Unveiling the 2024 NSIB Report Card

Speakers:

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Such a privilege to launch our second annual National Security Innovation Base Report Card. We published the report card yesterday. Maybe just a word to build on Roger's remarks in terms of why we do this report card. There are a lot of convenings, a lot of conferences, a lot of conversations around national security innovation. And as the Reagan Institute started to do more policy work in that space, we identified that there was a gap. There was no baseline assessment of how we're doing and where exactly we need to improve, just conversation that we need to improve. And so this report card is really an attempt to provide that baseline assessment, to look in-depth across what matters in this ecosystem to assess where our relative strengths and weaknesses are, and then to provide recommendations for improving those weaknesses. It's going to inform many of the conversations that will happen on this stage today. We hope it will be useful to you as a policy tool in your work in this space. And so we thought we'd start with just a few minutes between Dale and myself digging into the findings, previewing some of what you'll see throughout the day in the report card.

Maybe to start just a bit on methodology, how exactly do we build the report card? And for those following along in the room or at home, you can find this on page 7 of the report card. When we built our first report card, the inaugural report card that we launched this time last year, we built what we hoped would be a sound and repeatable approach. We dedicated a lot of time in our first year, along with our knowledge partners at McKinsey, to identifying the set of key metrics that we would assess. Those metrics, those indicators as we call them, we needed to be most diagnostic to assessing the health of this ecosystem.

Underneath each indicator, we developed a set of assessment criteria, and underneath those we sourced a wide fact base of key metrics that we could use to measure those criteria. And then, because it is indeed a report card, we use that fact base, those
measurable metrics to assign grades to each criteria and to each indicator. A word on grades, because as we go through, you will see some grades that you would very much not have been proud to receive in school, I imagine. But we worked hard to have a grading rubric that really shows on an A-to-F scale, traditional A-to-F scale in this way, that really delineates these lines between our relative strengths and weaknesses. So an A, truly excellent grade, really meant to areas of American distinctiveness; a B, really, really, really good grade. These are meant to represent strengths in our ecosystem.

C is where we start to see vulnerabilities and inconsistencies in the National Security Innovation Base. D is where those start to really – those vulnerabilities really start to erode the health of our NSIB. And then F is where we start to see catastrophic failures that are undermining American global leadership. Overall, the structure is designed to be repeated in what will now be an annual assessment. Each year we revisit our indicators, make sure we're still measuring the right things. Dale will talk a little bit as he goes into indicators about some shifts that we made in how we present those indicators this year. But the 10 indicators from the inaugural report card remain the same. We revisit the fact base, revisit the assessment, reassign the grades, and then importantly, and this is of course new now that we have the second iteration of the report card, we can start to look at trendlines.

Those trends over time I think are going to be a really important contribution of the report card this year because we can see where we're moving in the right direction, where we're staying flat or neutral, and where, if at all, we're moving in the wrong direction. And there are some key indicators, some important ones, where we do assess that we're moving in the wrong direction. Another new aspect of the report card this year, as you dig into the content of the indicator pages, is that each indicator is supported by a set of headwinds and tailwinds that we've identified. So these are meant to identify aspects that are either pushing us in the right direction, holding us back, or indeed pushing us in the wrong direction. So you'll see that through this year's assessment as well. One final note on methodology. We do assign some neutral trends across some of our indicators, but there are some times, as we went through the assessment, where the NSIB report card team, along with our Advisory Board who served as an important set of leaders in this space to inform our work as well –

We also conducted a number of subject matter expert interviews with those in government and outside of government. As we did this year's assessment, the report card team concluded that where trends are flat, if the sense of urgency that Roger previewed in his remarks, given the threat environment we face is so significant, no progress can
actually be represented by a lower grade given the investments our competitors are making in eroding America's military and technological edge, and given the overall threat environment. We have to be moving at the speed of relevance. So even if we're not proactively moving in the right direction, if we're staying status on certain indicators, that's going to be represented by a lower grade, and Dale will go into some of that as well. Just a word on some of the key themes that emerged from the report card. This is on page 8.

Some of the key takeaways from our assessment this year. Number one, there's been a lot of activity in national security innovation in the last year. I expect we'll hear a lot about that on stage from leaders, particularly in government. The report card assesses that those represent green shoots of progress that we are excited about in this ecosystem, but that despite those green shoots, we are not yet seeing those innovation priorities translated and transitioned into at-scale funded deployment of those key technologies to the warfighter. We've still seen no new programs of record that address NDS and NSIB priorities. Number two, the report card finds major warning signs around some of the key inputs that Dale will talk about, these critical factors that are necessary to drive national security innovation. That's even despite the fact that there seems to be consensus that there's a problem, and that we need to address it, and that these things matter.

So here, think about things like budget uncertainty, think about talent base, workforce. Think about supply chain risk. Number three, there's a sense in -- well, a piece of good news, I suppose, America does still lead in global innovation, but the disconnect where we're seeing is the lack of progress in translating that overall progress in digital technologies into scaled implementation of those technologies. And finally, the report card assesses that national security innovation is at a critical inflection point. There's an urgent need to transition the prototypes and experimentation that we're seeing into at-scale fielding of those technologies and business models. And that's going to require making this the norm, not the exception to the rule. I'll turn it over to Dale now to go over some of this year's findings in more detail. Dale, over to you.

Dale Swartz:
Thank you Rachel, and thank you all for being here. It's awesome for our second publication of this to have it pretty much be standing room only in here. And I know there's a bunch of folks watching on livestream as well, so we know there's a lot of other uses you could have of your time. And so thanks for spending at least part of your day with us. And it's also a privilege for us at McKinsey to continue to collaborate with the
Reagan team on the report card again this year. Let me do a couple more things just to orient folks, and then let's get into what people really care about, which is the grades and sort of what has changed. As Rachel mentioned, we look at a set of 10 diagnostic key indicators that we think help us better understand the national security engine in the United States.

One of the things that we're really highlighting this year, the indicators haven't changed, but we're really focusing on those three at the top this year. The idea of outputs and outcomes being a really important thing that we should ultimately be driving toward at the end of the day. You can see the definitions on here, for folks who are following along in your trusty report card, it's on page 9, but maybe just to orient a little bit, as Rachel mentioned, we look at defense modernization. Key question here is, are we actually getting discriminator capabilities in the hands of warfighters? We're looking at innovation leadership. And so the idea is, from a broad system perspective, is the United States actually leading on key critical technology areas? This idea of pull-through for broader national priorities is this idea of a multiplier effect: Are the investments that we're making around defense technology and innovation actually seeding broader multiplier effects in our economy overall?

And then we look at a couple of areas that we think of as inputs or drivers into the system. So one that gets a ton of debate, and I know it will this year as well, is customer clarity. The customer in this case is the holistic set of national security government agencies within the United States. So it's not just the Department of Defense, it's also the Intelligence Community, increasingly the Department of Commerce, to some extent the Department of Energy, and many other folks here who are ultimately asking for and acquiring capabilities across the board. We'll talk a little bit about what these mean when we actually get into some of the grades. Innovation capital is the idea of the set of government, public capital and private capital resources that are actually used to seed and scale the ecosystem. And then we look at a variety of different actors. So the private base, which we'll talk about, is actually very all-encompassing.

Often this gets shorthanded as a discussion on startups. It's not just startups. We'll talk about why that's important. It's a critical piece, but not the only one. We look at the public and civil innovation base. The idea here is the national labs, it is FFRDCs, it's a variety of other folks, UARCs, the academic community is incredibly important here. And then we look at levels of alignment from sort of cascading levels of government, international partnerships, and then sort of the talent base, which is a critical piece.

Alright, lots of wind up. How did the grades actually turn out? Let's go to the next page.
If you were purely calling balls and strikes, Rachel, in terms of how you all scored it this year, you would see four grades that went up, three grades that were flat, and three grades that declined. That's a pretty mixed story as I think you were talking about, and there's a little bit of signal and noise. And what is the actual interpretation out of this? We at McKinsey like our data, we like showing our work, and you see that, sort of, through here, but there's also a story that sits behind some of this, and let me maybe pull a couple of the dots together in terms of some of the key indicators and trends. The first one, Rachel, is what you talked about in terms of this idea of we need to see more speed and scale across the board. There's a ton of work going on in the innovation enterprise in whole, but as we talk about the world of prototyping, experimentation, that's all great, but we're really looking for things to be sort of at-scale across the board.

And I would tie a couple of grades together from that perspective. The first one is defense modernization. That is one that has declined this year. And you, Rachel, noted, I think one of the key indicators that we look at, which is ultimately to what extent are we actually embedding in the next wave of capabilities. And by the way, innovation here is not just technology. We spend a lot of time on the tech, but it's also innovative processes, it's innovative business models, and making sure that you've got the capabilities in terms of the folks who are actually driving this across the board. When we look here, there are certain areas we're going to talk about, space, for example, today where there actually is a lot of commercial technology that's getting embedded. But as we look at the system overall, I think in the view of Reagan, we haven't sort of made sufficient progress, particularly as we look just very squarely at how many incremental new programs of record are there that are driving capability in this area this year and actually getting in the hands of warfighters.

And we would say there's not as much as we want. So that's a piece that we would highlight. A second one here is actually if we look at a couple of the inputs, so customer clarity we talked about a little bit, this is a nuanced story, and it's actually probably important to spend at least a few seconds on. We are looking here at, first, the clear and consistent demand signal from the customer to sort of the broader community that's driving innovation. I think in this area, as you look at the underlying grades, there's a little bit of grades upon grades here. That one actually went up this year. And so the idea of elevating the Defense Innovation Unit, some of the critically important capabilities that have been announced around Replicator, a variety of different discussions around key critical technology areas, there's increasing alignment there I think that we see in
terms of announcements, and otherwise there's a mitigating factor here, which is the second piece, is timely and sufficient funding to support these priorities.

And obviously we're very much having the congressional budget discussion right now. This was I think the lowest grade overall in the report card. It was a D here in aggregate, but this specific dimension was an F-minus, I think is where we got to at the end of the day. And a data point that at least struck me, and I think is for us sort of budget and policy wonks talking about right now, is if you think about what continuing resolutions are actually doing here. So in 14 of the past 15 years, we've not actually had a full appropriation on time. The aggregate total time you've been under continuing resolutions since 2011 is five years in total. And as you think about critical next-generation capabilities like collaborative combat aircraft and a variety of these others that are actually important in terms of new starts, we're not getting where we need to be from that perspective.

And the other one I think I would highlight is sort of that flashing red light from a concern perspective is on the talent base side, the number 10 on the grade there, where the grade has gone down. Now this is not to say -- it's very important, there -- and many of you all are in the room -- there are amazing, incredibly talented technical folks, leaders and otherwise, who are driving innovation here across the board. But one of the things we're looking at is the speed and scale of that from an ecosystem's perspective. And one of the nuggets that sits with me is in this domain, almost a third of the workforce is at or nearing retirement age. And so as we have the graying out here, we're not actually replacing at the same rate. And while there I think are promising signs, and an increasing number of folks in younger generations are moving into these areas, I think it's not exactly where we'd like to be.

The final piece, and then I'll turn it back to you just to do a quick -- on the recommendation side, it's -- again, we should acknowledge some of the promising higher-end pieces. It's not all bad news here, but I think this is very much a year to prove it from a speed and scale perspective, and we should leverage strengths across the board. And two strengths that I think are enduring are the two highest grades here. One is innovation leadership overall. 2023 was a breakout year for artificial intelligence obviously. But actually seeing that embed in on a defense modernization side is a gap that you talked about. And the second is the strength of the private sector. Innovation base overall is incredibly dynamic. There are fragilities here, very much a concern for folks across the board as sort of the digital now meets the physical around critical supply chain challenges that many folks are attacking across the board. And so that, at least, is a
little bit of a -- sort a yellow flashing light for us, but there are clear strengths to leverage across the board. With that, I'll pass it back to you, Rachel.

Rachel Hoff:

Well, thanks Dale. Lots to cover and unpack throughout the day. As you can see, I just, as we wrap up, want to highlight that there are six signature recommendations embedded at the end of the report. We developed these in partnership with Eric Snelgrove, who served as a subject matter expert for the report card, and thank him also for his work on the policy product. I just want to breeze through a couple of highlights for you. I'll talk first about number one, this is simply around funding stated innovation priorities: New program announcements, Replicator, CCA, that's great. They should be fully funded. We talked about that. Grade number three is around developing novel manufacturing processes to help overcome some of our shortcomings in that regard. And then I'll highlight four and five as well, which are, both in the talent and workforce domain, kind of two sides of that coin.

Number four, addressing the foreign talent pipeline. And number five, addressing the domestic talent pipeline. Creating a green card recapture program to bring the best and brightest from around the world here to work on our hardest problems. And then number five, around creating a civic duty leave program. There are other recommendations there as well, but wanted to preview some of those. And I'll note too that these are really targeted towards those lower grades that we assess in the report card to offer the opportunity to think about how we might improve. That is what we have for you this morning on the report card. Dale and I are eager to dive in with each of you and chat more on the margins of today's event. Please don't hesitate, if there's feedback that you have in terms of the report card, questions, happy to address those. We hope it's a useful tool to you in your work as part of your toolkit.

And if there are ways that we can collaborate, please don't hesitate to reach out in that regard as well. I'll end where Roger started, which is just the sense of urgency that you see throughout this year's report card. I think we'll hear a lot of that on stage today as well. And I would commend you all to leave here, whenever it is that you leave today, and take that with you along with some of the fact base in this assessment. Thanks again for joining us today. We'll take a quick break and reconvene at 9:10 for our first session with policymakers. Thank you.

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