

AOC 2025 Closing Session Addresses EW Opportunities and Challenges

In the Closing Spotlight Session of AOC 2025, Rene D. Kanayama, Senior Researcher, Institute ITSTIME, Catholic University of the Sacred Heart, and Lieutenant General Lance Landrum, USAF (Ret.), former Deputy Chair of the NATO Military Committee, provided their perspectives on the challenges facing EMSO over the next decade.

Kanayama delivered a Japanese perspective on the role of EMSO amid rising tensions in the Western Pacific. Having travelled to Ukraine several times over the past few years, he discussed the lessons Japan is learning from the Russo-Ukrainian War, particularly about the widespread use of drones, and how Japan is adapting its defense strategy to address new challenges posed by China, North Korea, and Russia.

Referencing Russia's constant drone attacks on Ukrainian cities, he said, "Japan expects that in the event of a conflict on the Japanese territory, Japan needs to focus on the defense of the civilian infrastructure and the actual urban areas as opposed to some kind of battlefield which may not be on the Japanese territory." He also explained, "In Japan, given some of the proximity of the potential adversaries, we have to build a sustainable security perimeter and safety measures within the urban areas, because the distance over the sea is going to be much shorter than, for example, the distance we see today between the Western Ukraine and the eastern contact line."

Another lesson Japan is absorbing from Ukraine is that EW operations and effects extend beyond the front lines. "One of the things that the Japanese defense stakeholders understand

today, in the fourth year of the [Russo-Ukrainian] conflict, is that when it comes to EW, the rules essentially apply everywhere," he said. "That means frequencies used, signals being emitted, the technology being used counter to the equipment that is being used by the [Russian] aggressor. And therefore, the applicability of the EW used in Ukraine is going to be relevant in the Japanese scenario today. ... Therefore, we have to essentially learn all the nitty-gritty parts of the Ukrainian defense mechanism to be able to build our own system and sustainable mechanism [in Japan]. Obviously, we need to understand the actual equipment, and we also have to prepare the environment or the ecosystem where the stakeholders are willing to improve, develop and manufacture the effective EW technologies."

Based on lessons from Ukraine, Kanayama said Japan must consider the potential range of attack drones (more than 2,000 km for some models) and defend both its eastern and western coastlines from drone attacks. It also must increase the manufacturing scale of its defense industry to support drone and C-UAS production. Finally, it must invest more in spectrum management in order to test EW systems and use EW more surgically against drones in its urban areas.

General Landrum, who served as the Deputy Director of the DOD's EMSO Cross Functional Team from 2019 to 2020, discussed EW challenges and opportunities along three lines: messaging about EW issues; developing policies that align with that messaging; and seizing opportunities provided by growing defense budgets.

In terms of messaging, he said, "When we think about challenges and opportunities, I think the one that always comes first and foremost to my mind when it comes to the electromagnetic spectrum is how to tell that story, how to relay the sense of urgency, which is another way to say how do we transmit and talk with our senior most leaders in a way that resonates to create prioritization for the

electromagnetic spectrum.”

He continued, “So a second area is within policy. There are always challenges associated with rules, laws and regulations, but there’s also opportunity, particularly in today’s landscape. And if you can get the message across and you can have policies that are supportive, [then] you have to have a way to pay for it. And so the third area is budgets – always a challenge in budgets. But in today’s environment, there’s an opportunity in the budgets, as well.”

He went into further detail on each of these areas. He said today’s EW story needs to be told to leaders. “We have a real threat,” he said. “Russia’s illegal and unjustified war in Ukraine has created an undeniable and unavoidable threat that is right in front of our face.” He said leaders need to hear about the lessons from Ukraine, as well as GPS jamming from Kaliningrad, dangerous drone incursions over European airports and interference with telecommunications networks. “There’s an opportunity to use these case studies to tell the story in a way that resonates with our senior leaders so that they can prioritize our superiority in the electromagnetic spectrum. And if they prioritize it, then we could take advantage of policy.”

Policy changes, such as simplifying requirements generation process and speedier acquisition processes, can generate huge benefits for EW systems development and production. “Recent policy changes have really taken [systems acquisition] to a whole new level,” he said. “The most recent being Secretary Hegseth’s speech on November 7 and the corresponding memo about revamping the defense acquisition system, empowering program acquisition executives, making them accountable, giving them some flexibility to make trades as we see in that document. Also creating a Joint Acceleration Reserve [fund], which I find interesting. A Joint Acceleration Reserve for the Requirements and Resourcing Alignment Board headed by the Joint Requirements Oversight Council. So, a reserve of funding

for promising programs. All this is the right language. It's good policy. It is now to be determined how this is actually put into progress and into actual implementation."

Landrum also discussed EW challenges and opportunities for NATO. He said that while the NATO bureaucracy still moves slowly, its European members' defense budgets are on the rise. "The European nations around 2019 spent 250 billion Euro on defense," he said. "In 2025, they will hit about 500 billion Euro on defense. And if the trajectory holds to 2030, they will spend nearly 1 trillion Euro on defense. So, that trajectory is an opportunity as far as the budgets go."