The 16th Sustainment Brigade and NATO Allies:
A Quest for Interoperability

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Soldiers assigned to the 702nd Ordnance Company (Explosive Ordnance Disposal), 16th Sustainment Brigade, and Slovenian allies operate a remote-controlled Talon robot during Vanguard Proof at Pocek Range in Postonja, Slovenia, on March 19, 2017. (Photo by Paolo Bovo)

Building a sustainment common operational picture with NATO allies is essential to teamwork and a strong alliance.

A joint common operational picture (COP) is vital for the U.S. sustainment mission and for forces operating in Europe. Likewise, sharing information with NATO partners is critical when operating in a multinational environment. Planning and executing sustainment operations requires interoperable accessibility to digital systems that enable the commander to make decisions.

The Soldiers of the 16th Sustainment Brigade are faced with a dynamic mission that is critical to adversarial deterrence in the European theater. As the only U.S. Army sustainment unit supporting European theater security cooperation events and multinational exercises at the tactical level, the brigade must have multinational logistics interoperability during daily operations to ensure the support of equipment, supplies, personnel, vehicles, and other resources needed for mission assurance.

Limited Interoperability

Information sharing is the key to any modern multinational operation, and the information's true power is fully realized only if it is accurate, timely, understandable, and meets all mission requirements. Currently, U.S. and NATO mission command networks converge only through email messages and teleconferencing.

A joint logistics COP does not exist among NATO allies within the European theater for critical functions such as battlespace management, movement control, sustainment operations, and force accountability.

Timely decision-making demands a mutual COP that is enabled through shared communication systems and programs supporting joint efforts. Critical warfighting functions depend on the network, which means the applications that support those functions and the data populating those applications must be on a network accessible by both U.S. and partner forces.

Logistics Functional Area Services (LOGFAS) is the ideal platform for shared analysis, planning, executing, and monitoring of the sustainment mission set within the European theater. However, there are challenges with the U.S. network and LOGFAS data interoperability among NATO partners. The impact of these challenges hinders mission command with foreign partners and adds another layer of complexity to tactical operations.

Existing network platforms have provided limited interoperability with NATO partners. Up until this point, the Battlefield Information Collection and Exploitation Systems (BICES), for instance, has provided only email communication to NATO network platforms and a few collaborative websites. Furthermore, BICES does not offer the level of accessibility required to communicate with all NATO partners and efficiently carry out sustainment operations.

Mission Partner Environment

Implementing a federation of some sorts between U.S. networks and NATO partner networks is essential. That is where the Mission Partner Environment (MPE) comes into play. MPE offers more accessibility for NATO allies and makes it easier to create a gateway for new and effective ways to execute mission command.

The interoperability of mission command systems and core services (data and voice) with NATO allied forces would greatly enhance annual multinational exercises and create an endless number of training opportunities. However, the current U.S. signal posture does not have a permanent MPE network infrastructure in place for all units to utilize.

For Sabre Strike 18, a multinational exercise, MPE was the primary coalition platform for U.S. forces to collaborate with foreign partners. Although most of the 16th Sustainment Brigade was fully functional on the MPE network, the brigade was still unable to provide all of its battalions with MPE network kits to collaborate.

Even though the brigade was fielded three MPE baseband kits, additional MPE infrastructure would have greatly benefited the unit and provided needed flexibility with critical brigade training objectives, such as jumping the tactical operations center, with all three network enclaves, which are the Non-classified Internet Protocol Router Network, Secret Internet Protocol Router Network, and MPE.

LOGFAS on MPE

LOGFAS has been accredited on the MPE platform, which is a great step forward for enabling the exchange of information with NATO.

In concert with injecting joint LOGFAS data into a NATO COP, a formal training process needs to be immediately implemented to train all current COP technicians on how to use and implement the joint LOGFAS data within the NATO COP.

Furthermore, all Army regionally aligned forces at all tactical levels, particularly at brigade and division levels, need to be functionally proficient and manned and equipped to employ LOGFAS software.

The Brigade's Plan

While the network interoperability and LOGFAS data exchange proofs the data interoperability framework is headed in the right direction. The first practical application of this new capability is currently planned for exercise Trident Juncture 18 in late 2018. Trident Juncture 18 will have 40,000 participants from more than 30 countries. Its goals will be to deploy and exercise in a complex, joint, and distributed environment.

By gathering data injects from the boots on the ground and passing it up through the battalion, brigade, division, USAREUR, and finally the U.S. European Command, Army units in Europe can give the Supreme Allied Commander Europe situational awareness and actionable data to make

A multi-domain, large-scale combat operation will challenge leaders to forge teams capable of analyzing data, conceptualizing the battlefield, and making informed decisions aimed at facilitating warfighter support.

LOGFAS should be the universal platform for coalition forces to use because it encompasses a number of useful tools, such as the Sustainment Planning Module, Allied Deployment and Movement System, Effective Visible Execution, and Logistics Reporting.

The end state is to satisfy the requirement for an enduring capability for the U.S. European Command and components to collaborate with NATO for adaptive planning and the execution of coalition operations.

Steadfast Cobalt 18 introduced the 16th Sustainment Brigade to the Joint Enterprise Data Interoperability, a tool that has the potential to provide data and system-level interoperability for joint and coalition functional services on the MPE network. Joint Enterprise Data Interoperability also potentially enables data exchanges between the Joint Operation Planning and Execution System and LOGFAS over MPE information systems, replacing the current "swivel chair method," which uses manual LOGFAS data input.

of concept will hopefully bridge the gap on data exchange among U.S. forces and NATO allies, the Army must prioritize focused LOGFAS training for units and personnel.

To that end, the 16th Sustainment Brigade's S-6 staff has worked closely with the U.S. Army Europe (USAREUR) G-6 section to successfully make the LOGFAS connection work. Currently, the MPE network connection uses the garrison network backbone, and multiple tactical connections are at the ready.

Additionally, the 16th Sustainment Brigade's S-6 staff is receiving LOGFAS application training and has access to the latest software. Once final network architecture and federation modifications at the USAREUR level are complete, the brigade stands by to be possibly the first to test the LOGFAS application on the MPE network while exchanging logistics data with NATO allies.

There will undoubtedly be more challenges ahead with multinational data exchange, but it seems as if

real-time decisions in the European theater using the fully functional joint LOGFAS COP. Information sharing is a combat multiplier that helps to strengthen the alliance by putting allies and partners on equal footing in terms of digital capabilities.

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