I'm here with Sally de Swart from a Clarion Defence, which puts on defense conferences like DSEI, as well as SOF week here in the United States. And we're here to talk a little bit about the APEX conference series that Clarion is going to start over the next year, which is focused on what I think is a really important space for defense right now, which is coming up with near term solutions for today's operational problems. This is something that we have focused on here at Hudson through our research for the last several years. It's an area where the defense industry is increasingly centered, you're looking at the opportunities and new commercial companies as well as traditional defense providers to provide solutions to some of the combatant commanders most challenging operational problems, and and not making that a long term effort. But instead, how do we do that today? How do we integrate those solutions now? And how do we feel them in a way that's relevant for war fighters that are encountering difficulties ranging from the war in Ukraine to the fighting that's happening in Gaza, as well as in the Red Sea, and also the potential looming conflict and competition with China? So a variety of operational challenges are being posed to warfighters. Today, we need solutions. Now, we cannot wait for the long term cycle of defense r&d that we've traditionally relied upon to deliver those solutions. So this discussion today is really focused on how do we bring those solutions together. And it's the lead up to a longer discussion over the course of the next year, which will culminate in the work that Clarion is doing, but the apex conference, the Sally, you want to talk a bit about what Clarion is going to do with APEX?

Thank you so much, Bryan, I just want to welcome you all today and say thank you very much for giving up your time to join us. Thank you to Bryan and your team at Hudson for facilitating and Vago for moderating. I'm Sally de Swart, and the managing director for Clarion defense. So I'm here with my colleague, Ben, we're based in the UK we are a tradeshow organizer, owned by Blackstone. And as Bryan said, we organize DSEI, DSEI Japan, we work on delivering SOF week, so we've got good credentials and a long experience in the defense space. What we're talking about today, as Bryan said, is the start of a conversation around finding operational solutions to the near term requirements. And the reason that we are launching this event called or this series called APEX is based on customer insights, this issue isn't being addressed in a traditional tradeshow format. So the world does not need more trade shows. I appreciate that. So what we have done is in sort of come up with a concept that is completely different to a tradeshow concept. It's about a conversation, and ensuring that we can talk about those operational requirements. So I'm going to leave it today because today is about the conversation and starting that. But we will be staying in touch with you, hopefully to talk about how this new concept evolves. So thank you, Bryan.
Thank you, Sally. So I want to introduce our first speaker today. Aditi Kumar is the Deputy Director for Strategy Policy and National Security Partnerships at the Defense Innovation Unit. DIU has been really at the center of a lot of the innovation being applied to defense acquisition, defense requirements development, interaction between solution providers and commanders. And DIU is working very directly now with operational leaders to try to craft solutions to their near term operational problems. There's obviously a lot of recent initiatives like Replicator that are being pursued by DIU. But we're gonna talk a bit about kind of how DIU is pursuing their objectives of solving operational problems. And we wanted to have a Aditi come out and talk a little bit about kind of the agenda for DIU how DIU is evolving to better provide the solutions. And then we'll do a little q&a up here with me and then and hopefully with you as well, after a Aditi is done speaking. So a Aditi Kumar, thank you for being here today.

Aditi Kumar 4:09

Thank you, Bryan, and the Hudson Institute for hosting this event. I'm very excited to be joining you today. And thank you for everybody who made it here in person and those who are who are watching this online. So as Bryan mentioned, I'm the Deputy Director at DIU. I started there about four months ago, after several years in the department's acquisition and sustainment organization, which has been a great transition for me and a great learning opportunity building on the acquisition knowledge and focus on some of the department's largest programs transitioning to thinking about how to scale commercial tech. The common backdrop for both of these roles for me, of course, has been the national defense strategy and the PRC as the pacing challenge and our ongoing support to Ukraine's warfighters which has provided a real urgency to the department's entire acquisition enterprise these last two years and highlighted the importance of both the traditional defense vendors and commercial tech companies in equipping the warfighter.

In a way, this is also a continuation of my work at the Belfer Center where I had the pleasure and honor of working with Secretary Carter before I joined the department. And so I'm happy to continue his mission on the ground at DIU. The elevation of DIU, as a direct report to the Secretary and Deputy Secretary backward started with ash, I think highlights the centrality of our organization and what we're trying to do to the department's priorities, including our focus on delivering innovative capabilities at speed and scale. So this afternoon, I wanted to share a bit more with you about DIU 3.0, which is our new strategy, which is focused on three main things and I'll cover those off. But first, you know, the the overarching construct behind the US since our founding is our mission is to ensure that commercial technology is adopted at speed and scale, with the ultimate objective of deterring a major conflict and when forced to fight DIU 3.0 comes on the heels of two other phases in the growth and maturation of our organization. DIU 1.0, was about building bridges to Silicon Valley, connecting with the commercial sector, cultivating productive and strong relationships with industry partners, and proving that we could find solutions to real operational problems. DIU 2.0 was about demonstrating that we could then access those commercial technologies through acquisition authorities and contracting strategies
that really lowered the barriers for entry for new entrants and allowed them to quickly get to a prototype and then onward to production. DIU 3.0, under the leadership of our director, Doug Beck takes us a little bit further. So there are three things in the strategy that I wanted to highlight today. DIU 3.0 is first and foremost about synchronizing warfighter needs with commercial capabilities. That is our central focus is to ground everything in the warfighters needs. The second is catalyzing and unifying the innovation ecosystem broadly. And DIU is a part of that. But there are so many organizations here in the US and with our allies and partners that we want to make a part of it. And then finally, it's about delivering results at speed and scale.

So first on synchronizing warfighter needs with commercial capabilities. DIU is as I said, focused on grounding everything that we do. In the operational challenge. Everything we do needs to be warfighter centric and threat informed. And to that end, we have focused our resources significantly on working closely with the combatant commands, embedding our personnel directly with the combatant commands, and ensuring that all of the projects that we're undertaking are directly tied to their high priority areas. So to give you an example, give many examples but to focus on Yukon for a minute. Of course, the cute threat of Russian aggression marked by the full scale invasion of Ukraine, it has never been greater. And the ways in which that fight is unfold is unfolding is changing before our eyes and Diu has been at the forefront of that partnering with EUCOM. To make sure that we are bringing all of the commercial technologies to bear that could make a key that could make differences in that conflict. Last year, in the fall, I had the pleasure of attending a workshop that we hosted in Warsaw, Poland focus on unmanned aerial systems. And it was one of the first things I did as a deputy director at DIU. And it was absolutely eye opening. We had warfighters from Ukraine straight from the frontlines there. We had commercial sector there both Ukrainian companies, European companies, American companies, all focused around the common challenge of UAS and how to improve the capabilities that we're delivering to the Ukrainians in an environment that is incredibly contested. The statistic that I heard there was that the technology needs to keep pace basically, on a three month cycle, it needs to evolve on the three month cycle. And so to have all of the right folks there with the warfighter perspective and forming the types of technologies that they need. That's the kind of change that DIU wants to make. Those are the connections that we hope to broker.

And that's the kind of effort that we're pushing forward in partnership with UConn to make sure that we're staying ahead of the curve, and bringing in all the commercially relevant technology. The second part of the strategy is about catalyzing a unified innovation ecosystem. There are a number of new innovation organizations that have launched and we at DIU are working to harness the collective power of the defense innovation ecosystem, as I said, both domestically and internationally with our allies and partners, the objective is to build on ramps and operate off ramps, excuse me for high performing companies and talent, and to lower the barriers for entry as much as possible so that more companies can bring their solutions to the DOD and we can bring those solutions to the warfighter. So a couple of things I wanted to highlight here that I'm involved in driving. The first is called the defense innovation community of entities or dice. This is a collection of innovation organizations throughout the Department of Defense. And potentially, eventually we will broaden it to the broader United States government that are focused on commercial solutions, adoption DIU, with our elevated role in the department, I think has a very important role to play in collating the common concerns of these types of innovation organizations and understanding how with leadership attention, we can make them more successful. So we had an initial meeting of the dice organization shortly after I started. And as you can imagine, some of the concerns that we heard were about talent management, how do we
bring in the right folks in organizations that are focused on bringing s&t talent and competing with the private sector to bring that talent? So what are the set of solutions that we need to think about which working together will actually solve many of our problems, and collectively, we can get more resources to do so. Another challenge was about how do we interface with industry? So how do we make it so that the commercial sector is getting a unified message, so they have ways of working with the department that are clear that are cohesive, and that we're building ways in which each of our organizations is leveraging each other's networks and projects, again, to ultimately deliver the best solution to the warfighter and not working in silos. And so I think this is a great opportunity for DIU. To coordinate that community. Of course, we believe in letting 1000 Flowers bloom, that is always going to be the best strategy for the department. But I think a little bit of coordination there and elevating the issues where we need to up to the deputy secretary and the Secretary of like, collectively, this is where the innovation enterprise needs your help to drive solutions. That's the role that DIU wants to play. And I think related to that, I'll mention that the deputy secretary has set up the first innovation focus Governance Forum at her level that is driving all of these topics. I'll talk about replicator in a second. That is one topic that the deputies innovation steering group or DSG, is taking on the outputs of the dice or other topics that the DSG will take on. And the idea here is it is the deputy secretary, it is the Vice Chairman of the Joint Chiefs of Staff. And it is all of the senior leaders around the organization, including the combatant commanders, the service chiefs, and the under secretaries from OSD. Focus together on common innovation challenges. And DIU is helping to lead that group and we lead and chair the supporting working groups so that we can tee up these kinds of discussions. I know a lot of this is processing inside baseball. But for those of you who have been following the space for a while, you will appreciate the type of impact that can be driven by process changes in the department and with the senior level attention that the Secretary and the deputy secretary are now bringing to bear.

Aditi Kumar 13:21

The other area I wanted to highlight in this catalyzing the innovation community bucket was our international efforts. There are many innovation focused organizations and our counterparts, defense ministries, with allies and partners and we are forging the connections there as well. Orcas is a big focus, and we are about to announce an electronic warfare challenge with our office counterparts. We are doing similar challenges. With Indus x in India really focused on bridging the connections between our governments between our startup communities and between our investor communities. We're doing something similar with the NATO alliance, we're supporting NATO's Defense Innovation accelerator for the North Atlantic or Diana, this accelerator program, which is open to companies from all nations in the Alliance, it identifies and deploys emerging and disruptive dual use technologies to address our interconnected security challenges. And DIU is helping to lead that effort as well. And then the last point on this strategy is it's really about delivering results at speed and scale. We're, of course outcomes oriented and our team is committed to driving strategic impact, and making sure that we're building the technological edge that our military needs and that our national defense strategy calls for. One of my priorities and coming from ans This is near and dear to my heart is to make sure that we're really working with the service organizations, the POS the PMs to drive, adoption
of commercial technology. So a lot of what I think DIU can do is play that matchmaking role. between the warfighter centric combatant command approach and then the acquisition community that is largely resident now in the services to make sure that we're acquiring the technologies that will make a difference on the battlefield. So, I'll end with one tangible way that we're delivering at speed and scale, which is the replicator initiative, which I'm sure you have all heard a lot about. The replicator initiative is squarely grounded in operational need. We need capabilities to address the operational challenges laid out in the national defense strategy, the future for us has to be agile, we have to have the necessary capabilities to jerk to deter conflict. And if deterrence fails again to fight and win the war, the NDS identifies the PRC as a pacing challenge. And we have focused replicator efforts on meeting that challenge. replicator is about building capacity to rapidly innovate and fuel systems. And it is about accelerating those kibou capabilities, pulling them to the left, sometimes by by many years so that we can deliver at a faster pace and stay ahead of the threat. The first initiative under replicator is all domain a tradable autonomous systems. We intend for there to be many instances of replicator replicator is a process it is a process for accelerating capabilities through the building on the first priority area of a tradable autonomous systems. We are, as the deputy publicly stated, going to feel 1000s of systems within 18 to 24 months, since she announced that back in August, that puts us in the February to August 2025 timeline, which is a timeline I think about every day. As we as we execute this initiative, I will tell you that we're on track to meet those goals. The deputy selected the first tranche of capabilities for replicator right before Christmas. For those capabilities, we're currently working to identify all of the barriers to acceleration that we need to overcome to make sure that they are fielded in the hands of the warfighter in that February to August 2025. Time timeframe. And that will require the entire department and that is why forums like the DSG are really important because you have everybody around the table focused on problem solving and thinking about how you get a capability from where it is today, all the way into the field with all of the associated considerations around training around sustainment, etc. We're currently working with Congress to ensure that we have the appropriate funding strategies in place to start procuring these capabilities and feel them in our in our desired timeline. And I think, replicator one, which is, the term I'll use for suitable autonomous systems has already demonstrated that kind of process change that we're striving for, we've already learned lessons about how we can move faster. And the idea is now to apply that to other capabilities, and portfolios. So they can do this again and again, and, and really show that the department has the ability to move as quickly as the threat is moving. So let me pause there. There's a lot going on with DIU 3.0, I highlighted a couple of initiatives. And I cannot express to you the immense energy, both within the organization and around it in the department I have personally witnessed the just the level of enthusiasm, both from our leadership, the Secretary and the Deputy Secretary have done more to catalyze innovation than department then then many leadership teams and Congress as well just hyper focused on this effort. And that is what we're hoping to harness and catalyze as we look out at DIU 3.0. So thank you for inviting me to participate today. I look forward to your questions. And I will say that we are publishing the DIU 3.0 strategy next week. So that will be up on our website. And then happy to answer any questions about that. Thank you so much.

Bryan Clark 19:18
So we started a little bit late. So if it's okay, we can do my 10 minutes of questions. You probably need to head back to the Pentagon because you've got a tight deadline of February 25 to deliver a bunch of hardware. So not funny. We're laughing but I'm sure yeah. So but yeah, it's a great initiative, and we really appreciate you taking on that challenge. And thank you again for being here today. I'm glad you talked a lot about process because that's fundamentally sort of what this conversation is about is how do we provide a venue for folks with solutions and people with problems to kind of come together and sort out, you know, what's the what's the solution set to A variety of problems that we have in the military today. So let me start there. You talked about how DIU 3.0 is fundamentally about synchronizing what the commercial providers can deliver with what the combat or commanders need. How do you navigate that that conversation? How do you work with combatant commanders to define their problems, and then kind of refine their problems based on what the solution set, you know, can deliver, because obviously, they may have an idea of how they want to solve the problem. But that that solution they have in mind is probably not feasible with what's available in the near term. So how do you navigate that dialogue?

Aditi Kumar  20:38

Yeah, and it is a very interesting process and cultural change, I think for the department, what we're really trying to do is approach these problems, iteratively, which is not how the department traditionally works, and which is why I highlighted as as much as it's, you know, mundane as it sounds to highlight a forum. That's why bodies are like the DSG are important because you have everybody around the table. So what we're doing to understand the warfighter needs is we have DIU is actually focused on embedding our people with the combatant commands, we have folks in Indo PAYCOM that are working with the leadership of that organization, really understanding what are the top three technology needs replicators, one of them we're working on the joint fires network as well, elements of that. And so we we are there on the ground to understand the need, we're here with the services. And that's why I think it's really important that DIU staffing up our Washington DC presents, I am one of two senior leaders that we've brought on, we're really building out an entire team. And the way that DIU is now embedding into the Pentagon, I think is helping us with that too. And I think you know, for me personally coming from the ANS world, having those ties to the services is really important here, because then we can take what we're hearing on the ground with the combatant command, we can bring that to the service acquisition executives. And we can help you know, make those connections. And a lot of this is iterative. It's here's the solution that we have. Let's field it. Let's get the feedback directly from the warfighter, which is kind of why that UAS workshop was such an important way for us to get after this problem and something we hope to replicate No pun intended. Getting that real time feedback, and then going back and say, how do we want to refine the solution? So I think that is that is the type of process change we're trying to drive, which is, let's move faster. Let's get more feedback into the loop. And let's take more risk, frankly, because if we don't take risk in the process, then the warfighter takes the risk on the battlefield. And so that's what we're trying to do. And I think it is a change for the department. But I think it's really important.
Bryan Clark  22:50

It seems like you're fundamentally kind of putting the department or getting the Combat Commander to be in the position of a customer, and thinking of how they might need to refine their ask, you know, to accommodate, you know, what might be possible with what's available on the shelf today. Yeah.

Aditi Kumar  23:06

And it's about refining that ask I think, and being comfortable with that ask changing and getting the department comfortable with that changing and saying, Okay, what can we feel today? What can be filled in six months? What can we build in 12 months. And that's what the Ukraine conflict has really highlighted the importance of getting capability out there learning lessons, and then applying them to make sure that the next batch of capabilities, you know, gives us that additional edge. And so that's, that's where we're really focused, both domestically. And by the way, with our allies and partners, that's something that I really want to focus on, on the international side as well. You know, we often go out to allies and partners, or they often come to us asking for incredibly exquisite complex capabilities with lead times of many years. And I think the conversation needs to be yes, you can, you should absolutely do that. But then what are the things that are cheaper, that are faster that we can get to you that accomplish the same mission or accomplish part of that mission? And how can we, you know, get that get that fielded, get your, again, get your feedback and iterate on that? Because I think the the portfolio of capabilities that we need for national security has to comprise a mix of these things. And I think we need to figure out the right balance.

Bryan Clark  24:22

And I think you brought up an interesting point you brought up was how DIU is acting essentially as this interlocutor between the combatant command also in the services. So not only are you drawing upon what the commercial sector might be able to provide, but you're also providing a better sense or better, better discovery mechanism for the combat commanders to understand what the services might have already coming out of their research organizations that probably didn't get exposed to otherwise.

Aditi Kumar  24:48

That's That's right. And that's why the dice is so important. So this inaugural meeting, which this was the first time that I had been exposed to a lot of these organizations, which I think speaks to I mean, two and a half years. ans I think it speaks to some of the silos that exist in the department. But to have organizations like naval x, and the marine innovation unit and AFRL.
And around the table talking about here, the projects that we're working on, oh, I'm also working on that thing, you know, or I also reached out to this company, why don't we work together to shape the kind of capabilities we need, I think is really important. And then one of the feedback points that we heard from the innovation organizations was, wouldn't it be great for us to better understand the combatant commanders perspective of what they're thinking about immediately? And what they will need five years from now and 10 years from now, because a lot of these organizations are focusing on those longer term r&d efforts. And so as they look, you know, beyond the horizon, it's, you know, where should we be focusing? And how can we collectively increase our economies of scope and scale by by kind of understanding what those longer range needs are? Right,

Bryan Clark  25:58

right. And I guess one of the aspects of that, that kind of comes out is that when you deliver something to the warfighter, it has to be somebody's got to sustain it, someone's got to operate it, someone's got to probably pray the training manual for it and all that. So that's where I think your guys work with the services is probably really important. Because even when you feel something like with replicator, yeah, someone's gonna have to own that. And it can't just be indo PAYCOM, necessarily. Yeah,

Aditi Kumar  26:22

exactly. So replicator is end to end, as I said, it is delivering the autonomous, autonomous systems into the hands of the warfighter. And so we are looking at all aspects of that project lifecycle. A lot of the initial focus was, let's define the operational need, let's make it really crisp. And we worked very closely with indo PAYCOM. To do that, to this, you know, down to the specifics of what day is, what is the weather? What is happening? What are the target sets that we're going after him? What are the types of capabilities that you need? No kidding, to really, you know, make a difference in that scenario. So that was, you know, the bulk of the first, you know, few weeks and months of this effort. And then it really transitioned, as you can imagine, to the next piece, which is okay, the acquisition strategies, the funding strategies, how do we then bring those capabilities to bear. And in parallel with that, we have defined an entire governance structure for replicator that includes all of these cross cutting efforts, such as, you know, refinement of the comm apps, such as experimentation, because once you've got these capabilities, depending on where they are in the cycle, you have to experiment with them individually and as a portfolio. And what are the different exercises that we can leverage do that between now and February 2025, for example, the training piece of this is a huge focus. The information strategy piece of this is a huge focus. And so we've got all of the right experts, data in AI training, and I know you're speaking to Margie next. CDO is a great partner in this helping us think through, you know what that piece needs to look like. So it's bringing all of those together, so that when we deliver this in the end, it is the full capability. So
Bryan Clark  28:04

one thing I want to before I ask one question to the audience I wanted to address is, how are you working with Congress and you know, because appropriators authorizers like to be able to get their hands in middle things, they like to have some sense of exactly what the department's doing. It seems like this iterative process is much more of evolving more quickly than the normal ppbe cycle would allow. So how are you keeping them comfortable and informed and creating some transparency there? Yeah,

Aditi Kumar  28:32

Congress has been a great partner. To us on the replicator initiative. Specifically, we are briefing them on a regular basis. We're in the middle of briefing them right now on the capability selection. And all of the things that I just laid out are plans for delivering for delivering the capabilities. And I think it's an interesting time, obviously, with the budget cycle to go to Congress with a portfolio. And so we're working with them on the best funding strategies to realize what we're trying to do with replicator one. And then even beyond that, I mentioned there is great energy on the Hill right now for these types of efforts writ large Congress just made us a PSA do PSA in the NDA. So I think that, you know, speaks to to the focus here. Dice is another thing that is in the NDA, you know, mandates that we coordinate across this community of entities. And so I think Congress is focused on the right things. They're a partner to us as we try to execute these initiatives and replicators obviously going to be the priority over the coming weeks.

Bryan Clark  29:35

Yeah, makes sense. So time for one question from the audience. Young lady here your first I'm sorry. Thank you. That'll be a good one.

Speaker 3  29:47

Georgina DiNardo inside defense. So I just had a question. So you said capabilities were selected. Do you have on your timeline when we might see systems be selected for applicator and when that might be announced to the public? Like, thank you.

Aditi Kumar  30:00
So on the system's being selected once the deputy selected the capabilities before Christmas, the services then develop the acquisition strategies, which are to deliver those capabilities through specific systems. And so the services are identifying the specific systems. Our next step is to work with Congress. So we will be briefing them, we're in the middle of briefing them, in fact, and having the funding conversation, I think on the public announcement, that's going to be something that happens after we have completed our briefings to Congress. And it is also part of this broader information strategy that I mentioned is we have to think through, you know, what parts of replicator we want to speak about publicly, and then what parts we want to reserve because that is what the operational needs mandate. And so the department is working through those and then we'll share information at the appropriate time.

Bryan Clark  30:55

Well, thank you. Thank you. And thank you very much. Aditi Kumar from the Defense Innovation Unit. Thank you for being here today.