Center for Strategic and International Studies

TRANSCRIPT

Event

“What is the ‘Iron Dome for America’?”

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CSIS EXPERTS

Heather Williams

Director, Project on Nuclear Issues and Senior Fellow, Defense and Security Department, CSIS

Tom Karako

Director, Missile Defense Project and Senior Fellow, Defense and Security Department, CSIS

Kari A. Bingen

Director, Aerospace Security Project and Senior Fellow, Defense and Security Department, CSIS

Transcript By
Superior Transcriptions LLC
www.superiortranscriptions.com

Kari A. Bingen: On January 27th, 2025, President Trump signed an executive order on the Iron Dome for America that would defend the American homeland – both its citizens and critical infrastructure – from attacks through a next-generation missile shield. What does an Iron Dome for America actually mean? What are the implications of this executive order? How will the Pentagon implement it? And how does it fit within other deterrence and defense priorities?

I'm Kari Bingen, director of the Aerospace Security Project here at CSIS. Here to unpack these questions I'm joined today by Dr. Tom Karako, director of the Missile Defense Project; and Dr. Heather Williams, director of the Project on Nuclear Issues – PONI – here at CSIS. This really is a unique assembly of strategic forces experts here at the organization. We will take audience questions, so please submit those via the event homepage and I'll weave them in.

I want to start with Tom. But before I do that, let's queue up a short video.

(Video clip begins.)

President Donald Trump: – to immediately begin the construction of a state-of-the-art Iron Dome missile defense shield which will be able to protect Americans. You know, we protect other countries, but we don't protect ourself. And when Ronald Reagan wanted to do it many years ago, luckily we didn't. We didn't have the technology then. It was a concept, but we didn't. Now we have phenomenal technology. You see that with Israel, where out of 319 rockets they knocked down just about every one of them. So I think the United States is entitled to that. And everything will be made right here in the USA, 100 percent. (Applause.)

(End video clip.)

Ms. Bingen: So, Tom, what is the Iron Dome for America?

Tom Karako: Yeah. Look, this is a – this is a big – a big topic. I'll say three basic things.

One, I think it's appropriate that this is getting high-level attention. It deserves, frankly, a big executive order because – I like to quote former Assistant Secretary of Defense John Plumb, and now CSIS associate, who said, look, these are weapons of choice. And you heard reference right there to the April 14 attacks, for instance, last year. And these are the – you know, cruise missiles hitting Ukraine on a weekly basis, right? So, these are weapons of choice and, frankly, I think it deserves the high-level attention and I suspect large budgetary reorientation.

And also, the policy changes, as you said at the beginning, which is we need to realign our attention from the rogues to Russia and China. I would say this is about six years too late, you know, in terms of catching up with the 2018

National Defense Strategy that said we have to be focused on great-power competition.

I think the next big bucket is really a renewed attention to space and to putting space and missile defense in the same sentence. And so the executive order itself calls for an acceleration of space sensors for hypersonic and ballistic threats. Those satellites, as it turns out, actually orbited Valentine's Day last year, but we're going to need a lot more of them to get a global architecture.

But there's also some really important language about proliferated space-based interceptors. And this, I think, is going to be an important discussion point for us, that this was something that if you want to get after the boost phase, if you want to get after the big threats from the bigs – from Russia and China – you probably are going to need some kind of boost-phase attention. So you're going to see and you've seen language – there's a congressional bill percolating through that has serious money behind that.

And I would say that this is appropriate as well because the implications of space as a warfighting domain are just beginning to sink in. And when they sink in the salience of space fires is going to bring with it a lot of other capabilities, of which, you know, space-based interceptors I suspect will be a small subset.

And then the third bucket is that this is kind of near term, near term and close to home. So you definitely see a big attention on the homeland. You heard reference right there to attention to defending the various homeland – and I suspect Heather will talk about kind of what are we defending and how does that fit to our deterrence. But you see attention there to cruise missile defense. It's been two-and-a-half years since the – since the Air Force was named the lead service for homeland cruise missile defense. Hasn't had a – just a whole lot of progress on that front, but I think you'll probably see some renewed attention there.

But it's also near term. I think realistically you're talking the next couple fiscal years in terms of unified government, but also in terms of the epochs. The Missile Defense Agency put out an RFI calling for 2026, 2028, and 2030 demonstration or delivery, so they're looking to move fast on all this stuff. Not everything will be fast, but they're looking to move fast on some of it.

Ms. Bingen: Okay. Heather, I'm going to ask you the same question: What stood out to you about this executive order?

Heather Williams: So for the nuclear wonks there wasn't a lot in there. At first glance it seems like this is not about nukes, but it is. The word "nuclear" is only in there once, and it was specifically in reference to Reagan. It was hearkening back on that

legacy of Reagan, which we know that President Trump really likes to do. But it gets to this point that Tom was making about America just needs a stronger deterrent right now.

To kind of quickly set the scene on what is going on in the nuclear landscape, the nuclear landscape is just increasingly competitive, particularly in terms of the new means of delivery. We know that Russia and China are pursuing hypersonic programs which will likely be nuclear-armed. Iran and North Korea continue to develop their nuclear programs, and that includes they might be getting some missile technology from Russia and China. There have been some indications or hints at that in the press which I think are worth noting.

But this has also been an era, really, of strategic surprises when it comes to new means of delivery. So that includes Russia's Oreshnik missile system, but then the other one that I want to point to is – this was a real surprise for a lot of us – it was Pakistan. In December, former Deputy National Security Advisor John Finer announced worrying developments with Pakistan's missile program that could threaten the U.S. homeland. And for anyone listening who wants to know more about that, my colleague Diya Ashtakala wrote a fantastic piece kind of trying to break down what could be the drivers behind this.

But all of that and this air of increasing geopolitical and technological competition means America just really needs to double down on deterrence. And this executive order, for me, is moving in that direction, and it is showing part of a trend, I think, towards a strengthened deterrent. And so for Trump to hearken back to Reagan and that, I think that was a really important thing. So that was my first big takeaway.

The second one was about allies and partners. That was a really – for me, a pleasant surprise, shall we say, that the executive order calls for increased cooperation with allies and partners on missile defense. As we know, a lot of America's allies are a bit nervous about the incoming administration: Will the U.S. live up to its strategic commitments of extended deterrence – extended nuclear deterrence with them? And I thought this executive order really put the allies kind of front and center, and it was a really loud signal as I heard it saying, yes, we are still committed to working with allies and partners. There are still burden-sharing conversations to be had. All is not forgotten and forgiven. But for me, this was a really important indication about the administration's interest in maintaining cooperation with allies and partners, even if it's at a more transactional level.

The final takeaway that I had is probably going to be the ugliest part of the conversation, and that's the money. There didn't – there wasn't a lot in the executive order about how much this is going to cost or where that money is

all going to come from. And so while I support a lot of the spirit behind this executive order, definitely support a stronger deterrent, the biggest concern that I'd had with regards to nuclear was: Is any of this going to take money away from the really important nuclear modernization program that is also decades late, has been in a state of atrophy, and really just needs a lot of attention and emphasis? So where is the money going to come from, and is that going to have to jeopardize some other defense programs?

Kari, I'm going to flip it back to you because not only do you know budgets really well, and you – from your time on the Hill knowing kind of how the NDAA gets made, but also there is, as Tom said, the really big space component to this, which is your area of expertise. So, what were your takeaways?

Ms. Bingen: Well, and that's where I lead off as well. I have three big items that stood out to me. And if I can ask our team to put back up that missile trajectory graphic.

Number one for me was the missile defense-space nexus, Tom, that you mentioned and the centrality of space for missile defense. You know, we're doubling down on sensors – which we've had for decades up there – that detect missile launches, help track them. But now we're building out sensors to really do refined, exquisite targeting ability for, like, hypersonic missiles. You know – and this renewed emphasis on space-based interceptors.

You know, the interesting thing here – and I know Tom knows this well – is boost-phase defense, space-based interceptors. This has long been elusive to us. You know, the rationale here is that you intercept and boost before you release countermeasures; before reentry vehicles start to maneuver, which makes it harder to track; and then potentially over an aggressor country rather than your own. We've lived through past efforts – Kinetic Energy Interceptor, airborne laser. Each of those were technically hard and had operational limitations.

I do see the current homeland defense architecture that Tom can get into, its capabilities, its numbers are not postured for this advanced threat – the different trajectories now that missiles and aerial threats can come from, different launch points now. It's no longer just a missile shot over the – over the pole. I do see a need for space here. Global access: You're not constrained by country permissions. You're not constrained by denied areas where we just can't get close enough to the missile launches.

And, Tom, as you said, I mean, the reality here is that space is a war-fighting domain. Space Force leaders have said that we must operate in space, from space, and to space. We must defend against adversaries who would use space weapons and missiles against us, but then we also must deny their

ability to use space assets to attack our forces on land and at sea. And, Tom, you and our colleague Clayton Swope wrote a really interesting commentary – I think was last week – on rethinking our overall approach to space power and space fires. You know, just like we maximize our military options in other domains, we should look at the same in space.

The second item here for me was space-based interceptors are not new. And the rationale and assumptions for why they've been prohibitive in the past should be challenged. Ford in the '70s, Reagan's Strategic Defense Initiative, several congressional debates and directed studies. We were there with the House Armed Services Committee on the staff there, mid-2000s, late 2000s, 2010s, as all of these different debates and efforts were going forward. But the studies that I recall seeing, the limitations were we couldn't produce large numbers of interceptors, in the thousands, and they were costly. We couldn't get up the space launch rates that we needed, and then space launch was costly. I would really challenge each of those assumptions now, particularly with what SpaceX and Starlink are doing on cost, smaller, quicker development and production of satellites.

And then third – I mean, I'll say, I'm an engineer. I recognize the complexity here. So, I do not want to downplay that this initiative – it's still a very technically and operationally complex challenge. And it's a costly problem. We'll really need to take a hard look at that architecture, the technical aspects, but I think we can – you know, those need to be challenged, the assumptions there, the costs. But I would really emphasize the CONOPS, the concept of operations for how we use these, say, thousands of SBIs, and that command and control, battle management capability. When you have thousands of interceptors, you've got to figure out handoffs, and how you get targeting information to these, how you optimize which interceptor you use when, at machine speeds. And we do a lot of that today, but it just becomes more acute and magnified if you're now talking about thousands of interceptors from space.

I think the key here also will be, as this, you know, 60-day study unfolds, what are the requirements and assumptions? What are we expecting a layered or integrated missile defense shield to actually do? We need to think about what it is that you have to defend, how we think the adversary might use their missiles against us, from where and what trajectories are they – would they employ salvo launches? So, rapid fire, which makes it really hard when you're a satellite in space to intercept at a specific time and place many of these at a time. The timelines. I mean, you're less than three minutes in boost phase. So all of these requirements and assumptions are going to drive your architecture, design, your tradeoffs, your program schedule, your cost. So those are my big three takeaways.

Dr. Williams: I have a question for each of you, actually, if I can jump in. It's on partners and who you're going to work with on this. Because I don't think the executive order mentions the MDA. It hints at possibly interagency cooperation. But so, Tom, how did you see this happening? How did you see this executive order getting taken forward as an interagency effort? I know it does give some taskings to STRATCOM and other parts of DOD, but how is that going to work together? And then, Kari, my question for you was going to be about partnerships with industry. That was a really great summary, I think, of where of the improvements that have been made since the last time that America made a really serious effort, and that a lot of those previous concerns might now be obsolete. Can partnering with industry more help overcome some of those? But the partnership aspect was something from the EO that I really wanted to learn more on.

Dr. Karako: Yeah. I'll say first, in terms of, you know, who's in charge, who's going to be doing this, the EO called out STRATCOM and it called out NORTHCOM, I think. But in the news reports, in terms of the forthcoming SecDef memo for the implementation of this, is there's going to be a lot of folks involved – the chairman of the Joint Chiefs, USDP, undersecretary of defense for policy, certainly the Missile Defense Agency, NORTHCOM, SPACECOM, Space Force, all these kinds of things. So, it is going to be at least a big DOD-wide effort. And that's appropriate.

I think the new appointees and officials coming in, they're – frankly, they're going to be doing missile defense a lot for the next couple months. You know, Kari, you mentioned the 60-day study. Well, it's really, like, a couple weeks. Sixty days when they have to hand it in. We have the first round of reports reportedly due, you know, February 28. This is just a couple weeks. The second round of reports is due March 15. The Allied and Theater Missile Defense Review, May 15. So basically, it's all missile defense all the time for the next couple months.

Ostensibly, it's to – it's timed that way to inform FY '26, to get funds in, to figure out what's the reference architecture they want, small, medium, or large has been talked about, to inform '26. I think there's actually a prospect to inform FY '25. And so, I would encourage folks to watch for funds to be perhaps put into the reconciliation bill. You know, if there is going to be, for instance, big THAAD, Standard Missile, Patriot buys, might as well get a head start on that in terms of procurement side of the house, as well as the R&D for space-based interceptors.

So you're going to see a lot of different entities within DOD have a play here. And, don't worry, MDA is going to be busy in terms of – frankly, they're the subject matter expertise for so much of that spectrum. And so they're going to be taking the reports off the shelf for NORTHCOM on cruise missile defense, and all this other sort of stuff. And, you know, STRATCOM got the

call out. It's actually Space Command that is the lead for missile defense nowadays.

But I think that the references in the EO to counter-force and counter-value purposes, it's a little bit ambiguous, I would say, in terms of what really is the defended asset list, what's the priority of what's being defended? It talks about defending the population, but also says we need to have a secure second strike. And so are we going to be rolling THAADs next to New York? Or are we going to be rolling up THAAD batteries, you know, in Offutt, or ICBM fields, or something like that?

Ms. Bingen: So you take Iron Dome, the term, as more of an analogy, right?

Dr. Karako: It's a metaphor. It's certainly not the – it's certainly not the Rafael product. It's a metaphor. But I like to play with that metaphor and say that Iron Dome is the lowest tier of Israel's multitier system. It's what everybody knows. But it's going to be really important. We're going to go do the space-based interceptors thing. I think it is ripe now, in a way, it wasn't, for instance, in Trump 1.0. So much has changed. But we can't forget the air defense. We can't forget the garden variety cruise missiles that, you know, the non-nuclear strategic attack threats. So I encourage – the Iron Dome thing means we also need to be attentive to what it calls advanced aerial threats, to the to all these different things that will, frankly, under-fly a space-based interceptor layer. So it's going to have to be the full mix for all these threats, not just – not just the high – it has to be a high-low mix.

Ms. Bingen: And the good thing is we're not starting from scratch here. There is already a homeland missile defense system protecting our country with – and we've talked a little bit about where some of the gaps are – but ground-based midcourse defense, interceptors in Alaska and California, modernization programs underway with the glide-phase interceptor, several space-sensing programs to do that, missile warning, detection, tracking mission. Those are already budgeted and underway. And then what I mentioned earlier, which is the how do you command and control all this stuff? How do you manage all of these different assets at really machine speeds, and optimizing your operational space?

So I think there'll be a role for our traditional companies that have built up much of these layered systems already in place. But I think there'll also be an opportunity here for some of these non-traditional companies. This is going to be software heavy. We will need a lot of automation and optimization. So, I would expect to see – I hope – to see both as we go forward with each of these different EPOC contracts.

Dr. Karako: And there's an industry day, I think it's a week from today, that MDA is hosting. I understand that the services are likely to be there, even though

MDA issued the RFI and the industry day. And that's going to be an opportunity for all the companies, the bigs and the smalls, to put in their ideas of what can you buy fast and what can you be thinking about for development as well.

Ms. Bingen: Well, and I'm going to start weaving in some of these questions here, because, Heather, you mentioned in one of your key takeaways the allied piece. How do you think allied participation is being considered? And what's our sense on whether they've been invited, what the level of conversation is?

Dr. Williams: I have no idea if the allies have been contacted. Tom may more than I do on that. From a few conversations I have had though, the allies seem pretty excited about this. Air defense is obviously their top priority, both in terms of defense investments – and that is more on the conventional side, understandably. But all of Europe in particular, I think, is really grappling with this – the huge increase that they've had to make in their defense spending just in the past few years. And now 2 percent might become 3 percent, might become 4 percent. And so, I think that they're still coming to terms with that a little bit. But, from their perspective, it seems like, again, as I said before, the signal that this is sending about partnership, and still wanting to work with allies, and still caring about allies, and seeing allies as a value added is a really important one.

In terms of the technical cooperation, I mean, our allies are doing amazing work on air defense, mainly because they are – particularly in Europe – they are the ones who really are in the crosshairs. And so, for them, they've been thinking about this a lot. And so, I think that this seems – this hopefully is the start of a much bigger conversation. But, yeah, I think that – I mean, Tom, I don't know, do you know, has the – have we already reached out to the allies, and have they signed on the dotted line?

Dr. Karako: Yeah, maybe they can show up for the industry day. I'm not sure. (Laughter.) But it's going so fast. The tempo is really, figure out what you got right now on the shelf, ideas on the shelf. This is not a time to do a lot of research. It's taking the ideas that you have lying around and pushing them forward, because that's all due up – the phase one report's due to the secretary, I think, February 28. So, industry day on the 18th, I think it is. These are due (February) 28. So very quick turns at every piece.

A couple things. You know, Heather, to your point about the allies, I mean, Australia and Japan both have long-range strike and air and missile defense as their top two modernization priorities, right? Offensive and defensive missiles in their recent defense strategic reviews. I expect that the U.K. may have a new salience for both strike and air and missile defense when it comes out in the coming weeks or – weeks or months. And you mentioned Europe. I mean, look at – look at how the conversation in Europe has

changed, especially post-2022 Ukraine, is Germany, of all countries, is getting the Arrow 3 ballistic missile defense system. They historically have not been all that much on the BMD game.

And you see the German-led, ESSI, European Sky Shield Initiative, because they see where the threat is. They see this, and they figure out they got – they're putting billions of dollars, or euros, behind this in a multination collaborative effort. So, I think it's going to – it's going to continue to get a lot of attention. I also see just a slight – just a glimmer in the EO's attention to allied and theater, which is that it's probably a little bit of a goad to our partners and allies to say that you might need to get more of this for yourself. That precisely because the op tempo of U.S. forces is spread so thin, that we can't be everywhere.

We've had Patriot forces in Ukraine (sic) since 1991. They're still there. We also have forces there ourselves. But it's only in the last couple years that Bahrain has said, yeah, we ought to get some Patriots for ourselves. So, I do think you're seeing just a whole big demand signal. Unfortunately, the White House last year had to suspend all Patriot AMRAAM sales globally, and there's 18 countries that operate Patriot if you count Ukraine, because of supply. And so, on the industrial base side it's how fast can we increase the PAC-3 production rates, the THAAD rates, and all this sort of stuff. So the industrial – that is a component of the executive order.

And so, I think you're going to see a lot of attention to SRMs, to solid rocket motors, to Seekers – PAC-3 Seekers, for instance. The glide-phase interceptor that you talked about, Kari, it's a cooperative development program with Japan. And so they're very proud of that. I also think we're probably going to need some other hypersonic missile killers, probably in the – in the interim as well. So I would look for that.

Ms. Bingen: Well, and one of the critiques I continue to see on whether it's this layered homeland missile defense, or particularly with space-based interceptors, is that this would undermine strategic stability and weaken nuclear deterrence. I have some thoughts, but for Heather, I want to turn it over to you on that one first.

Dr. Williams: I don't see it as – I need to engage with those arguments a bit more, because I struggle to understand them a little bit, to be honest. I think Tom's point about counter-force versus counter-value is going to be a really important one, and where we decide to put our assets. I do think the EO gave us a bit of a – it's not even a hint – told us, which is secure second strike. And, you know, the very old Cold War definition of strategic stability is having a secure second-strike capability, which strengthens your deterrent because it kind of says to the other side, you know, don't even try, because we will be able to come back at you. We will maintain this capability. And so I think on a

practical level, that's going to be – that's one way in which this really could be strengthening that.

There is also, you know, that signaling point that I made from this. And I know I keep going back to it, but I really do think it's important that so many folks in the nuclear community, among our allies, have just been watching this administration for some sort of signal. What direction are you going to be going in on strategic forces? We know which theater this administration cares more about. Fine. But what are you going to invest in that? How are you thinking about these issues? And this EO really is the best indicator that we have of that. And so that isn't just sending a signal to our allies, we want to work with you. It's also sending a signal to our adversaries. Which is, you know, deterrence is really – is going to be a top priority. And deterrence is going to be a driver of this.

There's just one other deterrence angle that I do want to add in, which might seem – it is a little bit conceptual, but bear with me here. And it has to do with escalation management. So, our adversaries, we know, are relying on nuclear threats to back regional ambitions. And we have seen Russia do this throughout the war in Ukraine. You know, nuclear threats started almost – I think it started two days after the invasion began. And why is Putin doing this? The reason, we believe – nobody can get inside his head, and I'm not a Putin whisperer by any – or, Putin mind reader, rather – by any means. But it seems to be because he thinks that Russia cares about Ukraine more than we do. That they have more at stake there, and therefore they can manipulate risk and almost bully us out of Ukraine, bully us into stop sending them, you know, HIMARS, whatever it is that Russia doesn't want that day. And Russia just kind of keeps revamping that nuclear rhetoric and nuclear saber rattling to try to bully us out of it.

And I really do see this as being a means of deterring that in the first place, because what Russia is banking on is that we won't want to get into any sort of a conventional conflict with them because it could lead to escalation that could threaten the homeland. If we improve the homeland defenses, that really messes with their calculus. And so it can disrupt how they're thinking about risk manipulation and could undermine the way that they are trying to use nuclear deterrence for adventurism and, frankly, very illegal operations. And I would guess that some of our other adversaries have been watching what Russia is doing and have been taking their own lessons learned from that.

Dr. Karako: Can I jump in on the deterrence thing? Because, first of all, I don't think this team is going to lessen its attention to nuclear modernization at all.

Dr. Williams: Oh, good. (Laughter.)

Dr. Karako: And, you know, look, I always like to remind folks that most of the SDI speech was this long discussion of Minuteman survivability and, you know, how many – are we losing the ICBM race, and things like that. And then SDI came in at the end as a means to bolster deterrence. Not to replace it, but to bolster deterrence. And I think that's absolutely critical. The same folks that brought you the low-yield D5 and the SLCM-N, Sea Launched Cruise Missile, in the first administration, I don't think they're going to be walking away from that. The Biden folks came around to the SLCM-N in the tail end of the administration, because the world's a mess. The world's a mess. And the salience of nuclear weapons is only growing.

So, I don't see that going away. I expect you're probably going to see – we'll see – but I expect how fast can we get Sentinel right? What can we do to fix the industrial base and the delivery of the – of all that sort of stuff. So I feel more sanguine about the nuclear portfolio. I've got a lot of uncertainty about how all this is going to be pulled off, to be sure. But, yeah, that'd be my two cents on that.

Ms. Bingen: What I keep thinking, if we have it within our wherewithal to reduce vulnerability to the American homeland, and, you know, we can get it on an affordable and achievable timeline, why wouldn't we have a serious look at that? And, Heather, to your point on deterrence, I mean, is this – would whatever this shield is defend every single inch of the United States? No. But it does create enough uncertainty, I think, for an adversary – I mean, they will have to think twice, can I achieve what I'm trying to achieve? Whether it be through the saber rattling or actual launch.

And we always forget in this whole discussion, Russia has their own national missile defense system. They have interceptors ringed around Moscow. China has put up a Fractional Orbital Bombardment System, which is a satellite weapon that orbits the Earth. It could be a fraction or could stay in orbit, and then come down at a time and place of their choosing. So they're all – they've already moved in that direction. And we need to figure out ways to ensure that we are protecting ourselves as well.

You know, one of the questions here that comes up a lot, and particularly with this new team, is there's a lot on their plate from a defense perspective. So how do we see them prioritizing this initiative? And then how does it fit within other deterrence and defense priorities? Are we going to see a budget increase? What do you think?

Dr. Karako: Well, there's a lot of – a lot of trimming going on around town in different places that may find funds for this, or also within DOD. We'll see on the DOGE front. To there's a bill introduced in Congress by Senators Sullivan and Cramer that added, I think, $19.5 billion, with a B, for FY '26. I still say some

of that might be able to come back to '25. So I predict you will see meaningful big plus-ups.

To your point, Kari, we're not going to defend every acre of pasture in Texas. Would that we could. But the beginning of wisdom is to recognize you can't do everything. The threat's simply too great. And this is why I like to say, and this is a little bit – a little bit, I guess, controversial – but, you know, Reagan's SCI thing, wouldn't it be nice if we could make nuclear weapons impotent and obsolete? That's not going to happen. That is absolutely not going to happen. The threat has only gotten more wicked.

But to your point, Kari, we can raise the threshold. That's what this active missile defense – air and missile defense raises the threshold for attack, so that the onesies and twosies, the limited attacks, the coercive attacks are not as effective, and complicate their calculus as well. So it is active air and missile defense in support of deterrence, conventional deterrence, as well as nuclear deterrence.

Dr. Williams: It's a deterrence by denial strategy really, which is something we haven't thought about a whole lot in our strategic thinking for quite a while. And so it's – I think Tom put it perfectly, which is: Create uncertainty in the adversary's calculus. Because they might know, well, maybe I won't – maybe this one will – maybe not all of them will get through. Maybe some will. But do I want to take that risk? And that's where I think we really need to be moving as a country in terms of our strategic thinking, because for the past few decades the adversaries have been on the front foot. They have put us on the back foot. As I said at the outset, there's been a lot of strategic surprises. And I think that, you know, the time has come for us to maybe lean in a little bit more on these issues.

Ms. Bingen: So what are you watching for in the coming weeks, months, year?

Dr. Williams: Just about missile defense or everything?

Ms. Bingen: Back to this EO. What's on your plate? What haven't we talked about? What are you watching for, as we start to wind down?

Dr. Williams: I would say this, I would really like to see an EO on nuclear. Particularly on SLCM-N. I agree with you. I don't think that the president, whose administration the first time around put in SLCM-N and the low-yield warhead, is necessarily going to back away from it. But it's the nuclear modernization program, it just needs to move so much faster. And it needs political leadership to step in and say, this is a national security priority. And to be really specific, and say, I think SLCM-N is the easiest – Sea-Launched Cruise Missile-Nuclear – is the easiest kind of first step in moving that forward. There are other small steps that I think could be taken, things like

preparing to upload warheads when New START expires, potentially, you know, expanding the DCA mission in NATO. But that's probably the biggest one that I want to watch for.

The other thing I really want to watch for is how allies are going to respond. If they are going to come out and say anything publicly. I would guess they probably won't. NATO likes to try to keep things insular and to have those internal conversations. Final thing I'm watching for is how the adversaries are going to respond. Russia already came out with a statement, as you can guess, saying that this is going to instigate an arms race. China hasn't commented, nor are they necessarily likely to. But really watching if the adversaries do see this as an excuse for further escalation.

Ms. Bingen: Yeah. I want to answer my own question, because then, Tom, I want to give you the last word here as we wind down.

This really is, in my mind, at this point in time, less of a technology issue. It is very much more of a policy or political cost, and CONOPS or operational issue. We've seen studies. I actually want to get past the paper study phase to actual like RDT&E. Let's see what this looks like, and let's get some actual hard data, hardware, software, to inform options going forward. I do think it's significant that this was the first executive order on really a substantive defense program. And so I do hope that that parlays into, you know, the resources that we hope we'll see in the '26 budget. It is going to be competing with a lot of other challenges in front of the department, munitions shortfalls, nuclear modernization, technology innovation, shipbuilding, all of these things, which, you know, I think is really the impetus behind, say, Senator Wicker, Congressman Rogers push to increase the defense top line.

There's a lot that we have to build on that's already in the pipeline, which is good. And I think some of those things could be increased or accelerated. The partnerships here will be really important, not just on the allied front but, I'd say, within government. So Missile Defense Agency working really closely with the Space Force. Space Systems Command I hope quarterbacks this. I don't think we know yet. You know, I hope that whatever organization and individual gets the rose pinned on them, they're given the flexible authorities to go fast, as opposed to get stuck in maybe DOD-5,000. And then just the last thing that that I think about here, that we haven't talked about, is I really like the emphasis on left of launch, and also non-kinetic means. So it's not just hitting a bullet with a bullet, but are there other, more creative ways that we can degrade adversary capabilities without actually having to do that kinetic intercept?

So, Tom, let me turn it to you and give you the last word here.

Dr. Karako: Yeah. I'm going to be looking in the near term for kind of the meat and potatoes of are the things that are offered up for these reference architectures, are they achievable in the near term? That's going to be critical to do that. I'll also be looking for, frankly, the tone and tenor of the conversation. We need to make sure – we need to change our vocabulary. You know, somebody said if you keep doing the same thing over and over and expecting a different result it's not necessarily the best approach. This is why I think educating people about space as a warfighting domain is going to be critical to changing the conversation, instead of just sort of going back to studies from 20-30 years ago about Brilliant Pebbles. To understand that we are in a different environment. And, as you all have both said, that there is a different role to play here, of deterrence by denial, than simply in the past.

And, Kari, on the authorities piece, that's going to be – that's going to be important. You know, the last time Missile Defense Agency had their charter updated I think was 2014. It still has references to AT&L, these kinds of – kind of historical relics. So putting the right team in charge, or at least in a way directly to the SecDef or the DepSec, so they can meaningfully achieve what is, I would say rightfully, a presidential priority, this can be the golden age for missile defense to supplement deterrence and all these kind of things. But it's going to have to get these things right – the authorities, some meaningful budgets, in conjunction with all this. And, yeah, we're going to have to make sure that, politically speaking, this doesn't become a polarizing thing, but it is – rather, is educating folks of how this fits into our broader deterrence and defense goals.

Ms. Bingen: Well, we just scratched the surface today on this issue. So there will be more to come. I do want to emphasize that it is really unique to have experts together in one organization across the strategic forces portfolio. And I think even just in this conversation we very much saw the intersection of our issues – missile defense, space, nuclear weapons and strategic deterrence – and the complementary nature of our work.

I want to thank our streaming and broadcasting team here, our staffs – Pat Caroline, Kendra – who helped to get us ready for today. And then for our audience, thank you for joining us. And keep an eye out for more to come on this strategic forces collaboration.

(END.)