already a major provision in Senator Roger Wicker's Forged Act.³⁵

Finally, federal contractors are currently limited to a certain percentage of profit on non-fixed price contracts. Current levels generate cash and steady levels of profits, but do not readily facilitate increased investment, particularly in publicly traded companies, but also in venture-backed firms. Enabling companies to earn greater margins and therefore greater profits would frankly incentivize them much more than anything else. If DoD structured incentive contracts to enable higher margins for greater performance, for example, DoD could unlock tremendous sources of private capital in defense, much greater than even larger production contracts.

The key with all these incentives is that they address the metrics on which traditional, private equity, and venture capital firms are evaluated by their investors and shareholders. Addressing some or all of these incentive structures will spur the level of private capital investment needed to address DoD's needs and today's national security challenges.

Potential --- Revitalize IRAD reviews (Buyers)

One potential recommendation that was mentioned by a couple industry participants was the need to revitalize IRAD reviews. The research team did not have enough time to explore this issue in any depth, but there was at least a sense that IRAD reviews are not being utilized to their full potential to help industry and DoD mutually address defense challenges. Effective IRAD reviews could spur additional industry investment as they better understand DoD future priorities. This issue merits further research to fully explore effective ways to conduct these reviews and their potential benefits for both DoD and industry.

5 Marine View Plaza, Suite 501A | Hoboken, NJ 07030 acqirc.org

³⁴ https://www.energy.gov/lpo/financing-programs.

³⁵ https://www.wicker.senate.gov/services/files/4396C3A9-DA26-4BD6-A655-9E0910B83DA8.