STATEMENT BY SHYAM SANKAR
CHIEF TECHNOLOGY OFFICER
PALANTIR TECHNOLOGIES INC.

BEFORE THE 118TH CONGRESS
COMMITTEE ON ARMED SERVICES
U.S. HOUSE OF REPRESENTATIVES

16 SEPTEMBER 2024

Introduction

Chairman Rogers, Ranking Member Smith, distinguished members of the Committee, thank you for the opportunity to discuss one of the most important tasks ahead of us all today: How to drastically improve the ability of the Department of Defense (DoD) to adopt and field emerging technologies at speed, at scale, and with maximum operational effectiveness.

We are long past debating whether software and AI-enabled technologies are essential to America's ability to deter, and if necessary, defeat its adversaries. Today, we all agree that it is only through the deep integration of hardware and software that America can gain and sustain its unmatched advantage on the battlefield.

Through real-world testing, evaluation, and military exercises — like Valiant Shield, Scarlet Dragon, and the Global Information Dominance Experiments (GIDE) — we have already seen the foundations of a truly operational Combined Joint All-Domain Command and Control (CJADC2) capability, where advanced software and AI-enabled capabilities are fueling an unparalleled degree of integration and interoperability. AI-enabled software is helping weave together disparate data sources, sensors, platforms, and operators across all domains, giving the United States and its allies the ability to visualize the battlefield — and act on what they see — far better than ever before.

There is no doubt that key leaders in the Pentagon — including Secretary of Defense Lloyd Austin III, Deputy Secretary of Defense Dr. Kathleen Hicks, Director of the Defense Innovation Unit Doug Beck, and Chief Digital and Artificial Intelligence Officer Dr. Radha Plumb — recognize this necessity and have become champions of innovative acquisition.

But our initial progress is not enough. We are in a state of emergency. America's Armed Forces face complex operating theaters with adversaries who enjoy unique geographic and military advantages. In this environment, the only way for the United States to win is to leverage the strongest technological assets at its disposal. We — government and industry together — must determine how to do this.

As we face these challenges, we must accept that winning is the only requirement. And we must accept that speed has a quality all its own. To prevail in the next great war, the U.S. must have the capacity to develop, procure, field, and scale technological solutions at a pace that far exceeds its adversaries.

Specifically, to achieve needed levels of speed and effectiveness, we must:

1. Empower America's defense and commercial industrial base, including non-traditional software and defense technology providers, to build and sell their capabilities to the Defense market;
2. Ensure that the procurement community deploys every creative authority, pathway, and acquisition tool available to adopt mission-critical technologies at speed; and
3. Take a "field-to-learn" approach to software adoption by rapidly deploying, testing, and iterating on software in real-world conditions so that it is battle-ready.

More broadly, we must also encourage our political and military leaders to view innovative heretics — within government, the military, and industry — not as pesky disruptors, but as heroes who are eager and able to help fuel "Freedom's Forge."

I am honored that the Committee on Armed Services has invited me to share my views on these challenges, and importantly, on how we can address them through decisive action today.

Strengthening and Buying from the American Industrial Base

A little over thirty years ago, William Perry hosted a dinner that we now call the "Last Supper." Foreseeing a world in which defense industrial production would exceed America's military need, he encouraged the robust community of commercial defense vendors to consolidate. We are here today because the Department of Defense believes it has the opposite problem — a sluggish industrial base that may be unable to sustain the levels of production required to meet the next generation of defense needs.

In my view, this perception is wrong: Today, we are witnessing what I like to call a "First Breakfast" across America's commercial defense base. Thanks in part to the marriage of software and hardware, the private sector is already re-industrializing and diversifying at an incredible pace, and new companies are eagerly striving to bring their most cutting edge technologies to the government market. While the Last Supper caused what was once a dynamic industry of creatives to become a stagnant industry of conformity, First Breakfast is now reversing this decades-long trend.

The challenge, therefore, is not that America's industrial base is too small or too slow, but that government is unable to harness its full potential. Fortunately, the set of actions and policies that are going to have the greatest impact on the Pentagon's ability to acquire critical capabilities at speed and scale are also the simplest: Allow the free market to build commercial solutions that meet government needs, and then actually purchase those solutions from commercial vendors who can deploy mission-critical capabilities at greater effect, speed, and cost than solutions built in-house.

More specifically, I can offer the following recommendations:

First, and most importantly, the government must **buy commercially-available solutions** that can provide capability on day one. The commercial sector is capable of providing the most effective software and AI-enabled solutions on the quickest timelines and at the lowest prices. But program offices will often opt to build software-centric platforms in-house, even after they have been exposed to readily-available commercial solutions. This impulse by the procurement community to build in-house is driven by a number of factors, including: (a) a fear of "vendor lock;" (b) the belief that every solution for the DoD must be customized, and (c) sticker shock at the initial amount of a fixed-price package, service, or license.

Yet the decision to eschew commercial solutions due to these fears is both wasteful and, often, against the law. Despite the fact that commercial solutions are built for maximum flexibility and interoperability, building in-house solutions from scratch, rather than buying commercially-available software, delays the delivery of mission-critical technologies — sometimes by years — and further wastes taxpayer dollars and DoD time on solutions that cannot match the quality of commercial offerings. While industry leaders understand DoD concerns, the Department often seeks to avoid any form of lock-in at all costs, and I would argue that doing so actually locks warfighters *out* of access to the very tools they need, while locking in subpar solutions. Congress introduced commercial item preference — as inscribed by FAR Part 12 and 10 USC § 3453 — for good reason, and it must ensure that the DoD upholds it.

Second, the Department of Defense should **drop its insistence on custom solutions procured via Cost-Plus contracting** as a default. Although procurement offices may believe that cost-plus contracts can help avoid undue profiteering — by placing limits on contractor margins — the practice of pushing cost-plus for all procurements undermines the DoD's ability to adopt best-in-class capabilities in two ways. First, for those traditional companies who will compete for those contracts, it encourages them to forgoe ground-breaking R&D and embrace a system of building for rigid requirements that unfold over lengthy development timelines and ultimately drive up government spending. Second, because cost-plus frameworks are completely incompatible with the business model of most non-traditional defense tech providers — who instead require Firm-Fixed Price or other models — the insistence on cost-plus is driving innovative commercial tech firms away from the government market. The reason is that while commercial technology firms rely on large-scale, early-stage private capital investments to fund the hiring of world-class talent and ground-breaking R&D, cost-based pricing drastically undervalues these full lifecycle costs of commercial innovation and leads to contracts that limit firms' abilities to safeguard returns on their investments. As a result, non-traditional firms that want to survive will either have to split their commercial and government businesses apart to adopt the business model of the traditional defense community, or have no choice but to eschew the government as a customer altogether. This is bad for the warfighter, it is bad for taxpayers, and it is bad for the broader health of the industrial base. As such, I strongly encourage Congress to help ensure that built-from-scratch solutions and cost-plus contracting are only used as a last resort.

Third, Congress and the Department of Defense must **streamline the overly complex and costly accreditation process**. Many members of the defense industrial base simply do not have the resources to apply and comply with different Authorities to Operate (ATOs) every time they seek a contract. One long-term solution would be to further centralize and standardize the ATO

process across the DoD and even the entire U.S. government. Other solutions could include creating pre-approved platforms and marketplaces where vendors can offer their solutions. The CDAO's Open DAGIR ecosystem is a strong example of creative problem solving in this domain.

In short, the key to unlocking the necessary speed of capability delivery and impact is to field and adopt solutions that work today, not tomorrow. To do so, the DoD must follow its own guidance and U.S. law, which encourages the procurement of commercial solutions that are ready to help win the fight tonight. The defense tech ecosystem is eager to sell its solutions to the government, but this essential pillar of the defense industrial base will only survive if the U.S. government is also eager to adopt their solutions, unburdened by policies that hinder free market forces.

Improving Procurement by Using All Acquisition Authorities

Congress must also work with the Pentagon to improve the acquisition process, namely by making sure that the acquisition community is making the most of the diverse procurement tools that are already available to adopt new technology quickly and flexibly. Not only do most early-stage tech companies wither in the face of two-year budget cycles — the commercial sector now operates on a quarterly budget basis — warfighters themselves cannot afford a two-year gap between identifying a need and receiving it. Fortunately, the DoD doesn't have to operate at its current pace.

First, procurement officers already have a wide range of tools available to speed up procurement timelines — from OTAs and MTAs to Software Acquisition Pathways and other creative authorities — that are not utilized often enough. For example, Joint Urgent/Emergent Operational Needs (JUON/JEONs) and Operational Needs Statements (ONS) are valuable tools for capability delivery that could be used at a much higher rate. I can say from personal experience that without the use of JUON or ONS's, Palantir would not have been able to deliver essential support to units on the battlefield in Afghanistan and Iraq when warfighters needed it. In fact, I would argue that Palantir as a company would not have been able to stay in business without contracting from JUON/JEONs pathways. Simply put, when the DoD's normal planning process is too slow, too top-down, and too deductive to meet all warfighter needs, these unique acquisition tools provide the type of inductive problem solving that defines the American spirit and enables victory. As such, these procurement authorities should be viewed as a feature — not a bug — which are simply not used at the scale we need to deter and win.

To be clear, one cannot fully blame program officers for shying away from creative solutions as they are trained to be risk-averse, and so naturally view these pathways as exceptions to avoid. However, the simplest solution is for Congress and Pentagon leadership to **actively encourage procurement and program officers to use *every* available acquisition tool at their disposal** to ensure the best capabilities are being delivered at the pace warfighters deserve and expect.

Second, additional tactical solutions can be found in the recently completed final report of

Commission on Planning, Programming, Budgeting, and Execution (PPBE) Reform, which offers numerous recommendations for how the DoD can help ensure warfighters are getting what they need, when they need it. In particular, I can suggest that the Committee **examine Recommendations 5 ("Consolidate RDT&E Budget Activities"), 6 ("Increase Availability of Operating Funds"), 7 ("Modify Internal DoD Reprogramming Requirements"), 8 ("Update Values for Below Threshold Reprogrammings"), and 11 ("Address Challenges with Colors of Money") of the PPBE Reform Commission's final report** as opportunities to accelerate commercial software adoption.

In sum, for capabilities to be effective, they have to be in the hands of warfighters at the very moment they need them. No matter how critical a capability, if it is stuck in a two-year Program Objective Memorandum (POM) budgeting cycle, its effectiveness today is *zero* and the opportunity costs — in meeting mission needs, ensuring national security, and safeguarding American lives — are exponential.

Field-to-Learn-to-Win: Deploying Capabilities in Real-World Conditions

Identifying and procuring the right solution is never the last step in the process of delivering world-class capabilities to service members who need them. As the DoD has long recognized, "software is never done," requiring continuous innovation, integration, and delivery. And the only way to build that feedback loop is to **embrace a "field-to-learn" approach** of rapidly fielding software to end-users, having them deploy it in real-world conditions, and then taking the lessons from contact with reality to immediately fix bugs and develop new tools. This approach is the only way to ensure that software is battle-ready.

What I am describing is more than just end-user touch points, which are themselves incredibly valuable in earlier production stages. I am talking about the value of real-world, combined, joint, all-domain exercises in which end-users deploy the capabilities as they are intended, and under the most strenuous conditions possible. What fails will be fixed, what works will be scaled, and what remains unknown will be probed.

As noted above, there are already powerful examples of such exercises providing immediate value to defense readiness. I therefore strongly encourage Congress to **provide the DoD with additional funding for more "field-to-learn" exercises**, so more units across the Services and Combatant Commands (CCMDs) can take advantage of this process and at a greater frequency.

The NGA Maven program, arguably the most successful and sought-after AI program across the defense and intelligence communities, exemplifies the benefits of a field-to-learn approach. Since its inception in 2017, Maven has grown from helping with computer vision and algorithm development to what is now a complete AI-enabled platform (Maven Smart System, or "MSS") serving as the foundational technology supporting America's CJADC2 capability. What started as an experiment with the special operations community and the XVIII Airborne Corps is today a fully-fielded decision support system that enables tens of thousands of users — across multiple CCMDs and the Joint Staff — in real-world scenarios and on the frontlines of major crises.

Maven grew more robust over time because Congress, the DoD and CDAO, and the National Geospatial-Intelligence Agency (NGA) committed to a field-to-learn development and deployment process, in which service members and industry engineers partnered from day one to ensure continuous delivery, innovation, and growth.

To better understand the conditions that enabled Maven's success, I encourage you to read a recent report from Georgetown University's Center for Security and Emerging Technology, "Building the Tech Coalition." The report's findings include many of the recommendations made above as lessons learned. For example, the report highlights that "embedding engineers and developers with military operators in their everyday work and for wargaming exercises helped to avoid misunderstandings and realize new opportunities in the development of MSS. Developers came to better understand the needs of soldiers and soldiers came to see new opportunities to operate more efficiently." Furthermore, the report identifies the importance of onboarding new vendors with speed and ease, arguing that "public network enclaves supported faster onboarding times for new companies looking to contribute to MSS." And importantly, the report argues that "the common thread among the contracting mechanisms supporting MSS is flexibility. That flexibility enabled experimentation and innovation within the DevSecOps process."

Given this clear and highly impactful example in the NGA Maven program, I can thus make two additional recommendations to the Committee. First, to further scale Maven's impact, Congress should **provide funding to expand the scope of users across the Joint Force and CCMDs who will have access to MSS** as a fully operational and continuously improving warfighting resource. Continued Congressional and DoD support for Maven outlines a path forward for software acquisition and incentivizes other commercial companies to supply to the government. Second, another pathway to leverage the program's success is to encourage the DoD to **scale the lessons learned from NGA Maven to the development and delivery of other critical capabilities**.

Finally, since it is ultimately the CCMDs who are responsible for deploying capabilities and warfighters on the battlefield, Congress should **empower the CCMDs as buyers and provide them with a budget** to procure what they need and inject necessary signals to the rest of the system. The Services strive to acquire capabilities that the CCMDs want to buy, but sometimes what the Services acquire is simply not what the CCMDs need, both in terms of capability and scale. While it would be unnecessary to shift the full burden of procurement onto the CCMDs, moving even 5% of the budget will allow the CCMDs to find alternative capabilities when they are in need, as well as generate some space for healthy competition between the Services and CCMDs to be the most effective and efficient providers of solutions to warfighters.

All of the above recommendations — using and strengthening every corner of the defense industrial base, improving the acquisition process, and taking a field-to-learn approach to capability development and delivery — are collectively essential to ensure the delivery of mission-critical capabilities at a speed and scale that the current geopolitical threat environment demands.

Conclusion

Esteemed Committee Members, we have no time to waste. Mobilization Day was yesterday, and we must use every ounce of effort to ensure the U.S. military has access to every tool our society can offer to meet the challenges ahead.

I am here to say, on behalf of so many colleagues across industry, that we are not just ready — we are painfully eager to do our part to ensure America's warfighters will want for nothing. That our country's brave service members will have access to the world's best technological capabilities and wield an unrivaled advantage in the fusion of software and hardware.

To do so, however, we need the freedom to do what industry does best: Build. And we can only do so at the pace and rigor this moment commands in partnership with the government. This partnership does not require a new process, or a massive overhaul of an existing program. What we need is simply to commit to winning above all else, and the willingness to jettison old rules, regulations, and norms when they are standing in the government's own way — the kind of healthy rule-breaking that crisis often requires.

Furthermore, we need to reclaim the courage to empower innovative leaders across government, industry, academia, and civil society who are willing to push boundaries and break processes that stand in the way of building capabilities at the speed and scale required to keep our country safe. In short, we need to unleash and empower what I like to call America's "Heretics and Heroes." These are the leaders who have the discretion to take stakes, make bets, and build big, as well as the gall to push through any barrier that stands in their way. Former Secretary of Defense William Perry was one of these heretical heroes — he pushed through stealth and GPS technology, not by diligently working the PPBE process, but by going around it. As was Admiral Hyman G. Rickover, who bulldozed every bureaucratic roadblock to build America's nuclear Navy, and who would not have survived without Congressional support.

Our country is filled with nascent Heretics and Heroes — in government, industry, and in fact, across all sectors of our society — who can bring about rapid change to Defense readiness, if only we'd let them.

Thank you and I look forward to your questions.