

CONFERENCE CALL



LTG Jeffrey A. Sorenson talks about network operations with SSG Matthew Spire, 2-3 Brigade Troops Battalion, 2nd Brigade Combat Team, 3rd Infantry Division, Network Operations Noncommissioned-Officer-in-Charge, during a visit to Forward Operating Base Kalsu, Iraq. (U.S. Army photo by SPC Emily J. Wilsoncroft.)

Army Network Enterprise: A Progress Report

Margaret C. Roth

As the Army moves forward with plans to modernize and streamline its information networks, key leaders in this sweeping transformation provided a look back and ahead during the 2010 AUSA Annual Meeting and Exposition.

The transformation of LandWarNet, the Army's portion of the Global Information Grid comprising many loosely affiliated independent networks, means major changes in command, control, communications, computing, and information technology (C4IT), said now-retired LTG Jeffrey A. Sorenson, then Chief Information Officer (CIO)/G-6 in the Office of the Secretary of the Army.

The Army is undertaking network improvements to give Soldiers continuous access to applications and data resources using a single, persistent

tactical identity. It wants to enable them to rapidly deploy to an austere environment, ready to fight upon arrival and to seize and maintain the initiative without loss of operational tempo or situational awareness. Finally, the Army's network transformation will enable more efficient command and control of widely dispersed forces.

Speaking on Oct. 25, Sorenson told the AUSA audience: "We are transforming the way we deliver C4IT services. It will manifest itself in a different resource strategy. It will manifest itself in a different acquisition strategy."

Global Network Enterprise Construct

In March 2009, Chief of Staff of the Army (CSA) George W. Casey Jr. approved the transformation of LandWarNet in accordance with the Global Network Enterprise Construct (GNEC). The complexities of the operational environment and the growing need for warfighters to receive the right information, at the right time and in the right format, have elevated the importance of network access, control, and utilization.

The CSA's vision was, and is, a more secure, centralized, operational capability.



SPC Timothy Worley, Company C, 508th Special Troops Battalion, 4th Brigade Combat Team, 82nd Airborne Division, explains the usage of an automation subsystem to LTG Jeffrey A. Sorenson during his visit to Forward Operating Base Salerno, Afghanistan. (U.S. Army photo by SGT Matthew Clifton.)

The objectives of GNEC are to:

- Operationalize LandWarNet to enable global warfighting capability.
- Dramatically improve network defense.
- Realize economies and efficiencies while improving effectiveness.
- Enable Army interoperability and collaboration with mission partners.

This transformation anticipates that eventually, all Army generating force networks will be managed by a single command, U.S. Army Network Enterprise Technology Command (NETCOM)/9th Signal Command (Army), reporting to the Army CIO. NETCOM is responsible for organizing Army information to make it globally accessible, useful, and secure for Soldiers

deployed anywhere in the world, in sync with Army Force Generation, Base Realignment and Closure, and Global Defense Posture Realignment.

In May 2009, the Army conducted an operational evaluation that validated GNEC as a strategy to operationalize LandWarNet. The 9th Signal Command (Army) began consolidating information technology (IT) services including enterprise e-mail, data, software, and hardware in area processing centers (APCs).

GNEC encompasses a global construct of network service centers: one in Europe, two in CONUS, one in Southwest Asia, and one in the Pacific. It also calls for realigning CONUS

installation network enterprise centers, also known as Directorates of Information Management, under 9th Signal Command (Army); and establishing up to six APCs in CONUS and seven OCONUS.

For Soldiers, the result of this transformation will be a secure, single identity that will remain with them whether they are at home station or deployed. For the larger Army, it will mean a persistent battle command and weapon system network. A single network will serve both the generating and operating forces, supporting warfighting capabilities across all phases of joint operations (see "Army Enterprise Architecture" on Page 44).

For Army acquisition in particular, it will mean alignment with the Army's guidance and plan for the Common Operating Environment (COE), as a prerequisite to obtaining funding to develop and acquire IT devices or systems. The guidance and plan also will provide direction to industry partners.

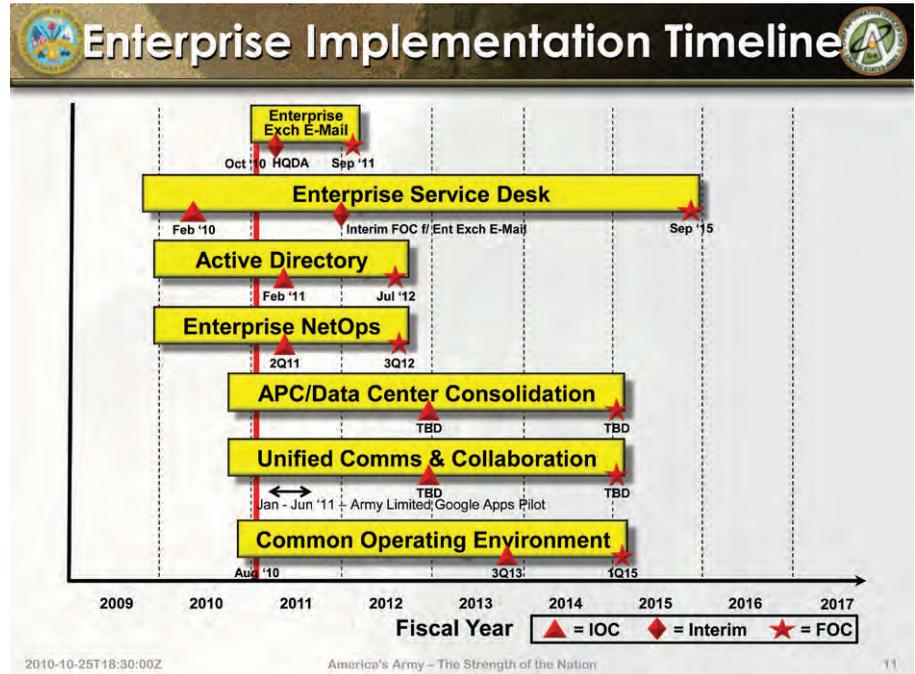
For Soldiers, the result of this transformation will be a secure, single identity that will remain with them whether they are at home station or deployed.

The COE is a set of computing technologies and standards enabling the rapid development and execution of secure, interoperable applications across a variety of computing environments—server, client, mobile devices, sensors, and platforms.

“This is what we call the network: the ability to take that data all the way from posts, camps, and stations through the defense system network into the battlefield. ... It has to be an integrated network capability,” Sorenson told the AUSA audience. “At the end of the day, we need to make sure we get to plug-and-play.”

Program Executive Office Integration is sorting out how to bring together disparate solutions currently in use, Sorenson said.

So far, the Army has established a tactical network architecture, a COE architecture, and an APC architecture. Still in progress are the Installation (Post/Camp/Station) Architecture, Information Assurance Architecture, and Geo-Spatial Architecture. More details, including the “to-be” architecture, are available on the Army



CIO/G-6 website at <http://ciog6.army.mil/ToBeArchitecture.aspx>.

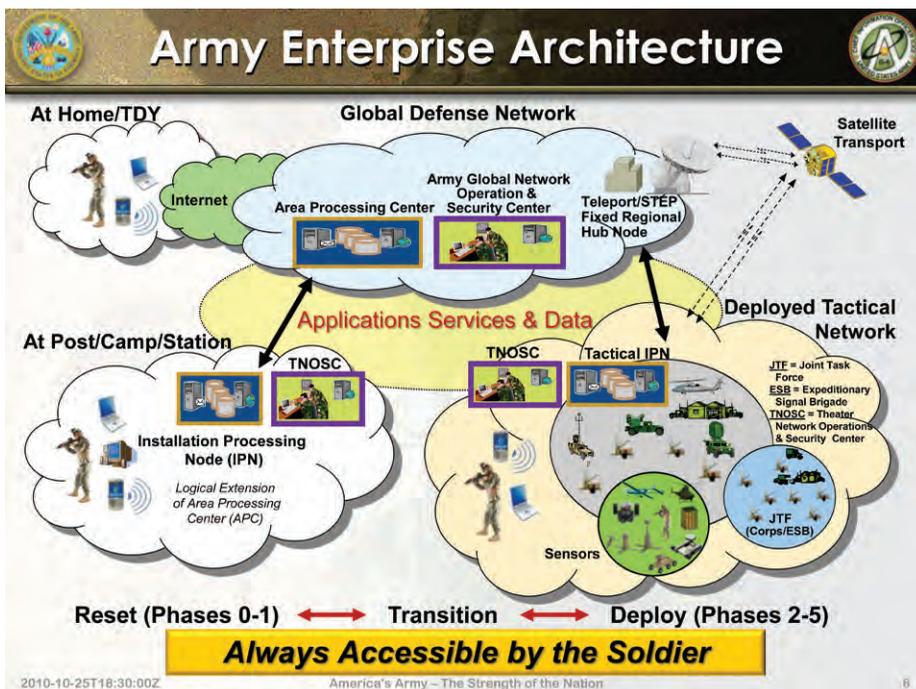
In early 2011, the Assistant Secretary of the Army for Acquisition, Logistics, and Technology is expected to publish an implementation plan that describes the steps and schedule for bringing Army systems into compliance with the guidance for COE.

By the end of FY11, the Army plans to deploy a brigade combat team (BCT)-sized unit leveraging the range of global network enterprise capabilities through all phases of its deployment, laying the groundwork for all BCTs to do the same.

“We need to be doing the integration on the front end,” said COL(P) John B. Morrison Jr., Director of LandWarNet/Battle Command in the Office of the Deputy Chief of Staff, G-3/-5/-7, at the AUSA Annual Meeting. “We have not really developed a capability set process” to establish requirements, he said. “That’s where the true integration burden is right now.”

Enterprise E-Mail

At the center of the overall transformation is “the Soldier’s story”—how Soldiers connect to the network at home and on deployment, as they move around the Army. Currently, Sorenson noted, “every time they do that, all the ways they stay connected to the network change—their e-mail, the way they connect from a transport standpoint, how they store their data, what they use for a collaboration capability.”





Apps for the Army, a competition launched in March 2010, may become a quarterly initiative. (U.S. Army photo.)

“Quite frankly, the hamsters are running tired on that wheel,” Sorenson said. Therefore, the Army is taking a major step toward modernization with the launch of Enterprise E-mail in 2011, providing users with a single, permanent e-mail address.

Enterprise E-mail will enable users to access their Army e-mail from any DOD location and to collaborate with any Army user worldwide via a Global Address List and enterprise calendar sharing, said Sorenson in an Oct. 25, 2010, Army news release. Today, most Army users are unable to share calendars or to find contact information for Army e-mail users at other locations.

Enterprise E-mail will leverage Army-owned Microsoft software licenses and the DOD computing cloud provided by the Defense Information Systems Agency (DISA). NETCOM will serve as the Army’s Internet service provider for e-mail.

The migration of Army Microsoft Exchange e-mail users includes 1.4 million unclassified network users and 200,000 users of the secret network. The Army CIO/G-6 and Army Headquarters are scheduled to migrate by early 2011. The rest of the migration will be completed by Sept. 30, 2011, and will include Transportation Command, European Command, and Africa Command.

Enterprise E-mail is expected to save the Army more than \$100 million a year starting in FY13.

“The Enterprise E-mail partnership between the Army and DISA is a tremendous opportunity to achieve significant capabilities and efficiencies,” said LTG Carroll F. Pollett, DISA Director, in the Army release. “Enterprise E-mail is one of several major Army IT efficiency initiatives that support Secretary of Defense efforts to free up resources for other Defense Department priorities,” Sorenson said.

Enterprise E-mail users will have access to the Army Enterprise Service Desk (AESD); a global phone number will provide IT support for any e-mail issue. In February 2010, seven CONUS installations began using the AESD; as of August 2010, the first-call resolution rate was 66 percent, above the industry standard.

Enterprise E-mail is only one part of the Army’s move to a global network enterprise. It will lead the way for other initiatives including Enterprise Active Directory, Enterprise Identity Management, Enterprise SharePoint Services, and Enterprise Service Desk.

“We know we can be more efficient,” Sorenson said in the release, noting redundancies in infrastructure across

the Army. He cited a case in point: Fort Belvoir, VA, “has 15 e-mail servers and six different help desks on a single installation. Other posts, camps, and stations have similar redundancies.”

The Army’s goal is to reduce the number of data centers by 75 percent by 2015, resulting in fewer servers, MG Mark S. Bowman, Director of Architecture for Operations, Networks, and Space in the Office of the CIO/G-6, told the audience at the AUSA Annual Meeting (see “Enterprise Implementation Timeline” on Page 44).

Seeking Smart Solutions

The Army is looking both within its ranks and outside the military for innovative computing solutions.

Apps for the Army (A4A), a competition launched in March 2010, may become a quarterly initiative. The first competition, from March 1 to May 15, enticed 141 Soldiers and Army civilians to register. The Army received 53 Web and mobile applications, of which 25 passed certification and testing in five categories: information access, locational awareness, training, warfighting or mission-specific, and morale, welfare, and recreation or other uses.

More information on the 15 winners and 10 honorable mentions is available on the CIO/G-6 website at <http://ciog6.army.mil/Apps4Army/tabid/67/Default.aspx>.

The Army is now working on including industry in the applications challenge.

MARGARET C. ROTH is Senior Editor of *Army AL&T* Magazine. She holds a B.A. in Russian language and linguistics from the University of Virginia. Roth has more than a decade of experience in writing about the Army and more than two decades’ experience in journalism and public relations.