



CHALLENGES AND OPPORTUNITIES IN NATIONAL SECURITY SPACE

AIA RECOMMENDATIONS FOR DOD SPACE ACQUISITION REFORM



For decades, the United States has grappled with how to better acquire the national security space capabilities that have made us the world's preeminent space power. Despite the Space Race initially building our dominant lead over global competitors, we have too often been hampered by an acquisition process ill-suited for the rapidly evolving and increasingly vulnerable space domain. Now our lead is shrinking significantly even as our military and economic dependence on space grows.

Without rapid and revolutionary transformation, we risk losing our comprehensive space advantage. To stay ahead of the aggressive development of advanced space capabilities by our adversaries, we must rethink our approaches to risk management, policy development, and fiscal and political oversight. Equally as importantly, the U.S. must optimize its approach to leveraging and capitalizing on the tremendous growth in space capabilities emerging within the private sector.

The 2019 establishment of the U.S. Space Force and U.S. Space Command offers an incredible opportunity to reassess how we develop and field space capabilities as quickly as our warfighters and decisionmakers need them. Building on recent congressional initiatives to streamline acquisition, these new space organizations can focus the momentum needed to drive innovative change.

There is broad agreement among government and industry over the need to acquire the right capabilities for warfighters at a speed that surpasses the threat. The aerospace and defense industry stands as a willing partner to discuss potential solutions. We offer the following recommendations to transform the space acquisition system and outpace the ever-advancing threat.

RECOMMENDATIONS:

1. The Administration should deliver its congressionally mandated space acquisition system reports as soon as possible.

The Department of Defense (DOD) cannot fix space acquisition on its own. Since 2018, Congress has sought inputs to reform the system, aiming for a collaborative solution instead of mandated oversight. These reports should be drafted with input from industry, signaling the Space Force's new approach to integration with innovative partners who best understand the marketplace and supply chain. Each day that passes without these reports is one less to negotiate solutions together.

2. The space enterprise must foster an innovative, diverse, and empowered workforce. Space acquisition requires a technically skilled cadre steeped in both acquisition and operations knowledge and an understanding of how to use their authorities to drive innovative solutions. A new culture must be fostered which incentivizes and promotes leaders who thoughtfully embrace risk, pursue opportunities to fail forward, and grow from both success and failure. The mold of today's space acquisition professional must be recast with a new approach to the training, education, experiences and, most importantly, leadership needed to groom the next generation. Talent management and diversity, equity, and inclusion must be cornerstones, not footnotes, of space acquisition.

- 3. DOD must clearly define the roles and responsibilities of space acquisition organizations.** These organizations must have clear lines of authority that discourage disruptive competition amongst them. This should include defining how and when programs transfer between organizations, ensuring programs avoid unnecessary duplication and are mutually supportive to the extent that is operationally feasible, and providing senior acquisition officials with the resources and authorities needed to succeed. The organizational construct should also ensure closer industry engagement by:
- Clearly and publicly identifying organizational roles and entry points for industry partners to eliminate confusion and capitalize on innovation of a multitude of space mission focus areas and acquisition organizations.
 - Implementing best practices in working with the private sector to leverage industry's full scope of space capabilities.
- 4. Congress and DOD should provide the budgetary and programmatic flexibility necessary to address the modern threat.** This will require increased transparency and trust between stakeholders, including Congress. To go beyond the existing Adaptive Acquisition Framework and Middle Tier Acquisition, we propose four specific recommendations to inject the speed and flexibility required to maintain our competitive edge:
- Consolidating space programs into mission area portfolios will optimize budget execution flexibility to respond to emerging threats and enable promising technologies to successfully evolve from prototypes to procurement. With this added flexibility, it will be incumbent upon the Space Force to provide sufficient visibility to ensure proper congressional oversight and effective coordination with industry.
 - Realigning the acquisition and budget process via a more agile alternative to traditional Planning, Programming, Budgeting, and Execution (PPBE) will better reflect a space marketplace that moves more quickly than the Program Objective Memorandum (POM) cycle and will create flexibility to proactively leverage emerging technologies that weren't known or required when the budget was approved two years prior.
 - Driving down decision-making authorities to the lowest level will save time and empower program managers to lead, take appropriate risk, and deliver effective capabilities to meet warfighter requirements. This will also require the culture change to incentivize and reward the workforce for innovation-driven decision-making.
 - Incrementally funding space system procurements will stabilize budget planning across the Future Years Defense Program (FYDP), lowering cost and schedule risks while enhancing capability.
- 5. DOD and the intelligence community must end the over-classification of space programs.** Excessive secrecy has created conditions that undermine deterrence, slow program delivery timelines, prevent integration of space assets into operational planning, eliminate opportunities to share data and capabilities with allies and partners, hinder public understanding of threats and support for space organizations and budgets, and constrain industry from leveraging existing technologies and targeting Independent Research and Development (IRAD) investments to deliver solutions to the threats we face.
- 6. Implement a consistent, coherent, and coordinated vision for an open and interoperable national security space architecture.** Today, competing visions and incomplete designs result in a combination of redundant acquisitions, capability gaps, and systems that are not sufficiently mutually supportive. The solution is not a detailed, common design, but an open and interoperable overall vision that includes both goals for resiliency and responsiveness and a balance between government and commercial contributions. This requires sending a clear signal to industry on medium- to long-term plans for acquiring space capabilities, which includes expectations for a competitive, U.S.-based supply chain. Absent this, industry is challenged to plan future investments, and new entrants find it challenging to close business cases.

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