



RESEARCH  
AND ENGINEERING

## UNDER SECRETARY OF DEFENSE

3030 DEFENSE PENTAGON  
WASHINGTON, DC 20301-3030

SEP 26 2024

### MEMORANDUM FOR THE DEFENSE INNOVATION BOARD

SUBJECT: Terms of Reference – Scaling Nontraditional Defense Innovation

The volume, velocity, and complexity of change in defense technologies requires the Department of Defense (DoD) to identify and acquire innovative technologies faster than ever before. As such, the traditional defense industrial base is no longer the sole source of innovation in national security. Increasingly, nontraditional defense contractors, as defined section 3014 of title 10, United States Code, are significant drivers of technological change and innovation, forming a burgeoning ecosystem of expertise, speed, and risk-taking that differentiates them from traditional defense prime contractors.

How can the DoD enable a more competitive and diverse industrial base? Properly understanding this dynamic ecosystem, and the growing role of nontraditional defense contractors within it, is essential to developing a thriving defense industrial base that supports supply chain resiliency and encourages innovation and growth.

To address this question, I hereby task the Defense Innovation Board (“the Board”) to deliver a study on nontraditional defense contractors to identify needed steps for the Department to better integrate emerging companies into the defense industrial base. This study will:

- Identify the key processes and practices nontraditional defense contractors have implemented to contract with the DoD;
- Identify best practices for expanding business with the DoD from lab to prototype to product based on lessons learned from established nontraditional defense contractors;
- Identify the key enabling and hindering characteristics, processes, and practices of the U.S. government agencies that work with nontraditional defense contractors on both prototyping or small-dollar revenue opportunities and multi-year revenue opportunities;
- Evaluate the effectiveness of existing DoD pathfinder programs for nontraditional defense contractors, such as the Defense Innovation Unit's Commercial Solutions Opening (CSO) process, Small Business Innovation Research (SBIR)/Small Business Technology Transfer (STTR) and related Strategic Funding Increase (STRATFI)/Tactical Funding Increase (TACFI) programs, accelerators, prize challenges, and other mechanisms for engaging nontraditional defense contractors;
- Analyze the Other Transaction Authority (OTA) as an award process for nontraditional defense contractors and the success it has in bridging the gap between DoD and Industry connections;
- Evaluate current acquisition workforce training requirements to determine if training for working with nontraditional defense contractors is effective or needs improvement;

- Examine the impact of private capital in scaling nontraditional defense contractors into the defense industrial enterprise;
- Provide anonymized, data-driven case studies to identify model business approaches that have resulted in nontraditional defense contractors contracting with the DoD.

The recommendations should aim to promote a more competitive and diverse nontraditional defense industrial base. The Board shall thoroughly consider and deliberate on its independent findings and recommendations at a properly noticed and open meeting unless the meeting must be closed in accordance with one or more of the exemptions found in subsection 552b(c) of title 5, U.S. Code. The Board shall provide its independent findings and recommendations no later than 120 days from the date this Terms of Reference (ToR) is signed.


In support of this ToR and the work conducted in response to it, the Board has my full support to meet with Department leaders. The Board staff, on behalf of the Board, may request the Office of the Secretary of Defense and DoD Component Heads to timely furnish any requested information, assistance, or access to personnel to the Board. All requests shall be consistent with applicable laws; applicable security classifications; DoD Instruction 5105.04, "Department of Defense Federal Advisory Committee Management Program," dated August 6, 2007; and this ToR. As special government employee members of a DoD federal advisory committee, the Board will not be given any access to DoD networks, to include DoD email systems.

Material provided to the Board becomes a permanent part of the Board's records. All data/information provided is subject to public inspection unless the originating Component office properly marks the data/information with the appropriate classification and subsection 552(b) of title 5, U.S. Code exemption categories before the data/information is released to the Board. The Board has physical storage capability and electronic storage and communications capability on both the unclassified and classified networks to support receipt of material up to the Secret level.

The Board will operate in conformity with and pursuant to the Board's charter; chapter 10 of title 5, U.S. Code; subsection 552b(c) of title 5, U.S. Code; and other applicable Federal statutes, regulations, and policy. Individual Board members do not have the authority to make decisions or provide recommendations on behalf of the Board nor report directly to any Federal

representative. The members of the Board are subject to certain Federal ethics laws, including section 208 of title 18, U.S. Code, governing conflicts of interest, and the Standards of Ethical Conduct regulations in 5 C.F.R., Part 2635.

Thank you in advance for your cooperation and support of this critical undertaking.



Heidi Shyu

cc:  
Senior Pentagon Leadership  
Directors of Defense Agencies  
Directors of DoD Field Activities  
Advisory Committee Management Officer for the Department of Defense