

SYNCING SUPPLY *with* DEMAND

Army's new equipment tracking and distribution system marks fundamental change in logistics

by Kris Osborn



A COMPREHENSIVE COUNT

Flatbed trucks carrying Mine Resistant Ambush Protected (MRAP) vehicles line up for inspection at the Redistribution Property Assistance Team yard at Camp Liberty, Iraq, in October 2011. The Logistics Information Warehouse (LIW) will reflect not only the Army's current inventory of MRAPs and other equipment, but also forecasted deliveries. Ultimately, all Army materiel will be visible in the LIW. (Photo by CPT Kurt Rauschenberg.)



Secretary of the Army John McHugh has designated U.S. Army Materiel Command (AMC) as the Lead Materiel Integrator (LMI), a distinction established to help the service implement a new, improved method of cataloguing, managing, tracking, and distributing equipment across the force.

The LMI is implicitly geared toward increasing the overall visibility of equipment throughout the Army. It draws upon a central database called the Logistics Information Warehouse (LIW) and a new software optimization tool designed to better integrate equipment management by linking supply with demand.

The LMI effort, to be formally established by Feb. 15, puts AMC in the lead role of coordinating equipment distribution; the idea is to successfully identify equipment needs and to facilitate or streamline distribution according to established priorities.

“The Army’s new approach for managing materiel is being designed to effectively and efficiently distribute and redistribute materiel to support the generation of trained and ready forces. Moreover, it must represent a different way of doing business that will foster open communication, improve collaboration, and eliminate redundancies in the process,” McHugh said in Army Directive 2011-06, *Designation of U.S. Army Materiel Command as the Army’s Lead Materiel Integrator (LMI)*, dated March 22, 2011. “As we transition into this new process for managing our materiel, I expect all Army commands and agencies to examine their logistical processes to make them more agile and efficient, as well as compliant with these changes.”

WHERE THE NEED IS

The LMI effort is designed to break the stovepipes and ad hoc strategies associated



GLOBAL INVENTORY

The thousands of items in the Theater Redistribution Center at the “W2N” yard on Camp Arifjan, Kuwait, represent one of many elements in the Army supply system, both in theater and in the United States, that the LIW and a new software optimization tool will better integrate. (Photo by CPL Christopher Bigelow.)

with the Army’s current approach and to pave the way toward a more efficient, timely, and economical approach to equipment management. Not only does the Army expect to have total visibility of equipment throughout the force, but it also will be positioned to better identify equipment needs and effectively match them with the supply base.

The software optimization tool is engineered to simultaneously account for a multitude of factors to calculate how to get the right equipment to the right place at the right time, said James C. Dwyer, AMC’s Deputy Chief of Staff for Logistics, G-4.

This new Decision Support Tool (DST) is aimed at determining how the Army can best predict and anticipate the equipment needs of a unit slated to deploy to

Afghanistan in six months. The DST will be able to predict the quantities of equipment a brigade would need based, at least in part, on historical requirements.

“The Decision Support Tool will optimize requirements and make decisions on the distribution of equipment. It provides an automatic feed of all of the demand requirements so we see them instantly. The optimization software is capable of solving thousands of equations at the same time. For example, we won’t take a tank and transport it from Fort Stewart, GA, to Fort Carson, CO, when there is a tank sitting much closer that we may not otherwise see,” Dwyer explained.

The current equipment management system relies on a host of different reporting and cataloguing entities that are



not always fully synchronized with one another, he said.

“LMI is going to break through these barriers. AMC will integrate all of those piles of equipment to make sure units have the equipment where they need it and when they need it at the least cost to the Army. We’ve basically taken the distribution of equipment out of HQDA as part of this new policy, and brought the responsibility to AMC. This is going to be a huge benefit to the Army,” Dwyer said.

MATERIEL ENTERPRISE EFFORT

As part of this broad effort, AMC and the Assistant Secretary of the Army for Acquisition, Logistics, and Technology (ASAALT) are engaged in a large-scale collaborative endeavor referred to as the Materiel Enterprise (ME). The ME is structured to streamline communication, establish common business rules, and better manage the acquisition and sustainment of technologies and equipment throughout the life cycle.

As part of the ME, a main objective of the LMI effort is to ensure that the management of Army equipment is synchronized with ASAALT and AMC personnel as it moves through the Army Force Generation process, said Tim Goddette, Director of Combat Sustainment Systems, ASAALT.

Program executive officers and program managers in the acquisition community “will have the ability to see ourselves far enough into the future to project,

anticipate, and track our newest equipment for those already in the fight or training prior to deploying,” Goddette explained. “We want to see problems and fix problems before they become problems. Although there are at times issues with having accurate total asset visibility, that should not stop us from striving to move to a more synchronized process and continuing to make improvements.”

Automating this process through the DST will pay large dividends, Goddette added.

The LIW will provide a key function for the LMI by serving as the Army’s authoritative materiel data repository, said Ed Agee, Chief, Materiel Readiness and Integration Branch, G-4 Support Operations in AMC Headquarters.

“LIW is going to be the one place where all authoritative data resources feed. The end result is total asset visibility. Given total asset visibility, we are going to be able to make better, more efficient decisions regarding how we distribute materiel in an environment where demands exceed supply,” Agee said.

Also, the Army will be better positioned to move equipment on a regional basis and align distribution according to geographical needs, to prevent unnecessarily moving things long distances, thus achieving cost avoidances, Agee said.

In addition, the LIW will be fortified with key information on depot production and

TOTAL ASSET VISIBILITY

The LIW is designed to record all equipment in the inventory, regardless of location, whether it is with the active or reserve component. Here, Soldiers assigned to the U.S. Army Reserve’s 824th Quartermaster Company prepare Container Delivery System (CDS) bundles for attachment to the anchor line onboard a C-17 Globemaster aircraft in July 2011. When the CDS bundles are rolled out of the C-17 from an undisclosed location in Southwest Asia, the static line is pulled, deploying the parachute to support deployed forces serving in Afghanistan. (Photo by SGT Shannon R. Gregory.)



IMPROVING EQUIPMENT TRACKING

The LIW's central database increases the visibility and tracking of equipment throughout the Army. Here, Mike Murphey moves supplies from the warehouse to the maintenance building at the Army Sustainment Command Logistic Support Team Complex on Camp Atterbury Joint Maneuver Training Center, IN, Nov. 7, 2011. The new complex replaces the tents and trailers that were previously used to issue and maintain equipment and vehicles for Soldiers undergoing predeployment training at Camp Atterbury. (Photo by SSG David Bruce.)

new contracts, to maximize awareness and management across the spectrum of equipment.

“You have disparate data sources all over the place right now. Right now, the LIW does not capture new-production equipment and does not capture new production on contract. If I had visibility of that, it would allow me to make better decisions about forecasted deliveries. I could be more proactive versus reactive and set the conditions for success,” Agee explained. “Everything is coalescing around LIW. At our desired end state, all Army materiel will be visible in the LIW.”

Reset, repair, and logistics modernization programs will also be entered into the LIW. The idea is to accurately track and account for all equipment in the inventory, regardless of location, whether it is

with the Army National Guard, Army Reserve, Army prepositioned stocks, or theater provided equipment, Agee said.

“You’ve got to know what you’ve got in your inventory before you can distribute it and move things around. We will be able to inform what we procure, what we modernize, what we divest, and what we extend the life cycle on by way of recapitalization,” Agee said.

CONCLUSION

The LMI and LIW efforts are helping to institutionalize new policies and new business rules across the Army, initiatives that will help the service become more efficient in today's more constrained fiscal environment, in which overseas contingency operations funding is expected to decrease and the Army will have to rely more on the base budget, Agee said.

“The LMI will synchronize the distribution and redistribution of equipment in accordance with Army priorities and directives. Through coordination and collaboration, we will do a better job at optimizing our supply against demand.

The LMI approach represents huge culture change Armywide. The LMI approach is a journey and will serve as the Army's transformational foundation for evolutionary change in the Materiel Enterprise over time,” Agee said.

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