



**HOW TO ENGAGES STARTUPS FOR A
MORE DYNAMIC US DEFENSE
INDUSTRIAL BASE**

BY MEGHAN FONG

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[Part I](#) of this series highlighted how the post-Cold War contraction of the defense industrial base (DIB) has left the United States ill-prepared for conflict with a near-peer adversary—particularly as ongoing wars in Ukraine and the Middle East further strain production capacity. It examined the limitations of capital infusion, such as the *One Big Beautiful Bill Act*, and used Elementum 3D as a case study to illustrate how startups can accelerate weapons production and help meet urgent operational demands on a compressed timeline. Yet although the imperative for munitions production modernization and the value of startup-driven innovation are codified in strategic documents, significant barriers to entry still preclude startup participation in the DIB at a scale necessary for transformative modernization.

Part II identifies the barriers limiting startup participation in the DIB and offers the US government four recommendations for improving the US government defense procurement process to facilitate increased, sustainable, and integrated startup participation in the DIB required for munitions production modernization.

Recommendations

1. Reduce bureaucratic friction

Successful entry into the DIB requires not only the delivery of technologically viable solutions to solicitations, but importantly the institutional capacity to navigate a complex and highly regulated federal procurement environment—a persistent barrier to entry despite recent efforts to expand rapid accensions pathways across the DoD. Structural misalignments—such as protracted and opaque bureaucratic processes, exacting compliance obligations, jargon- and acronym-laden communications, and a rigid hierarchical culture—frequently clash with the operational models of agile and decentralized startup enterprises.

While existing [guides](#) and [video tutorials](#) can provide a baseline level of orientation to defense procurement, they are insufficient for addressing the practical and bespoke challenges that early-stage companies face in transitioning from prototype to commercialization. To that end, the DoD should also consider providing tailored advisory services for aspiring defense startups and initial contract awardees. This requires further investment into the training and development of program executive offices, program managers, and other acquisitions professionals—not only in the technical scope of specific contracts, but in the procedural mechanics of defense contracting. Enhanced institutional support of this nature would reduce administrative friction, enabling small businesses to focus on core product development and integration, and mitigate the risk of promising technologies failing to scale due to process-driven barriers.

2. Prioritize interoperability and flexible production

Current defense procurement emphasizes widget over system, resulting in a multitude of stove piped capabilities and a rigid defense manufacturing base incapable of supporting dynamic warfighter requirements. The present DIB is sustained by aging factories, exhibited by production lines narrowly optimized to specific components, and constrained by

intellectual property regimes tightly controlled by major defense primes.

To successfully modernize legacy DIB structures, the DoD should focus on defense manufacturing acquisitions that foreground vendor-indiscriminate interoperability and open architectures. This practice can build a defense production environment that allows for flexible and scalable manufacturing as vendors expand and the rapid integration of off-the-shelf technologies. Acquisitions should emphasize expanding intellectual property sharing among DIB partners to mitigate production stovepipes and facilitate rapid scalability through diversified production lines as operational demands dictate. Lastly, rather than over-specifying solicitation requirements, the DoD should allow startups—as experts in their own technologies—to develop solutions for manufacturing integration, diversifying potential solutions to achieve the desired end state of a timely, dynamic, resilient, scalable, and capable production base.

3. Offer cyberspace as a service

As a result of the increasingly contested information environment, the DoD has specified high cybersecurity requirements for its commercial defense partners through the [Cybersecurity Maturity Model Certification](#) (CMMC) framework—which ensures contractors handle sensitive government information in a secure manner. Though the necessity of high cybersecurity requirements is not debated, CMMC places a heavy—if not lethal—resource burden on small businesses navigating and financing compliance.

Existing programs—such as the DoD Office of Small Business Programs’ [Project Spectrum](#), the [DoD-DIB Collaborative Information Sharing Environment](#) (DCISE), and the National Security Agency’s [DIB Cybersecurity Services](#)—aim to guide startups in obtaining CMMC; however, services are limited to threat intelligence sharing, training, and mentorship, surface-level threat prevention, and vulnerability testing. The responsibility of mitigating any cybersecurity vulnerabilities or intrusions and for financing required third-party assessments falls on startups.

To assist small businesses in building secure information infrastructure, the DoD should consider offering cybersecurity as a service for contracted defense businesses. Scalable solutions, such as a secure cloud environment, could present a DoD-provided solution that reduces the cybersecurity burden on startups with limited resources and expertise, while simultaneously ensuring sensitive defense information is secured.

4. Foster a culture of risk tolerance

The US DIB’s cultural and systemic emphasis on consistency, efficiency, and results stands in fundamental contrast to startups’ imperative to innovate through rapid, high-risk experimentation. Though defense strategies have long recognized the value of innovation for US security, efforts to facilitate DIB modernization are stymied by a procurement incentive structure that promotes a no-fail culture. The concentration of high-value, long-duration contracts among defense primes, often perceived as the most reliable partners, can paradoxically amplify risk when delivery timelines or production scale requirements are not met. The rigidity and exclusivity of current PORs further precludes vendor redundancy and the ability for the DoD to pivot from non-performing contracts, thereby institutionalizing monolithic dependencies in defense acquisitions.

To successfully incorporate of the startup community into the DIB, the DoD should seek to align its call for innovation with business practices and incentive structures that promote faster-paced and higher-risk procurement. By broadening measures of success from the individual contract-level to systems-level, the DoD can implement risk sharing mechanisms through teaming. Through this practice, acquisitions professionals would no longer be evaluated on the number and size of executed contracts, but acquisitions teams would be evaluated on measured capability advancements generated by the aggregate of contracts over time. Additionally, teams should be allocated more fiscal flexibility to pursue multiple vendors under the same POR and the authority pivot from underperforming contracts as necessary.

Conclusion

As the DoD reviews its munitions requirements for potential conflict in the Pacific and confronts the crises-demonstrated limitations of a legacy DIB, successful modernization from traditional defense production for rapid and scalable weapons development is contingent on its ability to rapidly incorporate startups. Though the US defense community has long recognized the value of this endeavor, persistent bureaucratic barriers and cultural norms create a gap between US defense strategy and US defense production capabilities. Insufficient attention to this misalignment could yield a defense enterprise incapable of supporting a Pacific scenario, risking dominance of the US alliance system, US credibility in the region, and American lives if conflict occurs.

PacNet commentaries and responses represent the views of the respective authors. Alternative viewpoints are always welcomed and encouraged.