RECOMMENDATION: Provide Authority and Resources to Promote Responsible Procurement Innovation for AI at Government Agencies

The National Artificial Intelligence Advisory Committee (NAIAC)

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INTRODUCTION

The United States federal government's procurement of AI technologies has increased dramatically over the past few years.[1] Based on research into the challenges that agencies face procuring cutting-edge AI, the NAIAC's fall 2023 recommendations focused on what agencies can do within existing procurement authorities. Namely, the NAIAC recommended agencies prioritize AI procurement, including within its Presidential transition plan; address the AI expertise gap and train the acquisition workforce; utilize a non-exhaustive list of emerging AI procurement practices — such as, quality assurance surveillance plans (QASP) and in-domain evaluation; and ensure expertise and best practices on innovative AI procurement become institutional knowledge and are shared throughout the interagency.[2] Continued research and engagement with stakeholders has revealed substantial limitations of how the Federal Acquisition Regulation (FAR) is implemented in practice. This recommendation thus focuses on changes necessary for agencies to procure best-in-class, trustworthy AI.

Additional procurement authorities leveraged by procurement innovation labs will provide agencies with necessary flexibility to develop and disseminate best practices for procuring AI that is trustworthy and best-suited for an agency's needs, fosters cultures of innovative procurement, and provides a deeper understanding of how the government is and should be procuring AI to achieve its mission.

Challenges to Procuring Best-in-Class, Trustworthy AI

Federal procurement of AI has increased in absolute numbers, but agencies, particularly civilian agencies, lack information about procurement best practices for

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[1] See, e.g., "The U.S. federal government is one of the largest purchasers of AI systems. In 2022 alone, the U.S. federal government spent an estimated $3.3 billion on AI-related contracts, approximately 2.5 times more than in 2017. The reach of AI procurement is also large, with the federal government buying AI from hundreds of vendors. Procurement is thus a powerful policy lever for catalyzing AI innovation and ensuring AI is accountable, responsible, and trustworthy." Recommendation: AI's Procurement Challenge," The National AI Advisory Committee (NAIAC), October 2023, 5, https://ai.gov/wp-content/uploads/2023/11/Recommendations_AIs-Procurement-Challenge.pdf (citing "2023 AI Index Report," Stanford University HAI, April 2023: 288, https://aiindex.stanford.edu/wp-content/uploads/2023/04/HAI_AI-Index-Report_2023.pdf); Nihal Krishna, "Federal gov spending on AI hit $3.3B in fiscal 2022: study," *FedScoop*, April 17, 2023, https://fedscoop.com/us-spending-on-ai-hit-3-3b-in-fiscal-2022/; Gregory S. Dawson, Kevin C. Desouza, and James S. Denford, "Understanding artificial intelligence spending by the U.S. federal government," Brookings (Sept. 22, 2022), https://www.brookings.edu/articles/understanding-artificial-intelligence-spending-by-the-u-s-federal-government/; Fei-Fei Li, "Hearing on Governing AI Through Acquisition and Procurement before the Senate Committee on Homeland Security and Governmental Affairs," September 14, 2023, https://www.hsgac.senate.gov/hearings/governing-ai-through-acquisition-and-procurement-2/; Lisbeth Perez, "Lawmakers Urged to Press on With AI Procurement Policy Work," MeriTalk, September 15, 2023, https://www.meritalk.com/articles/lawmakers-urged-to-press-on-with-ai-procurement-policy-work/)

[2] Recommendation: AI's Procurement Challenge," The National AI Advisory Committee (NAIAC), October 2023, https://ai.gov/wp-content/uploads/2023/11/Recommendations_AIs-Procurement-Challenge.pdf.

AI.[3] Additionally, risk-averse cultures, insufficient training and emphasis on continuous workforce development, and unnecessarily burdensome internal policies and procedures pose significant challenges to the agile acquisition of AI. Even where new procurement practices have been identified, or new authorities have been granted to agencies, contracting teams may be apprehensive to unlearn prior practices and adopt new ones.[4] It's become an oft-repeated axiom that the Federal Acquisition Regulation (FAR), which are the rules governing federal procurement, provides flexibility that agency contracting teams may not, in practice, utilize.[5]

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[3] AI-related contract spending is not equally distributed across the interagency. For example, one analysis found that the Department of Defense (DoD) alone funded 87% of the value of AI-related contracts. Civilian agencies that lead in procurement of AI include NASA along with the Departments of Veterans Affairs (VA), Health and Human Services (HHS), and Commerce.
The Strategic Landscape of AI: A Guided Service for Industry Leaders, Decision Makers, and Federal Agencies, Jennifer Meas, Leadership Connect (Jan. 30, 2024), https://www.leadershipconnect.io/federal-government/2024/01/30/the-strategic-landscape-of-ai-a-guided-service-for-industry-leaders-decision-makers-and-federal-agencies/.
See also, Gregory S. Dawson, Kevin C. Desouza, and James S. Denford, Understanding artificial intelligence spending by the U.S. federal government, Brookings (Sept. 22, 2022), https://www.brookings.edu/articles/understanding-artificial-intelligence-spending-by-the-u-s-federal-government/. *See also* Deltek, Federal AI Market Continues Expansion (Apr. 27, 2023), https://iq.govwin.com/neo/marketAnalysis/view/Federal-AI-Market-Continues-Expansion/7220?researchTypeId=1&researchMarket=
[4] Jason Miller, Procurement Innovation Lab to tackle 'big A' acquisition at DHS, Federal News Network (Jan. 29, 2024), https://federalnewsnetwork.com/contracting/2024/01/procurement-innovation-lab-to-tackle-big-a-acquisition-at-dhs/ ("I think the big obstacle is unlearning. Actually, there's this concept of being an infinite learner and it's really hard to be an infinite learner. But being an infinite learner means having the ability to learn something, unlearn that and learn the next thing. For so long, and in our work series, we were not infinite learners. We are focused on what it says in the FAR and then once you learn that, you can apply it forever," he said. "So it's unlearning the learning process that we had in place. Part of it is learning that I have permission to do that, and I'm not going to get in trouble if I take the leap. We're trying to instill upon the workforce that courage to go and take the leap as the permission to innovate and the ability then to reengage their critical thinking, which for so long has been pushed back on when you say, 'Hey, I've got this new idea,' and someone says, 'No, that's not how we've done it before. Let's just do it that way because we know we didn't get a protest or whatever else.")
[5] E.g., Tom Temin, Things are cookin' at the DHS Procurement Innovation Lab, Federal News Network (Aug. 15, 2023), https://federalnewsnetwork.com/acquisition/2023/08/things-are-cookin-at-the-dhs-procurement-innovation-lab/ (quoting the Department of Homeland Security's director of its Procurement Innovation Lab as saying "because contrary to popular belief, the FAR is extremely flexible and clearly states it clearly states in FAR part one that we should be innovating. It says in exercising initiative, government members of the acquisition team may assume if a specific strategy, policy or procedure is in the best interest of the government. And if it's not addressed in the FAR nor prohibited by law, then pretty much do it. So a lot of people feel when the FAR is absent, then you're not allowed to do it. Whereas it's truly if the FAR is absent, then you do have that leeway to do it. So there is a lot of flexibility and it seems to be our own internal cultures, policies, procedures that we put on top of the FAR that makes it seem burdensome."); Testimony of William Roberts, https://www.hsgac.senate.gov/wp-content/uploads/Testimony-Roberts-2023-09-14.pdf; Jason Miller, Procurement Innovation Lab to tackle 'big A' acquisition at DHS, Federal News Network (Jan. 29, 2024), https://federalnewsnetwork.com/contracting/2024/01/procurement-innovation-lab-to-tackle-big-a-acquisition-at-dhs/.

A significant organizational barrier is resistance based on perceived risks of deviations from standard procurement models.[6] Procurement may be halted by legal challenges to the fairness of the bidding and award process, which could, at a minimum, significantly elongate timelines or ultimately undermine the entire procurement effort. Officials may also be concerned that procurement innovations may increase the risk that the awarded contract will result in a product that is unusable or not fit-for-purpose. Contracting officers fear public pushback and professional repercussions as a result of wasting taxpayer dollars.[7]

Combatting organizational inertia and fostering agile, nimble procurement and acquisition cultures requires senior agency leadership to create and prioritize opportunities for contracting officials to safely experiment with innovative procurement practices. Even within the FAR, agencies underutilize options to shorten the procurement process, instead relying on past practices that may significantly lengthen time to final delivery.[8] To make use of flexible procurement, agencies require more than formal authority—agencies require the support of managers and procurement teams within the organization to create a culture that rewards procurement innovation.

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[6] The DHS PIL Yearbook for 2023 provides information from the Competing Values Framework (CVF) assessment given to members of the acquisition community within DHS. The results demonstrate that, while improving, acquisition professionals still rate "innnovation" as less of a priority than "process controls" within DHS. See discussion in "Canvassing the Community", https://www.dhs.gov/sites/default/files/2024-01/24_0123_cpo_procurement-innovation-lab-yearbook-for-fiscal-year-2023.pdf

[7] *See, e.g.*, In Senate testimony William Roberts described concerns of organizational resistance: "However, even if every single contract office had access to all statutory contract authorities, my fear is that – without any accompanying workforce development – very few offices would take advantage of these additional authorities. Or worse – due to substandard hiring and workforce development, contract office managers would not trust their contracting officers to make sound business and contract decisions, as some tools require more exercise than others. And so, the more important recommendation I have is one that I have echoed throughout this testimony. If we are to believe that AI is a revolutionary technology that will impact every single government mission – we must make AI Acquisition training mandatory across the entire federal acquisition workforce." https://www.hsgac.senate.gov/wp-content/uploads/Testimony-Roberts-2023-09-14.pdf

[8] A memorandum from the Deputy Administrator for Procurement Policy highlights this issue, providing specific guidance to Acquisition officials on flexible policies within the FAR to combat this misconception. Agencies underutilize flexibility under the FAR, even though certain practices may significantly shorten the procurement process. https://www.whitehouse.gov/wp-content/uploads/2019/05/SIGNED-Myth-Busting-4-Strenthening-Engagement-with-Industry-Partners-through-Innovative-Business-Practices.pdf

The Benefits of Flexible Procurement Authorities

The ability to use a non-FAR contracting environment has enabled agencies like DoD to procure state of the art AI technology and do so quickly.[9] The Chief Data and AI Office (CDAO) at the DoD has been prioritizing experimentation with AI procurement, particularly with non-FAR authorities, for years.[10] Utilizing OTAs, which are not subject to the FAR or any other standard set of regulations,[11] the DoD can pursue agile methodologies for managing the procurement process.

The CDAO's Tradewind initiative utilizes OTAs to improve the procurement of AI by applying and assessing innovative, agile contracting processes and making adjustments in real-time.[12] The program has been successful at shortening the procurement process, with prototype agreements typically awarded within 30 to 60 days.[13] Tradewind also collects and publishes resources to improve contracting practices, including recommendations for contract language and guides for negotiation.[14] Beyond the more quantifiable benefits of faster delivery, streamlined contracting processes, and better practices, the initiative has critically focused on transforming organizational culture by bringing together a diverse set of stakeholders and experts, including representatives from industry, academia, government, and nonprofits.[15]

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[9] "Tradewind's non-Federal Acquisition Regulation contracting environment provides much needed flexibility in pursuing cutting-edge AI technologies. The CDAO currently uses the Army Contracting Center in Rock Island, Illinois, as its contracting office while waiting for its contracting delegation to be finalized. Evangelista hopes to provide rotation or embed opportunities for others to experience the Tradewind environment to "change hearts and minds."
https://ncmahq.org/Web/Shared_Content/CM-Magazine/CM-Magazine-September-2022/Smarter-AI-Acquisition-September.aspx

[10] For instance, the Department of Defense Joint Artificial Intelligence Center (JAIC) has relied on non-FAR authorities to experiment with innovative procurement: "the JAIC has intentionally created a `golf course' of AI contracting called Tradewind, where the tees, pins, traps, and fairways can incorporate the business acumen of the FAR with the relative freedom of OTAs." See Timothy W. Cooke "Procurement Officials Are Leading Federal AI Adoption" (July 5, 2022).
https://www.theregreview.org/2022/07/05/cooke-procurement-officials-are-leading-federal-ai-adoption/.

[11] E.g.,
https://www.washington.edu/research/glossary/other-transaction-authority-ota/#:~:text=Some%20agencies%20with%20the%20authority.Department%20of%20Energy%20(DOE.)

[12] "The CDAO/JAIC Tradewind initiative is an implementation vehicle for applying and assessing innovative contracting processes for fast delivery of AI capabilities. Tradewind applies new policies without traditional red tape and quickly assesses proposed solutions for effectiveness and adjusts them in real time as part of the procurement process. . . . Tradewind is designed to provide an ecosystem that will quickly transition a concept from an idea to a working project. It tests the proof of concept through application and analysis of real results under an array of solicitation methods and other transaction authority (OTA)."
https://ncmahq.org/Web/Shared_Content/CM-Magazine/CM-Magazine-September-2022/Smarter-AI-Acquisition-September.aspx.

[13] Supra note 26

[14] Supra note 26

[15] According to Bonnie Evangelista, senior procurement analyst and Tradewind manager, "Greater communication and collaboration from working together will help [DoD] realize what we didn't know before." supra note 26

Similarly, the CDAO's TryAI program has used innovative tactics to enable robust experimentation with new technologies prior to acquisition. The initiative leverages three concepts, in particular, to promote pre-acquisition assessment: commercial solutions opening (CSO), OTA, and modular contracting.[16] The initiative harnesses demonstrations that enable teams to observe the efficacy of technology and provides an opportunity for teams to experiment quickly — and efficiently, reducing potential cost overruns and risks by demonstrating technology works as intended.[17]

Though OTAs do not require the same degree of procurement transparency, coupling more flexible procurement strategies with a procurement innovation lab that assists with experimentation and documentation provides more insight into management of the procurement process and improves oversight. Use of OTA contracting vehicles may carry risks, as other transaction agreements may be exempt from federal requirements designed to protect taxpayers' interests.[18] Lack of regulatory requirements may also make OTAs difficult for agencies to manage, as each OTA is unique.[19]

While remaining sensitive to these concerns, the DoD has used OTAs to pilot AI procurement and develop best practices. For example, the DoD can iterate on evaluation of technology before a final contract is awarded,[20] allowing the DoD to reallocate investments more easily, modify and create terms and conditions, and enhance learning about procuring AI.[21] OTAs also enable agencies to learn more about maintenance costs and, therefore, enable a more complete view of tradeoffs[22] and can help overcome some traditional challenges in the procurement space. For

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[16] Supra note 26

[17] Supra note 26

[18] GAO Report, "Federal Acquisitions: Use of `Other Transaction' Agreements Limited and Mostly for Research and Development Activities" (January 2016). https://www.gao.gov/assets/gao-16-209.pdf

[19] https://www.oig.dhs.gov/sites/default/files/assets/2017-12/OIG-18-24-Nov17.pdf

[20] Other transaction authority granted the Department of Defense "the flexibility necessary to adopt and incorporate business practices that reflect commercial industry standards and best practices into its award instruments." See the Department of Defense "Other Transactions Guide", https://www.acq.osd.mil/asda/dpc/cp/policy/docs/guidebook/TAB%20A1%20-%20DoD%20OT%20Guide%20JUL%202023_final.pdf

[21] As an acquisition analyst with CDAO/JAIC put it, the goal of the TryAI initiative which utilizes flexible authorities is to "fail fast." The analyst added that "if it's a hit, the benefit is at the end of demonstration; we can immediately award a follow-on contract." https://ncmahq.org/Web/Shared_Content/CM-Magazine/CM-Magazine-September-2022/Smarter-AI-Acquisition-September.aspx

[22] Furthermore, OTAs enable agencies to work with businesses that otherwise may be unable to partner with the federal government. A report by the DHS Office of Inspector General describes this benefit of OTAs: "Unlike procurement contracts, grants, and cooperative agreements, OTAs allow DHS to work with non-traditional contractors that would otherwise not do business with the Federal Government because of strict intellectual property and government cost-accounting standard requirements." https://www.oig.dhs.gov/sites/default/files/assets/2017-12/OIG-18-24-Nov17.pdf

example, at DoD, OTA agreements have increased contract awards to non-incumbents, including nontraditional companies and small businesses.[23]

Not all agencies have access to OTAs. Only eleven agencies, as of 2016, have received congressional authorization to use other transaction agreements, including NASA, DoD, DOE, HHS, DHS, and DOT among others.[24] Nevertheless, more flexible tools for assessment of AI technology are also valuable to civilian agencies. In particular, the ability to learn about performance in the use context and revise evaluation criteria based on performance assessments is critical to judge the performance of AI systems that may degrade quickly in new contexts. This is exceedingly difficult, if not impossible, under the FAR.

Fostering Cultures of Responsible Risk-Taking Through Procurement Innovation Labs

Procurement and acquisition innovation labs have been utilized by federal agencies to improve acquisition efficiencies and effectiveness by training the relevant workforce, promoting cross-functional collaboration, increasing knowledge through experimentation and documentation of innovative practices, and incentivizing creative cultures throughout the entire agency.[25] Procurement innovation labs can encourage agencies to make use of more flexible procurement policies by providing expertise, resources, and support throughout the procurement process.[26] These resources are critical to overcoming organizational challenges or resistance to unfamiliar, but valuable acquisition techniques.

By providing an environment in which agencies can test, plan evaluation criteria, share lessons, and obtain assistance from experts, procurement and acquisition

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[23] "According to figures provided by the agency, between June 2016 and September 2021, 33% of their contract awardees have been first-time DoD vendors; 86% are considered nontraditional and 73% are small businesses." Why the Pentagon remains both the best and worst customer for tech innovators, SC Media (Aug. 22, 2022), https://www.scmagazine.com/feature/emerging-technology/why-the-pentagon-remains-both-the-best-and-worst-customer-for-tech-innovators

[24] As of 2016, only 11 agencies had received congressional authorization to use OTA agreements. https://www.gao.gov/assets/gao-16-209.pdf

[25] See, e.g., "About the Lab," Department of Commerce, Office of Acquisition Management, https://www.commerce.gov/oam/lab/about-the-lab; "2023 PIL Yearbook: Building a Community of Procurement Innovation," Department of Homeland Security, Office of the Chief Procurement Officer, Procurement Innovation Lab (Jan. 19, 2024), https://www.dhs.gov/sites/default/files/2024-01/24_0123_cpo_procurement-innovation-lab-yearbook-for-fiscal-year-2023.pdf.

[26] On March 9, 2016, the Office of Management and Budget released a memo on "Acquisition Innovation Labs & Pilot for Digital Acquisition Innovation Lab" suggesting CFO Act agencies consider a pilot of an innovation lab. The memo highlights the potential benefits of such labs, stating that "a network of innovation labs can foster a culture of innovation at federal agencies by empowering and equipping agency employees and members of the public to implement their promising ideas to more effectively serve the American people." https://www.dhs.gov/sites/default/files/publications/March%202016%20Memo.pdf

innovation labs can help manage risk in the procurement process. These practices also enable teams within an organization to learn from others' experiences and promote continuous learning about procurement procedures. Both quantitative approaches (e.g., surveys) and qualitative information (e.g., focus groups) can yield valuable data-driven insights to inform improvements in procurement processes and outcomes. Thus procurement and acquisition innovation labs can provide the institutional infrastructure critical to successfully reform often entrenched procurement cultures.

The federal government has identified the benefit of procurement innovation labs, particularly for technology acquisition. In 2016, the Office of Management and Budget (OMB) requested agencies subject to the Chief Financial Officer (CFO) Act to establish an "acquisition innovation lab, or similar mechanism" with an emphasis on information technology investment and "encourage[d] agencies to consider participation in a pilot to accelerate the development of digital acquisition capabilities" with the support of the U.S. Digital Service (USDS), General Service Administration's 18F Consulting, and Presidential Innovation Fellows (PIF).[27] The OMB memorandum, which also directed agencies to appoint an "acquisition innovation advocate" (AIA) and participate in an AIA Council,[28] coincided with the Digital IT Acquisition Professional (DITAP) Training and Development Program and TechFAR Hub, which provides tools and resources for digital services acquisitions.[29] Today, departments and agencies — including the Departments of Homeland Security, Commerce, and Veterans Affairs, as well as NASA, NOAA, and EPA — have acquisition innovation labs.[30]

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[27] Memorandum to Chief Acquisition Officers, Senior Procurement Executives, and Chief Information Officers on Acquisition Innovation Labs and Pilot for Digital Acquisition Innovation Lab, Office of Management and Budget (Mar. 9, 2016), https://obamawhitehouse.archives.gov/sites/default/files/omb/procurement/memo/acquisition-innovation-labs-and-pilot-for-digital-acquisition-innovation-lab-memorandum.pdf.

[28] Id. See AIA Council members as of November 2023 at "About Acquisition Innovation," Acquisition Gateway, https://acquisitiongateway.gov/additional-resources/resources/4173.

[29] Memorandum to Chief Acquisition Officers, Senior Procurement Executives, and Chief Information Officers on Acquisition Innovation Labs and Pilot for Digital Acquisition Innovation Lab, supra note 8; "Introducing the TechFAR Hub," Executive Office of the White House (July 26, 2016), https://obamawhitehouse.archives.gov/blog/2016/07/26/introducing-techfar-hub; "Fostering a Culture of Innovation Across Government through Acquisition Innovation Labs," Executive Office of the President (March 9, 2016), https://obamawhitehouse.archives.gov/blog/2016/03/09/fostering-culture-innovation-across-government-through-acquisition-innovation-labs.

[30] See the Procurement Innovation Lab (PIL) at the Department of Homeland Security, the Acquisition Innovation Lab ("the Lab") at the Department of Commerce, the Department of Veterans Affairs IT Acquisition Innovation Lab, and the NASA Acquisition Innovation Launchpad (NAIL), NOAA Acquisition Innovation Launchpad (NAIL), EPA Cutting-Edge Contracting Innovation Lab (CECIL). "Procurement Innovation Lab (PIL)," Department of Homeland Security, https://www.dhs.gov/pil; "The Lab," Department of Commerce, Office of Acquisition Management, https://www.commerce.gov/oam/lab; "Technology Acquisition Center (TAC)," Department of Veterans Affairs, Office of Procurement, Acquisition and Logistics (OPAL), https://www.va.gov/opal/tac/index.asp; "NAIL Framework," NASA, https://www.nasa.gov/procurement-nail-framework/; "An Introduction to Innovation in Acquisition," Pierre Smith, NOAA (Jan. 2022),

The DHS Procurement Innovation Lab (DHS PIL)[31] provides particularly instructive examples of the benefits of procurement and acquisition innovation labs. The DHS PIL's explicit mission is to provide "a safe space to test new ideas, share lessons learned, and promote best practices" and to foster "cultural changes that promote[s] innovation and managed risk-taking through a continuous feedback cycle."[32] By equipping procurement teams with valuable information and resources, emphasizing continuous learning, identifying ways to streamline internal procurement policies[33], and ensuring that senior-level leadership advocates for innovative procurement within the agency, the DHS PIL has combatted organizational resistance and reaped significant benefits. In 2023, the DHS PIL accounted for nearly two thirds of the projects awarded by procurement or acquisition innovation labs across the federal government.[34] And the DHS PIL has placed an emphasis on spreading its lessons learned throughout the interagency. With the assistance of the PIL, agencies have been able to quickly procure desired technology: the Food and Drug Administration (FDA) was able to make a contract award for a system to streamline ServiceNow applications in just 94 days — much faster than the typical procurement period of over 180 days.[35] The success of the DHS PIL has spurred similar efforts at NASA.[36]

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https://www.noaa.gov/sites/default/files/2022-02/IntrotoInnovationinAcquisition.pptx; "Cutting-Edge COntracting Innovation Lab (CECIL)," EPA, https://www.epa.gov/contracts/cutting-edge-contracting-innovation-lab-cecil.

[31] The DHS PIL states its mission to "foster a culture of procurement excellence where smart risk-taking and innovation assure DHS mission success." https://www.dhs.gov/sites/default/files/2024-01/24_0123_cpo_procurement-innovation-lab-yearbook-for-fiscal-year-2023.pdf; Jason Miller, Procurement Innovation Lab to tackle 'big A' acquisition at DHS, Federal News Network (Jan. 29, 2024), https://federalnewsnetwork.com/contracting/2024/01/procurement-innovation-lab-to-tackle-big-a-acquisition-at-dhs/.

[32] https://www.dhs.gov/pil.

[33] Jason Miller, Procurement Innovation Lab to tackle 'big A' acquisition at DHS, Federal News Network (Jan. 29, 2024), https://federalnewsnetwork.com/contracting/2024/01/procurement-innovation-lab-to-tackle-big-a-acquisition-at-dhs/ ("One way the PIL will reimagine acquisition policies is through a "hack the policy" type of competition. The Army Contracting Command at Aberdeen Proving Ground did something similar in 2022, eventually removing 60 pages and three months of required reviews from its internal acquisition policy guidance. Simpson said the goal is to bring all the interested parties together — the contracting officers, the policy owners, the lawyers and anyone else — to address challenges by reworking and improving DHS's guidance.")

[34] See https://www.dhs.gov/sites/default/files/2024-01/24_0123_cpo_procurement-innovation-lab-yearbook-for-fiscal-year-2023.pdf

[35] See p. 16, DHS PIL Yearbook 2022. https://www.dhs.gov/sites/default/files/2023-03/PIL%202022%20Yearbook%20FINAL5082.10.pdf

[36] Tom Tevin. "NASA taking a page from DHS' procurement innovation lab." Federal News Network (October 31, 2022) https://federalnewsnetwork.com/podcast/federal-drive-with-tom-temin-podcast/nasa-taking-a-page-from-dhs-procurement-innovation-lab/

Dedicated staff and resources are key elements of the success of both DHS PIL and the DoD's CDAO. Too often, technical support is provided by officials that already have demanding roles, as new responsibilities may be layered on top of existing commitments.[37] If investing in digital competency is to bear the immense return it is capable of, agencies will require dedicated staff with digital skills to oversee and assist in the procurement process.[38] Both the DHS PIL and CDAO have full-time staff, whereas other innovation labs rely exclusively on volunteers who have less availability and who turn over at greater rates. When properly staffed, agencies have enjoyed a great deal of success in the use of innovation labs.

While OTAs may provide more flexibility, one concern with additional procurement authorities is that agencies may simply take advantage of these authorities without developing practices to improve the infrastructure, environment, innovation, and level playing field for AI procurement. NAIAC hence believes that more flexibility (e.g., via OTA) should be paired with the responsibility to transparently develop best AI procurement practices housed in a Procurement Innovation Lab.

RECOMMENDATION

NAIAC recommends that three or more civilian federal agencies are provided Other Transaction Authority (OTA) on the condition that agencies develop, document, and disseminate best practices on procuring AI through a procurement or acquisition innovation lab. To better realize the benefits of greater procurement flexibility and the benefits to competition, innovation, and equal opportunity and equity it can enable, agencies will require resources and dedicated staff for innovation labs to provide support throughout the procurement process.

To procure best-in-class, trustworthy AI, and to level the playing field across vendors, civilian agencies need the flexibility, resources, and senior-level support to experiment with, and learn from, best practices for procuring AI. For government agencies to efficiently procure trustworthy, cutting-edge AI, agencies must have access to as many procurement tools as possible. Non-FAR based procurement, such as provided by Other Transaction Authority (OTA) and Commercial Solutions Opening (CSO), provide agencies like the DoD the flexibility to select the

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[37] For instance, to meet the requirement in EO 14,110 that agencies name a Chief AI Officer (CAIO), many agencies have named current CIOs as CAIOs. An examination of Fedscoop's CAIO tracker shows that many agencies have named officials currently serving in technical roles as the agency's CAIO. See https://datawrapper.dwcdn.net/aZXJK/19/

[38] In her book, *Recoding America*, Jen Pahlka explains, "the USDS tallied up $3.5 billion in savings and cost avoidance (that is, helping agencies find better, less expensive ways to address their needs) in 2019 alone."

procurement practices most-tailored to addressing the procurement need. These authorities also allow agencies to improve supplier diversity, which is particularly important given companies that are new or have not traditionally worked with the federal government may be able to provide innovative, trustworthy AI that is best-suited to an agency's needs. To make full use of these authorities, agencies should have access to environments that enable safe experimentation and promote information about best practices. Misconceptions about opportunities for experimentation may lead agencies to rely on slow, but familiar processes[39] that prevent agile acquisition of AI.

One potential approach for implementation would be to sequence civilian agencies based on their existing authorities and innovation labs. In the short run, given capacity and resource constraints, it may be easiest to grant more flexible procurement authorities to agencies with existing procurement labs that lack OTA authority (e.g., the Department of Veterans Affairs).[40] Such agencies already have some institutional infrastructure in place for procurement innovation and can hence more effectively utilize non-FAR-based contracting vehicles. We recommend that OMB, along with other relevant stakeholders, assess the capability of existing procurement labs to inform selection of the first agencies to receive OTAs on a trial basis.[41] However, before receiving OTA, agencies with existing procurement and acquisition innovation labs should — in accordance with GAO guidance[42] to improve transparency and provide opportunities for evaluation of agencies' OTA use — create a plan for collecting and managing contracting data, including: a systemic approach to track awards under OTA; and a plan to collect and document OTA contract features (e.g., compensation, list of entities, area of focus). In the medium run, agencies with OTA but without procurement labs could create such labs to collect

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[39] In an interview, the DHS PIL director, Katherine Crompton, described this misconception: "...a lot of people feel when the FAR is absent, then you're not allowed to do it. Whereas it's truly if the FAR is absent, then you do have that leeway to do it. So there is a lot of flexibility and it seems to be our own internal cultures, policies, procedures that we put on top of the FAR that makes it seem burdensome." https://federalnewsnetwork.com/acquisition/2023/08/things-are-cookin-at-the-dhs-procurement-innovation-lab/

[40] Agencies with procurement innovation labs include the Environmental Protection Agency (EPA) Cutting-Edge Contracting Innovation Lab (CECIL), Department of Veterans Affairs IT Acquisition Innovation Lab, Office of Personnel Management (OPM) Lab, and General Services Administration (GSA) Procurement Innovation Resource Center (PIRC). See EPA CECIL, https://www.epa.gov/contracts/cutting-edge-contracting-innovation-lab-cecil; VA IT Acquisition Innovation Lab, https://www.va.gov/opal/tac/index.asp; Lab at OPM, https://lab.opm.gov/; GSA PIRC, https://www.gsa.gov/policy-regulations/policy/acquisition-policy/procurement-innovation-resource-center.

[41] Assessments of current procurement labs readiness for new authorities could inform the development of more structured assessment frameworks, like a procurement maturity model. For instance, the Wales genetic procurement maturity model provides a framework for assessment of public sector procurement practices. See https://www.gov.wales/sites/default/files/publications/2019-01/170111atisn10948doc1.pdf

[42] See GAO Report (GAO-22-105357), "Other Transaction Agreements: DOD Can Improve Planning for Consortia Awards" (September 2022) https://www.gao.gov/assets/gao-22-105357.pdf

best practices and fully utilize OTAs.[43] In the long run, based on substantive priorities, agencies that have neither OTA nor procurement labs could be granted such authorities and resources.

Procurement or acquisition innovation labs should, to the extent possible and to remain consistent with the NAIAC's fall 2023 procurement recommendation, maintain transparency and share and disseminate contracting artifacts and practices within and across agencies. For instance, NAIAC previously noted several emerging best practices for AI procurement, including Quality Assurance Surveillance Plans (QASPs) and provisions for in-domain evaluation, that the procurement or acquisition innovation labs should explore implementing.[44]

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ABOUT NAIAC

The National Artificial Intelligence Advisory Committee (NAIAC) advises the President and the White House National AI Initiative Office (NAIIO) on the intersection of AI and innovation, competition, societal issues, the economy, law, international relations, and other areas that can and will be impacted by AI in the near and long term. Their work guides the U.S. government in leveraging AI in a uniquely American

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[43] Agencies that have been granted OT authority, but do not appear to have procurement labs include Department of Health and Human Services (HHS) including National Institutes of Health (NIH), Department of Energy (DOE), Department of Transportation (DOT) including Federal Aviation Administration (FAA).
[44] Other recommendations for agency practices include statement of objectives (SOOs), teaming agreements, work plans, and contractual terms. *See* National AI Advisory Committee Recommendation: AI's Procurement Challenge (October 2023), https://ai.gov/wp-content/uploads/2023/11/Recommendations_AIs-Procurement-Challenge.pdf

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way — one that prioritizes democratic values and civil liberties, while also increasing opportunity.

NAIAC was established in April 2022 by the William M. (Mac) Thornberry National Defense Authorization Act. It first convened in May 2022. It consists of leading experts in AI across a wide range of domains, from industry to academia to civil society. https://www.ai.gov/naiac/

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