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“DIU 3.0”

Scaling Defense Innovation for Strategic Impact

Douglas A. Beck

Foreword by Richard Fontaine

About the Author



Douglas A. Beck is the Director of the Defense Innovation Unit (DIU) and Senior Advisor to the Secretary of Defense. He joined the Department on May 1, after 13 years at Apple reporting directly to CEO Tim Cook and leading businesses across

Asia, the Americas, and globally. He is also a Navy Reserve captain with over 26 years of service, including many years in the Indo-Pacific region and leadership from inception in 2015 through 2019 of DIU's joint reserve component. He is a veteran of Iraq and Afghanistan, where he served with a joint special operations task force.

As a civilian, Doug served as a member of the Secretary of State's Foreign Affairs Policy Board. He was an executive advisor to three Chiefs of Naval Operations and special operations community leadership and further served as a formal and informal advisor to senior civilian and uniformed Defense Department leaders for over 15 years. From 2015-2023, he served as a member of the Board of Directors of the Center for a New American Security.

About The Defense Innovation Unit

The Defense Innovation Unit (DIU) strengthens national security by accelerating the adoption of commercial technology throughout the military and bolstering U.S. allied and national security innovation bases. DIU partners with organizations across the Department of Defense (DoD) to rapidly prototype and field dual-use capabilities that solve operational challenges at speed and scale. With offices in Silicon Valley, Boston, Austin, Chicago, and inside the Pentagon, DIU is the Department's gateway to leading technology companies across the country.

DIU is the only DoD organization focused exclusively on fielding and scaling commercial technology across the U.S. military at commercial speeds. Its team, working in six critical technology sectors, engages directly within the venture capital and commercial technology innovation ecosystem, many of which are working with the DoD for the first time. Its streamlined process delivers prototypes to DoD partners, along with scalable revenue opportunities for our commercial vendors, within 12 to 24 months.

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Foreword

By Richard Fontaine

Rapid technological change touches virtually every aspect of life today. This includes defense and national security, and for good reason: To maintain the world's strongest military, the United States must adopt new technologies and integrate them into its forces faster than its competitors. Those competitors are moving quickly. China, in particular, has emerged as a global technology powerhouse in artificial intelligence, biotechnology, 5G wireless networking, quantum technology, and other areas. To stay ahead, the U.S. Department of Defense must innovate, and that increasingly means a turn to the commercial sector.

The commercial sector's role in technology development has been rising for decades. In 1960, U.S. defense spending accounted for some 36 percent of global research and development. By 2019, that portion had fallen to just 3.1 percent. During the Cold War, the Defense Department served as a major driver of global technology development, but today the commercial sector drives the bulk of tech innovation. Even in areas directly relevant to military applications, the commercial sector now plays a dominant role; non-defense firms currently lead progress in 11 of the Pentagon's 14 designated critical technology areas.

The Defense of Department leads the world in developing military-specific technologies, such as stealth aircraft and directed energy weapons. It remains, however, woefully behind the private sector in adopting a host of commercial technologies, ranging from cloud computing to artificial intelligence. Other nations, including China, have access to these same technologies, and work actively to incorporate them into military applications. The United States risks falling behind.

This realization helped drive the Pentagon's creation in 2015 of the Defense Innovation Unit (DIU), then called "DIUx," or "experimental." The aim was to rapidly adopt and scale commercially available technologies across the Department of Defense. DIU Directors Raj Shah and Michael Brown, supported by their respective teams, took the organization from an initial experiment and evolved it into an essential component of the defense innovation ecosystem. In fiscal year 2022, for example, DIU successfully transitioned 17 projects to the broader Department, totaling \$1.3 billion in contract award ceilings.

Yet to innovate at the scale necessary in an \$800 billion-plus enterprise, DIU must continue to evolve. In recognition of the unit's increasing importance, the Secretary of Defense last year elevated DIU to a direct report. To lead it, he brought aboard Doug Beck, who served simultaneously as a senior executive at Apple and a Navy Reserve captain. Since then, senior Department leadership has continued to emphasize the need to identify, absorb, and adopt commercial technologies rapidly and at scale.

The Center for a New American Security generally publishes reports and papers authored by its own experts. In extraordinary cases, it also publishes papers from external authors wishing to explore new ideas and articulate new directions. In this report, Beck offers such a new vision.

It is for a "DIU 3.0," a new phase in which the unit will focus on the U.S. military's most critical capability gaps—the ones necessary to deter and, if necessary, win a major power war. In this phase, DIU will also deepen its partnerships across the Defense Department so that successful prototypes are ready to scale and transition into the force. Congress signaled its support in 2023 by codifying the organization, establishing it as principal liaison between the Pentagon and the commercial technology sector, and charging it with coordinating Departmental efforts to harness technology for the warfighter. A first test of this revamped focus for the Department, and for DIU, will be the Replicator Initiative, which aims to field thousands of attritable, autonomous systems in 18 to 24 months.

In this report, Beck outlines an ambitious agenda. It's also one that must succeed, if the United States wishes to fully harness the value of commercial technology for defense purposes. America boasts a vibrant technology base, filled with companies, engineers, and scientists who wish to work with the U.S. military. There is a strong and urgent need for commercial solutions to the military's challenges. DIU has emerged as an increasingly important element in the defense technology ecosystem and, as Beck articulates, there remains much more to be done.

It is time for the Department of Defense’s (DoD’s) commercial technology efforts to deliver the strategic impact the nation requires.

More than eight years ago, then-Secretary of Defense Ash Carter founded the Defense Innovation Unit (DIU)—then “DIUx,” or Experimental—as part of a broader strategic initiative to maintain U.S. technological superiority in the face of a shifting threat landscape.¹ Secretary Carter saw then that access to advanced, commercially developed technologies was spreading on a global scale, that the People’s Republic of China (PRC) and Russia were heavily investing in offsetting U.S. military advantages, and that the United States must harness the incredible strength represented by its commercial tech sector to compete for the long run. Today, our imperative is much the same, but our time has grown dangerously short.

The good news is that the DoD, the interagency, Congress, and increasingly the private sector are awake to the challenge represented by the PRC and have all taken significant steps to secure America’s strategic competitiveness. The bad news is that we will not be able to reap the benefits of many of these actions until the 2030s and beyond. Many of the DoD’s major weapon systems modernization initiatives, driven through more traditional U.S. processes and defense suppliers, will not deliver until sometime early in the next decade. Partnerships such as those with the UK and Australia will begin generating the bulk of new capabilities on

a similar timeframe—for example, nuclear submarines from the UK and Australia will be delivered in the 2030s and 2040s, respectively. The CHIPS and Science Act and related efforts led by Secretary of Commerce Gina Raimondo will mitigate a critical vulnerability in the national security supply chain.² But revitalizing an entire industry and building the needed clusters of suppliers, access to raw materials, talent, and interrelated action at scale takes time. Similarly, efforts by major technology companies to diversify their complex value chains away from near-total reliance on Chinese manufacturing and assembly are encouraging, but they are still tiny relative to the massive scale of the infrastructure they helped build in the PRC over the past 20 years.

Meanwhile, China’s President Xi Jinping has instructed the People’s Liberation Army (PLA) to be ready to invade Taiwan as early as 2027.³ While he would no doubt prefer to achieve control over Taiwan peacefully, he has made clear that he intends to achieve what he calls “national reunification” and the “essence of national rejuvenation” on his watch.⁴ In support of this objective, the PRC has continued to accelerate its multi-faceted program of military buildup and modernization, even in the face of increasingly challenging Chinese domestic economic conditions. While conflict with China is neither imminent nor inevitable, the DoD must take the Chinese Communist Party and its leadership at their word and take action to increase regional stability through credible deterrence.

The Imperative

For the Department of Defense to meet this challenge from the PRC—while simultaneously addressing other threats facing the nation—it must complement its more traditional defense acquisition pathways with disruptive innovation from the tech sector. And it must do so with the focus, speed, and scale necessary to deter major conflict, or win if forced to fight.

Recognizing this, Secretary of Defense Lloyd J. Austin III realigned DIU as a direct report this past April and charged its new Director with developing a plan to similarly elevate DIU's impact.⁵ His decision is a reflection of the central role that commercially derived technologies must play in the Department's efforts to counter the pacing challenge of the PRC, meet the acute threat from Russia, and simultaneously address other threats across the globe.

The 2022 National Defense Strategy (NDS) already emphasizes the need to leverage all instruments of national power, including technological innovation, in a cogent, integrated manner. It emphasizes that the DoD must not only engage in consistent, targeted campaigning activities that counter competitors' present attempts to gain the upper hand, but also must undergo a generational transformation to build the enduring advantages that will deter the nation's adversaries far into the future.⁶ Building on the NDS, the Joint Concept for Competing (JCC) underscores the need for the DoD to fully deploy economic, financial, regulatory, and other tools to level and shift the playing field toward U.S. and allied advantage.⁷

DoD must undergo a generational transformation to build the enduring advantages that will deter the nation's adversaries far into the future.

The DoD is moving with purpose to achieve these objectives by collaborating with interagency and international partners and evolving the instruments of defense innovation and acquisition in concert with the defense sector.⁸ The requirements of support to Ukraine have underscored the criticality of this strategy; the public and private sectors alike have led Herculean efforts to improve the speed of delivery of munitions and other critical capabilities. To build and sustain enduring advantage in an environment of ever-accelerating technological change, however, the Department must

also move much more quickly to improve the speed at which it accesses and rapidly integrates the advances of the United States' and allies' vibrant commercial technology sectors, and it must do so at the scale required for strategic effect.

“DIU 3.0”

Spurred by trillions of dollars of private investment, innovation in many technologies critical to military power is proceeding at a much faster rate in the private sector than in the traditional defense sector.⁹ Progress in 11 of the 14 critical technology areas identified by the Under Secretary of Defense for Research and Engineering is primarily led by commercial entities, which are constantly identifying, testing, refining, and replacing them through market-driven efforts aimed at meeting the relentless demands of billions of consumers and the enterprises that serve them.¹⁰ Recent history demonstrates that new areas and applications of relevant technology—such as artificial intelligence, autonomy, cyber, space, biotechnology, and energy—are at least as likely to emerge from the commercial crucible as they are from academia, government laboratories, or traditional defense contractors. The same will be true for new technologies such as quantum, 6G and 7G, augmented and virtual reality, generative manufacturing, and AI-enabled genetic engineering, and will continue to be true for whatever comes next.

The DoD is already harnessing early stage science and technology to develop advanced, often highly classified, bespoke solutions for the Joint Force via the Defense Advanced Research Projects Agency (DARPA), the Strategic Capabilities Office (SCO), the network of government labs, and other federally funded research efforts, frequently working closely with the DoD's prime contractors. These efforts are critically important but not sufficient. The Department must simultaneously move much more quickly to cost-efficiently integrate and deploy complementary disruptive technologies from nontraditional, commercial sources with the volume and velocity necessary to deter potential adversaries and ensure victory in future conflicts.

DIU was created in 2015 with the intent of meeting this challenge.¹¹ In this initial phase, “DIU 1.0,” the primary focus was to build a bridge between the Department and the commercial technology sector. That linkage had eroded to nearly nothing, despite Silicon Valley's origins in the collaboration between government, the private sector, and academia to help win World War II and the Cold War. Success during this

first phase was measured by the volume of interest and engagement from both sides, and the recognition of value in collaborating to overcome hurdles—financial, procedural, legal, logistical, and cultural. It was marked by the early recognition of the value of talent with “dual fluency” at the intersection of technology and national security. While much remains to be done to achieve the levels of partnership, shared purpose, and collaborative investment that built Silicon Valley, DIU 1.0 succeeded in creating the initial pathways for engagement between the government and private sector upon which subsequent progress across the Department has been built.

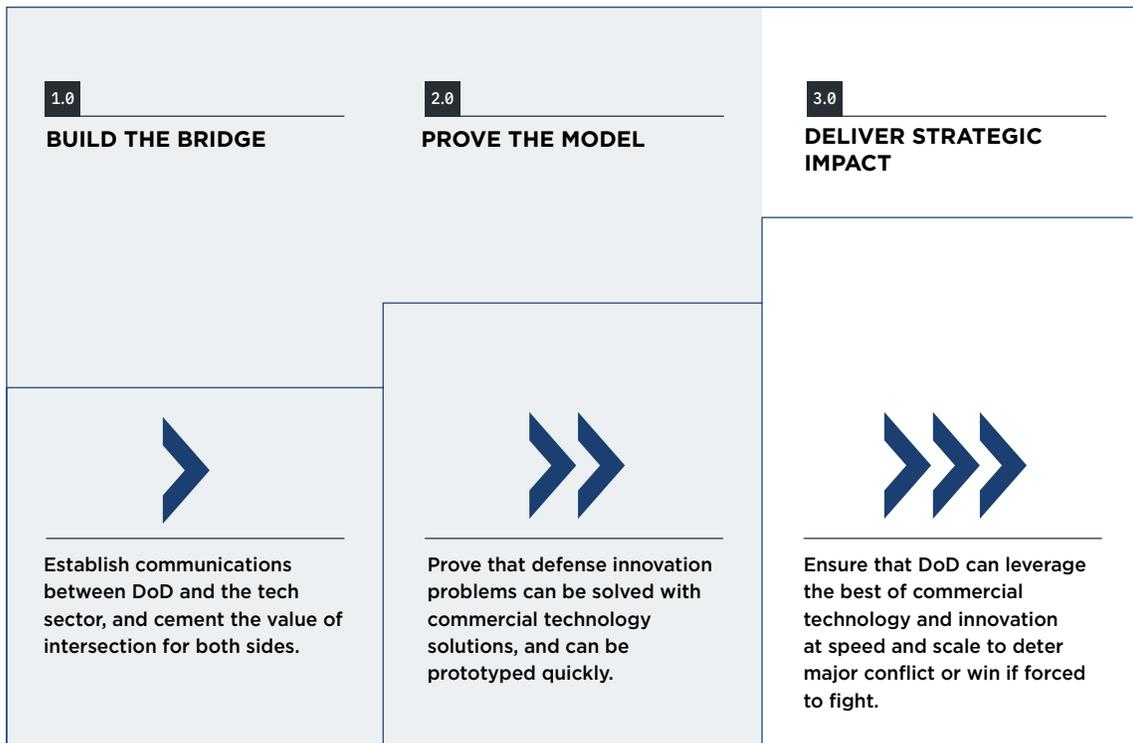
The second phase of DIU, “DIU 2.0,” which extends to today, has focused on demonstrating concretely that real military problems can be solved by rapidly delivering commercially derived capabilities to the warfighter. During this phase, DIU has proven this model works, cultivating a reputation as an acquisition pioneer by exercising Other Transaction Authority to rapidly tailor and acquire relevant commercial technology, yielding more than 80 prototypes, 52 of which

culminated in commercial solutions transitioned to the warfighter.¹² Importantly, these prototypes have attracted more than \$30 billion of private investment, deepening a broad set of enduring relationships with private capital interested in alternative defense investment.¹³

DIU 2.0 has also helped inspire a growing number of organizations across the Department and within the services geared toward amplifying and advancing techniques for harnessing commercial technology. The resulting ecosystem of innovation organizations has made substantial progress toward rapidly bringing commercially derived technology to the warfighter while continuing to identify remaining challenges in doing so. The resulting capabilities, expertise, relationships, and techniques have directly and indirectly allowed the DoD to achieve critical objectives in cooperation with allies and partners, and across all warfighting domains—including in support of Ukraine.

The challenge now is to take the capabilities developed during DIU 2.0 and apply them with the focus, scale, and speed necessary to deliver the strategic effect required. This is what DIU 3.0 is all about.

FIGURE 1: DIU PROGRESSION FROM 2015 TO TODAY



The Plan

The plan Secretary Austin approved for DIU 3.0 outlines the critical shift in focus, action, and resourcing that DIU will undertake to deliver the rapid strategic effect demanded. It relies on the years of defense innovation experience up to this point, and on over 300 discussions with stakeholders across the Department, commercial technology companies, tech-focused investors, defense primes, the interagency, international partners, Congress, think tanks, and other non-governmental organizations. DIU 3.0's eight mutually reinforcing lines of effort (LOEs) are designed in all respects to reflect the Secretary's three priorities to defend the nation, take care of our people, and succeed through teamwork.¹⁴ Each LOE builds on the successes of DIU 2.0, and directly addresses the challenges that hampered the ability to achieve the strategic impact now required.

Focus on the most critical capability gaps and embed with the warfighter to do so.

Given limited capacity and the need to quickly demonstrate the efficacy of processes and tools for rapid introduction of commercial technology to the warfighter, DIU 2.0 targeted a broad range of situations where a legitimate military customer and matching technology provider could be identified and where forward progress was thus possible. The metrics for success for this effort were the speed of execution, the amount of private sector investment leveraged—thus saving the Department money—and the absolute number and percentage of prototype programs transitioned to a fielded capability that could be employed by the warfighter. These metrics are necessary—and were appropriate to that phase of evolution—but must now be reoriented through a relentless focus on the most critical capability gaps that are central to the U.S. ability to deter and win wars, and to their scale adoption by the forces that will do so. As U.S. Indo-Pacific Command (INDOPACOM) Commander Admiral John Aquilino emphasized recently, “If [a relevant] capability exists, and we can deliver in 18 to 24 months, I’m ready to plug it in. I’m ready to experiment with it tomorrow.”¹⁵ DIU must foster deep, trust-based relationships with those closest to the fight to identify priorities and maximize the opportunity for useful commercially derived technologies to help close the most critical capability gaps.

To that end, DIU will continue to deepen its embedded support to U.S. European Command (EUCOM) related

to the war in Ukraine and expand deep partnerships, in INDOPACOM and elsewhere across the force. For example, Admiral Aquilino recently announced the creation of INDOPACOM's Joint Mission Accelerator Directorate (JMAD), reporting directly to him and charged with accelerating major technology-related innovation efforts around the Joint Fires Network, Mission Partner Environment, and others. A senior DIU team member serves as the JMAD's chief technology officer and deputy director, an arrangement built into the JMAD's charter. A DIU “embed” is similarly established as the Science and Technology Advisor and Innovative Technologies Lead for EUCOM's Security Assistance Group – Ukraine (SAG-U). Going forward, DIU 3.0 will include embeds like this at the most critical nodes of warfighter demand, within the most innovative operating organizations of the Joint Force, and at the key points of innovative warfighter demand in each of the services and the special operations community. Those embeds will both help shape demand for technology and ensure that innovation efforts are unwaveringly focused on meeting it.

Partner at every level with DoD's “engines of scale.”

In the past, prototypes delivered by DIU and transitioned to the force—even when closely aligned with critical warfighter needs—were rarely adopted with the scale and integration necessary to have a material impact on the most pivotal operational plans and deterrence options. Notable successes, including DIU's direct and indirect support of efforts related to the war in Ukraine, reinforce the extent to which that level of strategic scale impact has not been the norm, and to which processes are not well established to ensure that it is.

DIU 3.0 will dramatically deepen the partnership with the Department's true “engines of scale”—the services—as well as with the critical scaling partners in the Joint Staff and the Office of the Secretary of Defense (OSD). Partnerships with both Secretariat and uniformed service leadership, from the service acquisition executives across the Department to leaders in Army Futures Command, the Navy's new Disruptive Capabilities Office, and the leaders shaping warfare capabilities for the Air and Space Force, will help DIU ensure that the demand is there to scale successful prototypes aligned with the services' operational imperatives—and that DIU does not work on anything where that agreement is not in place.

DIU is also uniquely positioned to partner with the services—and with the Joint Staff and the combatant

commanders—to develop and initially field those prototypes into the exercise cycle. This will help ensure they cross the first few “valleys of death”—and develop the required plans for successful adoption and integration into warfighting capability—before the slower-moving major programmatic funding sources are prepared to pick up the ball. Partnerships with others in OSD, such as the Undersecretaries for Acquisition and Sustainment and Research and Engineering, will help ensure roadblocks to that scaling—whether in testing, evaluation, or production contracting—are knocked down.

Deputy Secretary of Defense Kathleen Hicks’s creation of the new Deputy’s Innovation Steering Group (DISG), co-chaired by her and the Vice Chairman of the Joint Chiefs, is designed to help scale this collaboration further, delivering systemic change in the context of concrete solutions to operational capability gaps. The DIU Director now serves as a member of DISG as well as its primary staff support, responsible for setting its agenda and chairing its supporting Defense Innovation Working Group (DIWG). In a first example of these new processes in action, DISG and DIWG, in turn, serve as the governance for the Replicator initiative, which DIU also quarterback.

Replicator is a Department-wide initiative announced by the Deputy Secretary to deliver attritable autonomous systems at mass within 18 to 24 months in order to meet the challenge presented by the PRC, and to develop and then employ a replicable process to attack other problems the same way. It is a moonshot—and will not be easy. But it is a perfect example of what we must do—leverage emerging technology to deliver operational capability, now, and work across the Department to deliver scale, fast. Replicator is already breaking new ground, teeing up challenges for the senior leaders of the DISG and DIWG to break down. And it is on track, well into its first phase, to deliver the capability Secretary Hicks described, on the timeline she laid out.

Catalyze the DoD’s innovation entities into a community of impact.

Broad acknowledgement of the potential for commercial technologies has resulted in the proliferation of innovation entities across the Department. While each innovation organization is delivering results, the synergy among them is a vast underutilized area of potential value. In addition, uncoordinated outreach has sometimes resulted in overlapping, unprioritized, and competing demand signals that can make it hard for tech companies to engage, particularly small companies and

startups.¹⁶ Confused communication about the different pathways for working with the DoD as a vendor leads to mismatched expectations, suboptimal prioritization of scarce resources, and inefficient business operations.¹⁷ This confusion is a frequent target for largely understandable commentary from private sector partners, DoD customers, Congress, and the public—and represents a missed opportunity for synergy and leverage.

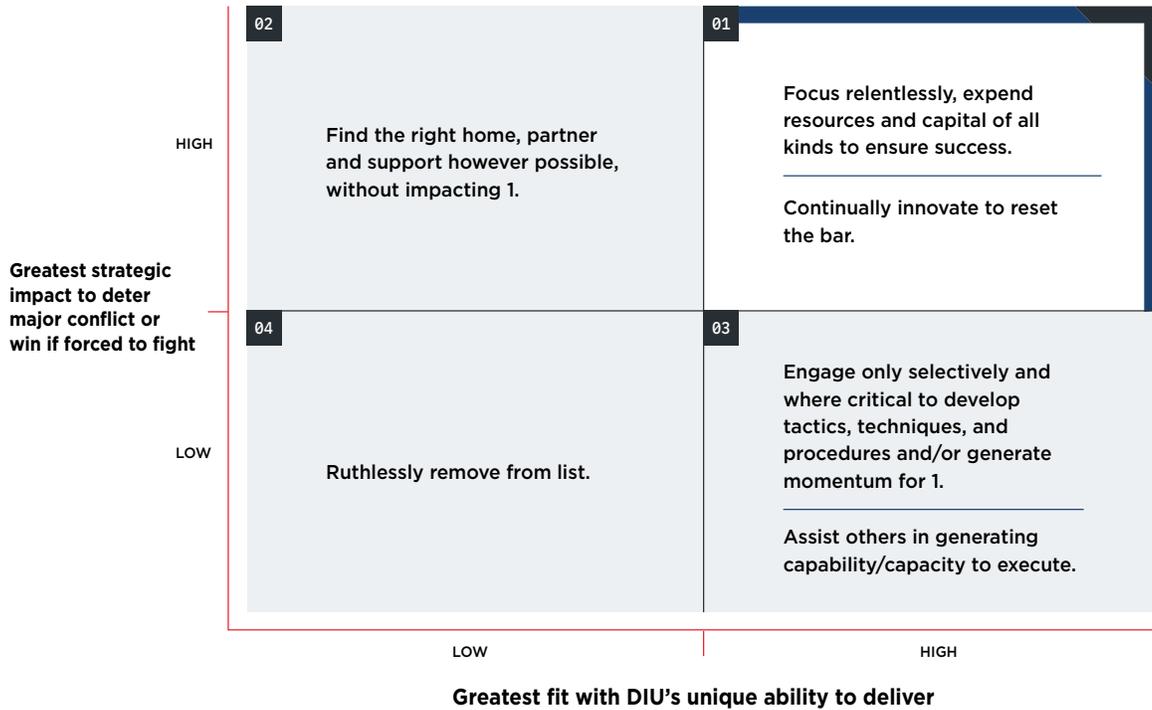
Going forward, DIU will work with partners across the Department’s community of defense innovation entities—as well as with the Chief Data and Artificial Intelligence Officer (CDAO)—to take advantage of opportunities to generate impact through shared best practices, talent management, shared systems and processes, and enhanced teamwork. DIU has been charged by the Secretary and Deputy Secretary of Defense with ensuring maximum synergy—and eliminating dyssynergy—across this team.

DIU will also be in a position to represent this vibrant community, alongside the services and others that have created and lead them, in the Department’s leadership processes. Helping to catalyze impact for this community also has implications for the kind of project work DIU does. DIU 3.0 will focus directly on those initiatives that are truly strategic and that the Secretary’s national mission force for innovation is uniquely positioned to help deliver. At the same time, DIU 3.0 will bake into its strategy and its processes the discipline about where *not* to focus, where to help others succeed instead, and where to simply get out of the way. Figure 2 reflects a simple tool DIU is employing to help do that.

Take the partnership with the commercial tech sector to a new level.

The commercial tech sector—including large and small companies—is increasingly ready and eager to partner with the Department. Real and perceived cultural barriers notwithstanding, the number and capability of companies developing and proposing dual use technology, and the talent and investment energy that is flowing into those efforts, is inspiring. Unfortunately, despite a lot of progress, DoD’s “demand signal” for that capability remains muddled and very difficult for even the most capable of commercial tech entities to decipher, both in terms of strategic prioritization and the likelihood of a path to scale.¹⁸ Even signature examples of DIU projects (e.g., maritime intelligence, surveillance, and reconnaissance technology and the commercial space and communications solutions playing critical roles in Ukraine) are viewed tepidly by some in the private sector

FIGURE 2: DIU 3.0'S MATRIX FOR PROJECT PRIORITIZATION



because the lack of a reliable path to scale results in lower risk-adjusted investment returns relative to the broader commercial tech market.¹⁹ This mixed demand signaling, combined with the well-known valleys of death between initial prototypes and full Program Objective Memorandum (POM) cycle inclusion, reinforces the largely justified perception that DoD is a bad counterparty for tech entrepreneurs and investors.²⁰ For the “founders and funders” that make up the U.S. commercial technology sector to do what they do best—assess, price, take, and manage risk to rapidly and efficiently deploy (and redeploy) resources at scale—the DoD must have clear priorities and demonstrated success in scaling technologies. Without this clarity, DoD impedes the flow of billions of dollars of interested private capital to its priorities and creates the mistaken impression in some quarters that capital is a scarce resource. The net result of an ambiguous demand signal is a need for the DoD to assume risk—through slower pathways to innovation or the deployment of its own capital—and an inability to deliver advanced capability to warfighters at speed.

Alignment as a direct report to the Secretary of Defense and at the heart of DoD innovation processes, reinforced in December by legislation from Congress, affirms DIU 3.0 as a clear focal point for partners in the commercial tech sector and as a clear entry point for companies and talent in the nation’s major tech centers and in emerging innovation hubs across the country.²¹ DIU will leverage this positioning—as well as the dual fluency talent that is central to its success—to continue pushing the bounds of viable solutions to military problems from the relentlessly evolving commercial technology sector. It will also put in place new structures—physical, digital, and procedural—to provide easier “on-ramps” for that capability to the Department, building on the work already ongoing through DIU’s National Security Innovation Network. DIU will leverage its role at the heart of critical Department processes to relentlessly help knock down barriers to success faced by commercial tech innovators, large and small. At the same time, DIU is uniquely positioned to help clarify the Department’s demand signal so that those in the commercial world who assess, price,

take, and manage risk for a living are in a position to do so at scale in support of the nation’s most strategic national security priorities.

Realize the enormous potential of tech partnership with allies and partners.

One of the greatest strengths that the United States enjoys relative to its adversaries is the fact that we have friends—and that our friends are incredibly capable. Almost every major advance in technology leverages capabilities, expertise—and often competition—from multiple tech-savvy nations, all of which share an interest in the maintenance of the international system. Nascent collaboration and coordination across allies and partners to leverage commercial technology for defense has been demonstrated through examples such as the UK’s jHub, NATO’s Defense Innovation Accelerator (DIANA), and the Australia-UK-U.S. (AUKUS) Pillar 2 objectives, but these efforts can and must go further. Moreover, capabilities sourced from DIU and the rest of the innovation ecosystem do not currently have a natural path to timely delivery at the scale necessary to credibly support allies and partners. We must connect the solutions created by U.S. tech companies to allied and partner acquisition organizations when appropriate—and connect capabilities developed by our partner nations’ companies to our own needs and to one another—especially in a conflict, when speed is critical.

A strong international community of defense innovation entities among allies and partners can enhance best practices for harnessing and sharing commercially derived technologies, and can increase instances of mission-driven collaboration. DIU is establishing deeper relationships with defense innovation entities that already exist in many partner countries, such as the UK, Australia, and India, while working with other key partners and allies to help them develop comparable entities. DIU is already converting those partnerships into real action, for example by launching maritime challenges with the Indian’s Ministry of Defense’s Innovations for Defence Excellence (iDEX). These challenges aim to deliver real capability that is strategic for both nations and leverage the strengths of companies resident in each. The DIU and iDEX challenges have also launched a series of similar challenges with its UK and Australian partners under the umbrella of AUKUS. Taking this effort to the next level will be a major focus of DIU 3.0, working closely with partners across the U.S. government and the tech sector.

Build the trust and momentum required for speed and scale.

DIU began its history amid both skepticism and hope and built a great deal of credibility and trust through DIU 2.0. The challenges of making that impact scale, however, have heavily taxed that trust in all directions, leading some to wonder whether the Department is serious about making the impact from defense innovation real. At the same time, the imperative for defense innovation—and the role DIU can and must play in catalyzing it—has become clearer as the PRC’s efforts to reshape the international order have become more obvious, and as Ukraine has dramatically demonstrated what is possible with commercial technology. These recent events have reinvigorated the calls from across the Department, Congress, the tech sector, the interagency, and the public for DIU to help the Department achieve a bold vision for integrated commercial technology. Missing this opportunity would damage the Department’s prospects for positive change.

DIU 3.0 must operate, communicate, and above all deliver in a way that reinforces and capitalizes on existing momentum, that builds a shared enthusiasm and growing alignment between internal and external partners, and that both inspires and merits the special trust required for stakeholders on all sides to take the risks that are necessary.

Retool DIU to support all of the above.

DIU is at a critical inflection point common to many startups—the time has come to scale. DIU’s strong capability in dual fluency commercial tech integration must be expanded to meet its evolved relationships with partners across the Department and its expanded responsibility to deliver, scale, and institutionalize impact. The talent that delivers that dual fluency—combining authentic capability at the intersection of military requirements and the cutting edge of commercial technology—is everything to DIU’s success. The men and women who make up this talent are also highly in demand and, while many are willing to forgo lucrative private sector careers or take enormous pay cuts to leave those careers behind in support of the mission, most are unwilling to wait for many months or even years to find out if a job that pays a fraction of their current income will materialize.

Staffing levels have been insufficient to address the Department’s needs, and DIU’s historical personnel process—which has not leveraged pathways already

pioneered by DARPA, the Space Development Agency, the Cybersecurity and Infrastructure Security Agency, and others—has been unable to execute at the speed and scale necessary. DIU’s mission rests on the ability to attract, develop, deploy, and retain that talent, both for the direct application to DIU’s own mission and for the development of a cadre of technology talent available to deploy throughout the Department. The Secretary has already approved plans to increase DIU’s staffing, including the addition of two senior executive Deputy Directors based in the Pentagon, both of whom are now in place and working hard to make DIU 3.0 a reality.

Provide the Secretary and Deputy Secretary with world class dual fluency advice.

The Department has a wealth of experience with both traditional primes and the academic and broader science and technology communities, as well as enormous depth of talent in working with those groups. The Secretary’s decision to elevate the DIU Director to a direct report and senior advisor to both the Secretary and Deputy Secretary provides an opportunity to better take advantage of the capability resident throughout DIU to bring similar depth of insight to the leverage of the commercial tech sector, and a similar level of expertise in partnering with its companies and talent base. DIU’s team, reinforced by others in the DoD innovation community, provides invaluable and irreplaceable authentic, trust-based relationships and native fluency in all aspects of the tech sector. DIU 3.0 can and must capitalize on that unique position at the intersection of two worlds to help the Department and the broader U.S. government achieve a renewed level of collaboration with the private sector, reminiscent of the teamwork that helped win World War II and the Cold War.

In Sum: Focusing on Real Risk

As a nation, we cannot ask our service members to put their lives on the line without the best capabilities available, and we cannot afford to mortgage our strategic future to inaction.

The imperative for DIU 3.0 is clear. Against a backdrop of international challenges and with the world’s most capable technology sector, we can and must do more to identify and adopt impactful commercial technologies at speed and scale. With recent changes and support from DoD leadership and Congress, we are now poised to help our partners across the Department, inter-agency, commercial tech sector, and allied and partner nations meet these goals. We will need help from teammates both inside and outside of government to help us shape our collective efforts, to adapt and refine them to overcome the inevitable hurdles and missteps, and above all to deliver.

Making this change a reality will not be easy. It will require us—the Department, the private sector, the inter-agency, Congress, and our allies and partners—to work together in new ways, and to take bureaucratic, financial, institutional, and reputational risk in doing so. But it is far better for us to take those kind of risks—all of which can be mitigated, managed, or overcome—*now* than it is for us to take the risk of inaction. Doing that would merely continue the unforgivable pattern of transferring that risk to the future, converting it to *real* risk to the warfighter, to the soldiers, sailors, airmen, guardians, and marines who will be on the front lines in a future war.

Getting this right will take all of us working together. And we cannot afford to get it wrong.

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