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TRANSCRIPT

Event

"Demining Ukraine: Outcomes from the 2025 Ukraine Mine Action Conference"

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FEATURING

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Caitlin Welsh: Good morning, everyone. On behalf of CSIS and the HALO Trust USA, I am so pleased to welcome you to today's public event, "Demining Ukraine: Outcomes of the 2025 Ukraine Mine Action Conference." I'm Caitlin Welsh, director of the CSIS Global Food and Water Security Program.

Ukraine is more heavily contaminated with mines and unexploded ordnances than any country since the Second World War. Today, over 53,000 square miles of Ukrainian territory, an area the size of the state of New York, is at risk of contamination from explosives. Beyond military operations, this affects Ukraine's economic recovery and individual lives and livelihoods across the country. A significant proportion of this contaminated land is farmland. Contaminated farmland endangers farmers' lives and limits the area of land under cultivation, ultimately reducing Ukraine's agricultural production and agricultural exports. Alongside many of you in our audience, CSIS has called attention to the importance of demining farmland to Ukraine's agricultural recovery and to global agriculture markets and global food security.

For all of these reasons, mine action is the zero stage for Ukraine's reconstruction, to borrow a phrase from the government of Japan. The Japanese government hosted the Ukraine Mine Action Conference, or UMAC, just last week in Tokyo. While the challenges of mine contamination in Ukraine are great, support for Ukraine's mine clearance operations from Japan, from the United States, and many others, as demonstrated in Tokyo, is formidable. UMAC saw over $80 million in new commitments to support humanitarian demining in Ukraine. The government of Japan launched its new Ukraine Mine Action Support Initiative. And the governments of Japan, Colombia, Cambodia, Azerbaijan, Slovenia, and others signed numerous memoranda outlining cooperation to support land mine clearance in Ukraine.

Today, we'll be discussing these and other outcomes of UMAC in Tokyo. We'll discuss what was accomplished and what remains to be done, including at the next UMAC, which will be hosted in the European Union in 2026. We have a fantastic lineup of speakers to address these topics today. Before we begin, a few housekeeping items. Today we'll have a panel discussion. And following our panel discussion, we will welcome, and we encourage questions from the audience. If you'd like to ask a question, please submit it at the "ask questions here" button on our event page online. And then, following today's event, we will invite those of you who are joining us in person to continue the conversation on our second-floor foyer. And finally, the second-floor foyer is also the location of one of our emergency exits, which is behind you and to the right. The other exit is behind me and to the right. Should the need arise, which we do not expect, please follow my instructions and head toward these exits.

And now on to our program. It is my distinct honor to introduce Ukraine's ambassador to the United States, Olga Stefanishyna. Before her arrival in Washington just two months ago, Ambassador Stefanishyna held numerous high-level positions in the Ukrainian government, including as deputy prime minister for European and Euro-Atlantic integration, overseeing Ukraine's integration efforts with the EU and NATO, and as Ukraine's minister of justice. Ambassador Stefanishyna understands the importance of high-level diplomacy to accomplish humanitarian demining across Ukraine, and she understands what's at stake on the front lines for Ukraine's families and for Ukraine's farms.

Ambassador Stefanishyna, welcome to Washington. Welcome back to CSIS. And welcome to CSIS for the first time as ambassador in this new role. The virtual floor is yours.

Ambassador Olga Stefanishyna: Thank you. Thank you, Caitlin. And thank you for this introduction. It's my honor to address the CSIS audience and the broader audience on behalf of the government on Ukraine. And I'd like to thank CSIS for bringing us together today and concentrating the attention on this very important topic. Demining is, is the vital element for all the territory of Ukraine, and especially the territory where the front line is and around that. Let me also thank you, Caitlin, for making this event happen. And I am really pleased to understand and to hear that this whole day will be targeted to a discussion on the priority issues needed for making sure this joint effort is successful.

As we are carrying out this momentum to discuss we have to understand that it's almost 137,000 of square meters of Ukraine's territory still require a survey and potentially clearance. It's still around the force of Ukraine's territory. It was much worse at the end of 2022. The situation was much more dramatic. It was more than 170,000 square kilometers. And it's very important that we have been able to return over 30,000 square kilometers to a safe use within the territory of Ukraine, which now enabled Ukraine's functioning as a state, but also enabled Ukraine's economy.

And we do not have to forget that safe demining directly impacts everyday life of my country, like the scale of farming opportunities, Ukraine's agricultural recovery is our contribution to our food security. That's why it's not only Ukraine efforts, it's our common effort. It also impacts the economic recovery and reconstruction, including affected infrastructure and logistics. And, of course, as we have been putting a lot of focus in implementation of new economic platforms between Ukraine and the United States and European Union, it's a significant economic project which could be implemented subject to creating a safe demined space and territory within Ukraine.

It has been a lot of efforts put in by the government of Ukraine to create this safe environment. We have empowered quality work and certification mine action operators via online services, which are available for everyone. We have built a modern national administrative system. Unfortunately, the experience of war and the global challenge, which is now in the territory of Ukraine related to a heavy mining of significant parts of its territory, have not been something that is widely spread around the world, and one has a lot of experiences in. And so, we built from scratch a new state system managing the policy in this area across the state.

We have created a whole ecosystem of this – in this area, which means that every operator, every company which has the experience, knowledge, capacity, and desire to help Ukraine operate on territory of Ukraine in the area of demining has access to Ukrainian market. It's our Ministry of Economy, Environment, and Agriculture of Ukraine which is the institution which synchronizes and coordinating this this effort. It's very important for us that are the international fora we have a broader coalition of demining capabilities. And now it includes 23 countries. And we, of course, plan to allocate more than 165 million euros in 2025, which will enable us to provide Ukraine with the machinery and equipment through major European effort. American effort is, of course, very much encouraged. And I'm really in a position where I have the sense that the momentum is there to look into this area from the American perspective as well.

So, at this point, our primary ask is to find direct humanitarian clearance through Ukraine. Humanitarian demining facility is the Ukrainian institution called Humanitarian Demining Center. The funds channeled to this center are on a transparent and on a very competitive and open basis. This model delivers more clearance in a bigger scale and thus making sure that all three points I mentioned before are effectively implemented. So, we have already signed more than eighty different contracts for almost 14,000 hectares of the agricultural land. And this is a very important element of our resilience, and sustainability, and continuity of effort on the economic fora.

The other very important issue for us is aligning demining projects with the national system, meaning that there is a wide range of international partners, donors, and companies willing to operate on Ukrainian market. But because it's a highly risky and very sensitive area, it's very much important that the same rules are applied to everyone. So, we encourage everyone to reach out to our institutions, our Ministry of Economy, to make sure that the efforts you're putting into this area are effective and synchronized with also security and defense issues. I think it's very well-known fact that the war has become a major driver of military and defense tech innovations. Unfortunately, at the highest price, but very importantly it makes Europe and all the allies and democratic countries much stronger by gaining new

experience, knowledge on innovations. And demining and mining is not an exception in this particular situation.

Colleagues, it's very important that we do not forget that the efforts we're discussing today are a direct effort which saves the lives of Ukrainian military, of Ukrainian soldiers, of Ukrainian civilians who are being affected by the brutal and barbaric mining policy of the Russian Federation. This is not their land. This is not the war which is on their soil. And they do not care about the lives of Ukrainians, the heritage we preserve, and anything which is called humanity. So, although we're speaking about the opportunities and demining, first and foremost we're speaking about saving the lives of people. And I'm really grateful for being provided this floor. And I'm really happy that on behalf of the government of Ukraine and Ukraine's Prime Minister Yulia Svyrydenko, I'm able to present the showcases of Ukraine, Ukraine's innovation, and Ukraine's openness to different opportunities which will help us to save the life, to restore the resilience of Ukraine economy, but also to continue as the reliable ally on the food security network.

I'm grateful for being invited. And I'm happy to deliver these remarks. And I'm looking forward for a fruitful discussion and positive outcomes in a new contracts and capabilities on the territory of Ukraine. Thank you. (Applause.)

Ms. Welsh: Thank you, Ambassador Stefanishyna, for your inspiring keynote remarks, which helps set a foundation for today's discussion. We look forward to welcoming you back to CSIS in person soon.

It's now my pleasure to introduce Takehiro Shimada, deputy chief of mission of the Embassy of Japan in the United States. Mr. Shimada has served for over 30 years in Japan's Ministry of Foreign Affairs, including three tours here in Washington. This is his third. Early in his career, DCM Shimada supported Japan's efforts to support humanitarian demining in Cambodia, which we learned just a few minutes ago. So, with today's event, he is returning to a topic that is close to his heart. Thank you, DCM Shimada. Welcome back to CSIS. The floor is yours. (Applause.)

Takehiro Shimada: Thank you very much for your kind introduction. Yeah, I rarely wear the colorful ties like this, but today I just wanted to show my solidarity with Ukraine. (Laughter.) Ladies and gentlemen, thank you very much for inviting me to this significant event today. I'm truly honored to speak at this important and timely moment, just after the UMAC in Tokyo event. First of all, I'd like to once again pay tribute to the courage and the perseverance of the Ukrainian people, who have been fighting to protect their freedom and independence for three years and eight months following the Russian aggression since 2022.

In Japan, a new administration was recently launched, but over the past three years – (coughs) – excuse me – prime ministers have declared that Japan has been, and will continue to be, with Ukraine. Japan's position of continuing support for Ukraine remains unchanged. The reason Japan supports Ukraine is clear. Russia's invasion of Ukraine is an outrageous act that shakes the foundation of international order. Security in Europe and the Indo-Pacific is inseparable, and under the strong awareness that today's Ukraine may be tomorrow's East Asia, our country has implemented support Ukraine and sanctions against Russia.

Japan supports Ukraine to bring fair and lasting peace to Ukraine. The situation remains fluid. And unfortunately, a ceasefire has not been established. However, the resilience of Ukraine's economic society is extremely important. Japan has announced over $12 billion in support. And we have been steadily delivering on that commitment. We will continue to advance effort to support Ukraine's recovery and reconstruction. Japan positions mine action as a key pillar of support for Ukraine. Hosting UMAC is part of that. And our country has many years of experience in the field of mine action, starting with Cambodia.

Allow me to briefly introduce UMAC 2025. The conference, under the theme of acceleration towards reconstruction, confirms the common understanding and the future direction regarding important element for future mine action in Ukraine with three pillars – people, technology, and nexus. A document reflecting those documents has been adopted. Regarding the relationship between mine clearance and agriculture, which is a theme of today's event, the outcome document recognizes the nexus approach as a gateway to reconstruction. It also acknowledges that agriculture is a key industry for Ukraine and therefore emphasized the importance of integrating humanitarian mine clearance into reconstruction and development efforts.

Areas with high mine contamination risk in Ukraine account for about 25 percent of the national territory, but 90 percent of them are farmland. Mine clearance, regeneration, and reuse in the agricultural sector are essential to Ukraine's reconstruction. To achieve this faster, safer, and more sustainable mine Action, support by strong international cooperation is urgently needed. This outcome document was announced with the support of many participating countries in UMAC. Japan will advance Japan-Ukraine Mine Action Support Initiative, which focuses on the following three areas. Firstly, strengthening human resource development and technology. Secondly, a smooth transition to the recovery and reconstruction process nexus. And thirdly, the diversification and the strengthening of a partnership with other partner countries and international organizations.

The reconstruction of Ukraine, including mine clearance, is a long-term effort. And it is necessary for further strengthening the solidarity of the

international community that support it. Given this situation, today's conference is a valuable opportunity to deepen our understanding of the critical issue of mine clearance in Ukraine's agricultural sector. The destruction and revitalization of Ukraine is in the shared interest of the entire international community. Japan will continue to support Ukraine's recovery and reconstruction, working together with both public and private sectors, and cooperating with likeminded countries, international organizations, NGOs, and various actors. Let's gather our wisdom and resources to support Ukraine. Thank you for your attention. (Applause.)

Ms. Welsh: Great. I would like to thank the Deputy Chief of Mission of the Japanese Embassy Takehiro Shimada for your generous remarks. And we look forward to building on your remarks, along with Ambassador Stefanishyna's remarks, in today's discussion.

I'm very pleased to introduce our panelists for today's panel. Ihor Baranetskyi, who's minister-counsellor for economic issues in the Embassy of Ukraine in the United States, and Chris Whatley, executive director of the HALO Trust USA. Both Ihor and Chris have been generous contributors to our own research on demining in Ukraine, so I want to thank you for your contributions and welcome you back to CSIS.

Today we'll be highlighting the impressive contributions of the government of Japan to demining efforts across Ukraine, and the special relationship between these governments. But I want to note that, with Japan, the United States, and Japan together, are the top two contributors to demining efforts worldwide. The U.S. being the top donor – sorry, in Ukraine – the United States being the top bilateral donor to demining efforts in Ukraine, and Japan number two. We did attempt to secure participation from the U.S. government in today's panel, but amid the ongoing federal government shutdown we were unable to, unfortunately. That said, we have two fantastic panelists, and we'll have an excellent discussion together.

So, I'll start with you, Ihor. Again, welcome back to CSIS. The focus of today's event, of course, is UMAC. And the focus of UMAC is demining in Ukraine. So, as we begin this discussion, can you give us a sense of the status of demining and clearance of unexploded ordnances in Ukraine, including on Ukraine's farmland? What's been accomplished? What remains to be accomplished?

Ihor Baranetskyi: Well, thank you very much. It's always a pleasure to be here. And we really appreciate all efforts provided by CSIS, with regard to researchers, like analysis, and, of course, hosting this type of event like we host today.

That's a crucial topic, because, you see, that's the foundation for many other steps. It's not possible to proceed with regard to reconstruction, recovery, farming, without demining efforts. And, well, you know, the ambassador

made this task a little bit easier for me because she highlighted the top priorities, the top challenges in this regard. But once again, where we are? The major problem, that's the scale – the scale of this problem. And, you know, I remember in my – like, not just childhood, but maybe 10 years ago I've seen, like, movies or humanitarian tracks with regard to mines and contamination in Afghanistan in Syria, and some other places. I could never imagine that something like that could happen in my country.

So, the problem is, once again, the scale. And, as we mentioned, it used to be almost one-third of Ukraine's territory. Right now, it's roughly one-fourth. It's still huge, because territory of Ukraine is really large. And with regard to ongoing, like, the current state of dynamics, we will need roughly 80 years – 80 years. Just imagine. So, we have to speed up the process. We have to speed up the process. And I think later on I will concentrate on our vision of how we can manage to do that, what we really need. With regard to expenses, you know, on the one hand it may sound like an enormous sum of money. So maybe I don't – I think not less than ten or tens of billions of dollars. But on the other hand, just imagine that every year we are losing roughly 11 billion of our GDP because of contamination, because of landmines. And also, we are losing roughly more than 1 billion in earnings in Texas, and other earnings for the state.

So, whenever we compare these figures, it doesn't sound, like, too frightening with regard to the whole sum which we need for the demining processes. So, the sooner we deal with this challenge, the faster we will recover. We'll, let's say, reimburse this sum. And of course, the threat goes directly to the global food security, because Ukraine plays a significant role as a contributor with regard to global food security. And again, that limits our opportunities and opportunities on flexibility of our global partners.

Ms. Welsh: Well, thank you for those remarks. And I think that's a perfect segue to something else I'd like to talk about, which is Ukraine's agricultural recovery. Demining, of course, is essential to recovering and to the use of Ukraine's farmland. Many other things are critical as well. Can you give us a sense, maybe just top lines, on the status of agricultural recovery in Ukraine?

Mr. Baranetskyi: Well, the major thing we did, it's also creation of institutional bodies which are going to coordinate the process. That's a good step that, as of now, we created this Humanitarian Demining Center. And we would appreciate whenever major donors and our partners channel funds through this coordination body. Also, right now we – you know, we have this huge ministry which unites under one roof, Ministry of Economy, Ministry of Agriculture, and Ministry of Environment. Why? Because all mining problems impact all these fields. So, you need money for demining. Our farmers face this challenge. And of course, that's a huge problem for environmental issues.

Another thing that we also did some major step with regard to program of compensation, so agrarians compensation program for their own efforts of demining. It still needs adjustment. It still needs funding. It still needs impetus in order to speed up all processes. But digitalization of this field, creation of bodies, and minimizing of bureaucracy, also because of e-governance solutions, helped our farmers to proceed faster. Again, unfortunately, I have to mourn and pay tribute to those brave farmers who lost their lives, because what we see that without even any additional support our farmers do understand that they have to proceed. They don't have – they don't have time to wait. So very often we are just – we're not just inspired and surprised, we are shocked by those inventive innovation solutions which our farmers do on their own to deal with the contamination on the landforms.

So still, we can – it's a little bit tricky to play with these figures because in Ukraine we count in hectares. I have to transform it to acres. (Laughter.) Or square – we measure in square kilometers, then I have to switch to square miles. (Laughter.) But nevertheless, I would like to share with you a very simple figure that, again, with regard to the speed – to the speed which we're at now allows us to proceed on agricultural land. It's still not enough, because it's roughly – like, it's roughly, like, hundreds – well, hundreds of thousands of acres. But altogether, it creates, like, several square miles per year. And just imagine that we still have one – more than almost 137 square kilometers – 137,000 of square kilometers. So, whenever we manage to demine, like, a couple square miles per year, it will, again, take us decades.

So, we have to be innovative. We have to be creative. We have got to speed up those processes and help our farmers to proceed. Also, or on their own, but we have to help them. So here and now, I want to stipulate that we really have to create this synergy effect with regards to involvement of government, private sector, and NGOs. So, in order to synchronize all efforts and in order for them to work together. Because doesn't matter the scale of donorship and support from our key partners – and, by the way, I would like once again to recognize amazing and significant contribution from Japan.

It never happened in Japanese history, this scale of support to another country. And we really understand this. We appreciate this. By the way, I was one of the pen holders of bilateral security agreement. As of now, we have 28 bilateral security agreements with many countries. And as usual, demining has special block in those – in those bilateral security agreements. So, Japan is in the top three contributors. We still have other donors but, again, without involvement of private sector, without direct involvement of farmers themselves, it's not manageable.

Ms. Welsh: Yeah. Well, thank you. Thank you for those overviews, which give us a lot to talk about, in fact, in my conversation with Chris. And I'll come back to you with a few follow-up questions. But thanks very, very much.

Very pleased to have with us Chris Whatley, executive director of the HALO Trust USA, which is an organization that many of you are familiar with. I think some in the audience might be new to HALO Trust. So, Chris, do you mind starting out with just an overview of the HALO Trust globally, and then your operations in Ukraine as well.

Chris Whatley: Sure. The HALO Trust is the largest civilian demining organization worldwide. So, if you've – if you've ever heard of us, it's probably because of Princess Diana in 1997 in Angola, when she kind of brought the issue to the world. We have 10,000 employees who work on their hands and knees clearing landmines every day in 30 different countries around the world. Half of those are countries in conflict, Ukraine being our biggest program with 1,600 staff. But also, we have countries that are post conflict, such as Cambodia, where Japan has also been a major innovator. So that's kind of what we do. We've been around since 1988. And, by far, the biggest challenge we've ever faced is what Ukraine is facing right now.

Ms. Welsh: Well, in Ukraine the HALO Trust has removed over 42,700 explosives – I got that from your website, so it might be a little bit old. In fact, I assume it's old. So, I assume it's more than that – since Russia's invasion in 2022. Regarding landmine – clearance of landmines across Ukraine, and including on Ukraine's farmland, can you outline some of your successes in partnership with the Ukrainian government and others, perhaps even with the private sector, which Ihor has introduced?

Mr. Whatley: Great. Well, I think – you know, because landmines aren't something that we live with in our daily lives in the United States – in fact, despite the fact that landmines were first used as a weapon of war in the United States in the Civil War. They were used in the defense of Richmond by the Confederacy. So not that far from where we stand right here. But because we don't think about them in our daily lives, it might be helpful to think about what that process looks like and how it connects to the technological innovations that this conference was addressing.

So, the first challenge in landmine clearance is actually locating where the threat is. Because the Russians aren't handing us maps of the landmines that laid. It's not obvious. It's across huge areas of territory. So, the first challenge is just to locate where the true landmine lines are. And then eliminate all those other areas that are suspected of danger and therefore locked away from economic use. Farmers can't use the land because they're worried there may be landmines there. That location challenge is by far the most important, urgent activity that gets farmers back on their land. And in fact,

the success that was articulated before by the ambassador of removing 33,000 square kilometers of land from suspected contamination since the end of 2022, which that's like removing the state of Maryland in terms of a contaminated area, that was largely really smart work being done to figure out where the land mines aren't, to focus in the contamination areas and the areas that truly need to be cleared.

And in fact, they're – one of the companies that the Japanese government featured, UADamage, which is, you know, a great entrepreneur – Ukrainian entrepreneur who's created ways to develop synergies between satellite data, and drone data, data that sits in the databases of the Ukrainian government, and use AI solutions to examine all of that and therefore narrow the contamination. That, you know, it's that kind of effort. And we feed our research into it. We benefit from pro-bono partnerships that we have with other corporations like Amazon web services. But narrowing the problem, figuring out where the land mines aren't, so that you can tell the farmers get back on your land right now and get back to economic activity, that's one of the areas that really Ukrainian innovation has helped to address the problem, and that I think the Japanese did a great job of featuring in Tokyo.

Ms. Welsh: Thank you for that overview, Chris. You're right. We don't live with landmines, thankfully, in our day-to-day. And I've seen a demonstration of the type of work that you do, which is really, really remarkable, and a really helpful understanding of this work. So, thanks for giving that overview to our audience. You also introduced something that I'd like to talk to you about, which is HALO Trust's use of advanced technologies in the work that you do. Because depending on the type of technologies that will be used to accomplish humanitarian demining, the estimates for the amount of time that it will take range from years – including even 80 years – to hundreds of years, which are some of the estimates that I've seen – that I've seen recently. If we have better technologies, then it will take less time. So, again, HALO Trust is at the forefront of using some of the most advanced technologies. Can you give us some examples of that?

Mr. Whatley: Sure. And I think that coming back from Tokyo this weekend that's probably the biggest takeaway for me, is the kind of momentum that the conference and the collaboration between industry leaders in Ukraine, in Japan, in the U.S., and elsewhere are making across technologies. So, you got the location problem there. The next thing you have to do is to detect the actual explosive in the ground. So, the classic technology that you've – that you've seen from war movies from World War II, that really was still industry standard even 10 years ago, you know, was a metal detector. The problem is the Russians use an awful lot of plastic mines. So minimal metal.

The next thing you can do is ground-penetrating radar. We've introduced those. The U.S. military, through something called the Humanitarian

Demining Research and Development Program – a great hidden gem of the U.S. government – has developed great ground penetrating radars. But you can't really tell the difference between the shape of a landmine or the shape of a potato or a rock or something else. So, the next rounds of technologies, that were featured very prominently at the Ukraine Mine Action Conference, actually use magnetic resonance. So, you know, think of an MRI machine. It can map your entire brain. The problem is you can't really carry an entire MRI machine into a minefield. But we've gotten to the point where we can miniaturize some of those technologies. And what you actually do is you use magnetic resonance to detect the explosive content of very, very specific explosives.

And we're testing all of those things in Ukraine and seeing great promise in it. So that would – that would speed up the clearance rates tremendously, because right now we probably – we probably dig out 19 false signals for every single landmine that we dig out. And you do that very slowly and deliberately. I've been on minefields where you are moving towards a signal and you don't know what it is, and it's – you know, it's World War II shrapnel at the end of the day when once you get there. So that kind of detection technology that was featured heavily by great Ukrainian companies, great Japanese companies, great American innovation through the Department of War, I think that those are all things that are exciting.

And I would say the last thing on that – in that innovation space is, OK, you've located the problem. You've narrowed it down. Now you've detected that explosive in the ground. The most dangerous thing we do is the moment you have a signal in the ground, and you back up a meter, and you dig down 15 centimeters, and you excavate towards it. And you don't know what's at the end of the mine line. Is it an explosive? Is it – has it been tilted in the ground in a way that that as you dig towards it you could set off the pressure plate? It's the most dangerous thing we do. And therefore, it's the slowest thing we do. I mean, we do it successfully and safely, but it takes an awful lot of time.

So, there was a great Japanese company called Innovative Operation Systems that we were are working with in Ukraine that was featured heavily at the summit that uses compressed air and robotics. It's a robotics company. So, they basically put a compressed air nozzle at the end of a robotics system, and it uses compressed air to just blow out all the soil around the mine in a very rapid way. It doesn't create enough pressure to set off the pressure plate, even a, you know, sensitive antipersonnel mine. And, you know, so from our side, just as HALO, it's our staff in the field. We care about it as a safety factor. But it's, you know, a 5X transformation in the clearance rate, because you're not worried about the human operator. Their CEO was showing applications to perhaps use it on a drone platform as well, which helps us manage some of the other issues of the pressures of getting a robotics system – a land-based robotics system into the field.

So, you take all those things, you take what UADamage is doing on AI, and others, to narrow the threat. You take magnetic resonance and, you know, a great philanthropy called Minesight, which is a whole bunch of folks from MIT and Bell Labs and others who are looking at these kinds of detection scenarios. You take, what the Japanese are doing on excavation, that's what could get you to 10X transformation. That's what gets you to, instead of 100 years to clear Ukraine, to 10 years. And there are a lot of problems where you sit there and say, OK, this humanitarian problem is unacceptable, because it's easy to say unacceptable on whether it's food security or shelter or anything else. The hopeful thing, I think, about our work is it's also unnecessary at this point. I mean Ukraine has the worst mind problem in the world, but it's also one of the global centers of tech innovation. Was before the Russian invasion, is now, has started to focus that on this problem. So, it's – I think it's an exciting time. And I think the Japanese did a great job of kind of propelling that forward and making that a focus on the fight against the landmine challenge in Ukraine.

Ms. Welsh: Yeah. Again, you are both doing such a great job of teeing up – anticipating my next question. So, thank you for doing that. Thanks for your answer and your overview of the excellent technology that you see in the field and anticipating my next question. Which is about this year's Ukraine financial conference, which was the third – it was not the first. We had the first in Croatia in 2023, second in Switzerland in 2024, again, this is the third, Japan 2025. And the next one, the fourth, will be, as I mentioned, hosted in the European Union in 2026. So, my question for you is – for the both of you, actually – is about what stood out to you about outcomes of this year's Ukraine Mine Action Conference? Chris, I know you were there on the ground, so I can turn to you first. But also, Ihor, I'd like to hear from you about what was exceptional about this year's UMAC.

Before we go to answers though, I'd like to point our audience's attention to the QR code that we put up here for those of you who are online – sorry – for those in person. For those online we have the "Ask Questions Here" button. Really encourage your questions because we'll have time for a few questions for our panelists. So that's a reminder for everybody. With that, though, Chris, I want to turn to you about UMAC and Tokyo.

Mr. Whatley: Well, obviously, I've gone on the innovation side a bunch. And I still think that that's the biggest outcome for me. Just as an American, and I'm here as a private American working for an American charity. So, I can't speak for the U.S. government. But I see a lot of excitement in trilateral cooperation between U.S. leadership, Japanese leadership, and Ukrainian innovation and commitment. That the U.S. government has been the largest supporter of mine action globally. It continues to be. This continues to be an area of great bipartisan collaboration on Capitol Hill. It is a priority in President Trump's

budget. This is something that continues to be a key area of U.S. humanitarian leadership.

The Japanese, as the second-largest donor towards mine action but also a country with some of the big champions in terms of major companies doing great work that we benefit from in the field around the world – whether that's Komatsu, Hitachi – these major companies who have adapted their machines and that we use to accelerate mechanically mine clearance. So, to see the Japanese, to see how they engage with the truly innovative new companies that have come up in Ukraine. And then to know that, you know, despite the fact that this is a government shutdown, so the U.S. government wasn't present, but to know that there is so much political support for continued U.S. leadership in this field in the U.S., I do think that we could take this and have this be a component of what our three countries do together.

Ms. Welsh: Thank you.

Mr. Baranetskyi: Well, I will try to be precise. And you see major think with regard to outcomes of this conference, that we assessed the current state, so where we are, what we highlighted, the top priorities. And we received new commitments. Well, not all of them are public. It's even more. But as of now, it's at least approximately like 80 million-plus, good. In addition to that, we, of course, I would like to remind you, that we have so-called Demining Capacity Coalition, and led by Iceland and Lithuania. And there are currently 23 countries. And I would like to underline that that's – you see, this field of demining is a good way for those countries which, due to constitutional restrictions, due to their internal policy, foreign policy, can't provide us – or can't provide Ukraine with weapons. But they can do a lot with regard to humanitarian demining.

That gives flexibility to the countries of Global South. And that's, by the way, one of significant outcomes of this conference, because Japan is really smart and innovative host of the conference. So, we have underlined participation of many countries from Global South. So, we want to see more of them because, once again, I would like to underline that consider – please consider demining of Ukraine like investment – your own investment in your own security and your own future. Because today's Ukraine, nobody knows what's going to happen tomorrow. And the thing is, with regard to Ukraine, we are on the front line of revolutionary innovative solutions. That's not our choice. We are not happy about that. But unfortunately, this type of war – and, you know, it's kind of a little bit rude, but even war has to have some rules. But Russia doesn't have any rules. That's a quite barbaric approach to war.

So, whenever they can't occupy something, they just contaminate it, they just do everything possible not to allow anyone else to use the territory. That's

the problem. So, I don't even think that they are – they have classic or normal maps of contamination. They even don't know what they're doing. They just create disaster on every square meter when Russian forces are present. They just create disaster. That's additional challenge. So, and with regard to technologies, again, as additional outcome of the conference, we demonstrated new innovative solutions. We demonstrated additional ways of institutionalization or synchronization of our efforts. And what is quite significant, with regard to Ukraine is we have strong correlation between defense industry and private business, because right after the war, right after the ceasefire, after the victory, there are going to be decades of replenishment of the stockpiles with modern technologies, with modern solutions, including demining machines. And also, absolute majority of wartime technologies will be easily transformed to commerce.

So, my feeling, with regard to demining the crucial role will be played by artificial intelligence and drones. So, drones, because we are the country and our close partners are those countries who really consider human life as precious. On the contrary, with Russia. So, we will do everything possible to make this process more technological. And by involvement artificial intelligence and drones, flying drones, land drones, in order to speed up the process of demining.

Ms. Welsh: Yeah. Well, thank you. Thank you. We've gotten some good questions in online. So, I'd like to take just a couple minutes to ask some of those questions. I'll ask one to you, Chris, and then one to you, Ihor. Chris, we've gotten a couple of questions in from the Georgia Institute of Technology focusing on applications of technology. So, one on technological limitations. So, what are the limitations that you're coming up against in terms of the application of technology to humanitarian demining? And also, some more examples of applications of AI that you've seen in the field. So, you've given a great overview of the advanced technologies, and including how that was a major focus of UMAC in Tokyo last week. But anything else that you'd like to add on that theme?

Mr. Whatley: I would just say that, you know, the main application of AI for us is using all of these sensory platforms. So, the 24/7 satellite imagery that Planet Labs provides that we get for free, the drone imagery, because we have terabytes of data running drones over the top of areas that are suspected of having explosives, and processing that with AI. The problem is, we're still finding lots of false positives. I would say that UADamage, the company featured, they're, you know, narrowing down and getting much better at this because they're fusing across many platforms. They use – they were using AI for other purposes before. So, we're getting better at the false positive side. But that's still the biggest problem we have.

Ms. Welsh: OK. Thank you. Thank you for that.

And, Ihor, I have a question for you from an online participant in our event based on here in D.C. about partnerships. That seems to be an important outcome of UMAC and Tokyo. Again, what I clocked were partnerships among Ukraine, Japan, and Cambodia, Japan and Cambodia, Ukraine and Azerbaijan, Ukraine and Slovenia. That seemed to be a real – a real marker of UMAC, all the memoranda that they signed together. So, anything that you'd like to say about those partnerships?

Mr. Baranetskyi: You see, we create history. And those partnership, they're mutually beneficial for all sides. So, for example, with regard to Japan, of course, it gives additional knowledge, additional technologies and impetus to all other projects, like decontamination, demining in other regions, not just Ukraine. And it creates additional impetus, of course, in Ukraine itself. So, with regard to U.S., you will definitely know about U.S.-Ukraine Reconstruction Investment Fund. And, of course, demining process will speed up joint ventures in mining industry, in infrastructure projects. So, we want to see more joint ventures on the territory of Ukraine with localization. And we do encourage more direct investment, more direct financial support to our local demining operators as well. So, we can work, like, hand to hand.

So, it we have to create this smart balance. Because, you know, one way is to throw us life buoy all the time. Another way is to teach us how to swim. So, we want to know how to swim in this demining process. And we are ready to share our knowledge. So, let's double, let's triple our speed, our efforts together. And again, and again I would like to underline that we do need more synchronization. And with regard to priorities, for example, because statistics is good. So in general, we can show pictures that, let's say, this year we demined, like, 5,000 square kilometers. Next year, it's going to be, like, for example, 10,000 square kilometers. But what type of land is that? Is it really top priority land? Is those facilities and places where we want to proceed with reconstruction of farming, or it's just general land, like, second priority? So that's also very crucial issue in this regard.

And, once again, I would like to pay tribute and thank to our farmers, to our farming alliances, because they actually – they use even agriculture equipment as a type of demining equipment, so that they move on parallel track in this regard. So, partnerships. That's a strong, strong support for global process to deal with such threats like mining and contamination. And it has direct impact, once again, on global food security, on security in general, and on preventing those kinds of barbarism which, unfortunately, we face on daily basis because of Russian aggression.

Mr. Welsh: Yeah. Well, thank you. Thank you for your answer to that question.

Anything that either of you would like to say about a topic that I didn't ask you about? So just for final comments, in, you know, 30 seconds or so, any points that you'd like to make?

Mr. Whatley: I would just say, as someone from the demining profession, that all of the innovations that we're part of would not have been possible were it not for the fact that companies like Cargill, who support us in our strategy on connecting our work and the kind of ag recovery strategy of the Ukrainian government, they've invested in us. In, yes clearing, because they are funding clearance teams, but also in connecting to thought leadership and innovation.

The same is true on, you know, individual Americans who've just supported what we do to enable us to use technology. Because I would say that, in general in our sector, we have benefited from amazingly generous support from governments, from the U.S. government, from the Japanese government, from the U.K., the EU. But they are – by definition, tend to be very conservative in their investments in technology. So, they will – they will fund us to show up and put manual deminers in the field. But when it comes to transforming our entire technological approach, we have depended on private sector participants, whether that's the individual donor from San Angelo, Texas, where I come from, or whether that's Cargill and companies like that, who've really helped us transform our work.

Ms. Welsh: Mmm hmm. Yeah. Thank you, Chris. Thank you very much.

Ihor, final remarks?

Mr. Baranetskyi: Yeah. Thank you very much. Of course, I would like to highlight one more positive outcome of the UMAC conference in Japan. That's participation of special envoys, special representatives with regard to reconstruction and recovery of Ukraine. We want to see more countries to dedicate top-level authorities, nominate them as special envoys to Ukraine, and deal also with demining. Because, again, it helps to synchronize processes.

Also, you know that Ukraine tries to work more efficiently with celebrities. And we have, for example, one of our celebrity plays the role of, like, demining ambassador Jerry Heil. So, we want to see more involvement of celebrities because, you know, they have to distribute, to disseminate this knowledge of understanding how hard, how huge scale of contamination in Ukraine. And also, that's crucial for the worldwide understanding, that those lands – that's not, like, desert land, or semidesert lands, like, in the middle of nowhere. Actually, those lands where we can produce crops, we can contribute to global food security. So that's why. That's why demining processes in Ukraine even more crucial than it might appear from the first glance. So that's what I would like to underline once again.

And, of course, the third thing, and the last one, that we anticipate efficient conference in the EU next year. We want even more involvement of the EU as a future member of the European Union. So, again, we encourage all EU countries to consider Ukraine is not just a neighbor country, but as a future member of the EU. That's why, again, we have to provide additional impetus to those demining processes. And that's the place where we can – where we can integrate demining agenda, demining strategy of Ukraine into membership agenda of Ukraine. Because, you know, every couple years EU votes for the new budget, for the new period. So, what we want to see is the place of Ukrainian demining programs in this new budget of the European Union for the next period.

Ms. Welsh: Well, thank you. You've given us a good topic for further research and further convenings on these important issues. So, Ihor Baranetskyi, Chris Whatley, thank you so much for being with us today and lending your expertise and experience to our conversation.

Thanks, again, to Ambassador Stefanishyna and Deputy Chief of Mission Shimada for your remarks. Then thank you again to HALO Trust for partnering with us in today's event here at CSIS. Thanks to my entire team, especially Emma Dodd, Rose Parker, Joely Virzi, and Defne Aslan, alongside CSIS's events productions team, who I always think are the best of the business, Eric Ruditskiy and Dwayne Gladden. Thank you so much for your support. And to our audience, thank you for joining us in person and online. For those of you who are in person, you're welcome to stay here to continue our conversation in the room. This concludes our event. Thank you.

Mr. Baranetskyi: Thank you.

(END.)