

## Global Leaders Examine Interoperability and Coalition Operations

Network interoperability is critical to peacekeeping and saving lives, but today it remains an elusive goal for the U.S. military, NATO and other joint forces. Despite efforts for more than a decade, realities such as shrinking budgets, changing priorities, new technology and cyber-security vulnerabilities have affected the ability to interoperate among coalition partners.

The barriers to achieving interoperability were at the heart of a discussion in February, when the Network Centric Operations Industry Consortium brought together international military and business leaders to talk about their experiences. **Lt. Gen., USAF (Ret) Harry Raduege**, NCOIC chief executive officer, assembled and moderated an executive panel to discuss interoperability in coalition operations.



"Interoperability is getting harder, not easier. There are more nations, more electronics and more security issues involved in how we protect our information — and the timelines are shorter, not longer. Things that we did in days, now have to be done literally in minutes," **Gen., USA (Ret) Paul Kern**, senior counselor at The Cohen Group and former commanding general of the U.S. Army Material Command, told the crowd at the NCOIC meeting held in Arlington, Va.



"Even within one nation, interoperability over systems becomes a challenge, because many of those systems are developed uniquely by a single contract to a single contractor. Then we try to integrate them at a later date, when we bring them together," said Kern. "You have to start early and think about how you want to operate further down the line. What is the information? How are we going to be able to provide that information, over what communications network? What are the security requirements, How we going to pay for it? Who is going to be responsible for making sure it really happens?"

Another of the executive speakers, **Lt. Gen., USMC (Ret) Bob Shea**, president and CEO of AFCEA International and former director of C4 Systems for The Joint Staff, talked about the enormity of



the effort — the size of the U.S. military, the many generations of equipment in use, the uneven funding among the services and the time it takes to field a new capability and train the forces.

"I've been struggling with this issue of interoperability my whole career, all 36 years," Shea said. "In the Department of Defense, interoperability is a challenge between the services and the National Guard, which is working with a homeland security element. We also deal with other coalition forces around the world — 28 nations in NATO and over 30 different countries in the Pacific Command, for example — and have scores of bi-lateral relationships. Not only that, but we're working with non-governmental organizations. How do you develop interoperability between all these partners?"

Two panelists from NATO echoed the need to include all mission partners to achieve true interoperability. "In our Afghanistan mission, there were 48 troop-contributing nations and today, we still have 40 troop-contributing nations. In Kosovo, we had 31," said **Gen., German Air Force (Ret) Harald Kujat**, former chief of staff of the German Armed Forces and chairman of the NATO Military Committee. "Using various national systems in an operation has caused an extremely negative effect on operational capacity."



Kujat stressed that interoperability is a force multiplier and the single most important asset for coalition operations. "Interoperability enables members of the alliance as well as partners to act together coherently, effectively and efficiently to achieve tactical, operational and strategic objectives. It allows the alliance to react swiftly on newly emerging threats and tackle today's more and more unpredictable challenges," he said.

**Rear Adm. Mustafa Ugurlu** of the Turkish Navy and assistant chief of staff for Command, Control, Deployability and Sustainability at NATO Allied Command Transformation, talked about NATO's IT modernization efforts and the steps the NATO Communications and Information Agency is taking to improve readiness and information sharing in future operations.



"It is necessary to translate our command and control vision into short-, mid- and long-term roadmaps, creating a smooth continuing legacy to tomorrow's superior capability," said Ugurlu. "A great deal of work is ahead of us and this work cannot be done in isolation. Close cooperation is necessary with all stakeholders, inside and outside NATO."

The panelists and audience members discussed other key challenges to achieving interoperability, including the need for a driving force or decision-maker to initiate the effort, provide funding and see that mission objectives are met. Also, governance among coalition partners is a key issue. Agreements, understandings, standards, guidelines, policies and processes must be put in place in advance so the interoperable environment can enable mission success.

"We spend a lot of time talking past each other because we really aren't on the same page. We need to reevaluate how we operate and cultural changes need to be driven in order to achieve the true transformation that needs to take place," said AFCEA's Shea. "We need to balance our concept development with technology."

NCOIC executives told participants that the path to interoperability does not have to be complex and costly. **Pat Ryan**, NCOIC chief technology officer, said the consortium has laid the groundwork and developed a proven, three-step approach to help organizations achieve greater interoperability.



"First you need a plan or roadmap so you know where you are and where you are going. Next you need governance and acquisition strategies. Then you need to test and evaluate the different solutions before you buy – the technology doesn't have to be new, but it does have to work," explained Ryan. "NCOIC understands and addresses the different aspects of interoperability, like governance – if you don't start there, you will end there."

Said The Cohen Group's Kern, "We figured out the old challenges over time. Interoperability is more complex now, and I'm very glad that we have an organization like the NCOIC that is taking it on."

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