# Leveraging Enterprise Data Systems to Estimate Sustainment Requirements in Europe

■ By Maj. Gen. Duane A. Gamble and Capt. James A. Broadie

*An M1A2 Abrams is loaded onto a railcar at the port of Constanta in Romania on July 1 headed for Exercise Saber Guardian 2016 in Cincu, Romania. The multinational military exercise involves military personnel from Armenia, Azerbaijan, Bulgaria, Canada, Georgia, Moldova, Poland, Romania, Ukraine, and the United States. (Photo by Sgt. Cory Grogan)*

U.S. Army Europe (USAREUR) Soldiers and leaders live and operate in an increasingly dynamic and volatile theater where operating tempo and troop concentration matter. Across the European Command (EUCOM) area of responsibility (AOR), the 21st Theater Sustainment Command (TSC) leverages a wide array of enterprise data systems to anticipate requirements and enable its core missions of theater opening, theater distribution, and sustaining the EUCOM AOR.

Enterprise data systems enable the 21st TSC to increase distribution velocity and anticipatory sustainment. This article details examples that demonstrate how the 21st TSC is leveraging enterprise data systems for transportation, onward movement, repair parts forecasting, and munitions management.

## Transportation

Freedom of movement is crucial to speed of assembly and speed of response. Transportation routes, control factors, host-nation support, and specialized handling requirements must be coordinated to maximize the velocity of the force projection process, from the initial planning efforts to force closure.

The most critical transportation enterprise system in the coordination of intertheater movement of personnel and equipment is the Joint Operation Planning and Execution System (JOPES), which is used across all military components. Planners use JOPES to develop time-phased force deployment data that provide combatant commanders with critical movement information for deploying and allocated forces.

For example, knowing when each element of an armored brigade combat team or other units operating as part of the rotational regionally aligned forces (RAF) will be arriving at a seaport of debarkation allows the 21st TSC to anticipate the heavy lift requirements associated with moving tanks to destinations across Europe.

## Onward Movement

Synchronizing the arrival of rail assets at the port and materials handling equipment at the unit's planned destination allows for effective and efficient onward movement. JOPES enables the theater to anticipate the lift assets required to support onward movement and maintain the overall velocity of the force while conserving resources and minimizing cost.

Movement data provided by JOPES is applied to more than just major end item movements in the AOR. Units designated to deploy to Eu-

The 21st Theater Sustainment Command is using enterprise data systems to make sure the European theater and its regionally aligned forces have what they need when they need it.

rope and to draw pre-positioned equipment in support of various operations will build passenger and "to accompany troops lines" of time-phased force deployment data.

Having this information allows the 21st TSC to anticipate onward movement and life support requirements for arriving forces. When JOPES is leveraged effectively, it ensures a predictable flow of forces that helps sustainers anticipate reception requirements in order to maintain the velocity of the pipeline in support of rapid unit deployments.

JOPES is a powerful combat logistics multiplier for transporters and sustainers but has limits in the EUCOM AOR because it is a system designed only for U.S. forces. All NATO movement operations in the AOR use a suite of applications that fall under the Logistics Functional Area Services (LOGFAS) software suite.

During Trident Juncture 2015, other NATO nations successfully used LOGFAS to conduct unit flow analysis and movement asset allocation. As JOPES and LOGFAS are not interoperable, improving the system so that data can be transferred from JOPES into LOGFAS would help to bridge the information gap and potentially add efficiencies to EUCOM's transportation processes.

## Repair Parts Forecasting

The 21st TSC is also using an enterprise data system to anticipate repair-parts requirements in support of continental United States-based rotational units. By doing this, it is ensuring that units are able to maintain high operational readiness rates from the start of their deployment.

Rotational units participate in rigorous predeployment training to include combat training center rotations. During this training, a rotational unit consumes parts from its shop stocks list and authorized stockage list (ASL) and normally has shortages when it ships its stocks' containers to Europe. Using Global Combat Support System–Army (GCSS–Army), the 21st TSC analyzes unit shortages, leverages existing theater stocks, and readies replenishment items for when units arrive in theater.

Even though GCSS–Army has no capability to laterally search for parts between supply support activities (SSAs), enterprise data systems enable us to overcome this shortfall. One method that the 21st TSC uses is the automated process within the Logistics Modernization Program, the Army Materiel Command's pri-

*Sgt. Arthur Horton, 51st Transportation Company, and Spc. Fredrita Banks, 240th Quartermaster Support Company, refuel tanks at the Cincu Training Area, Romania, railhead to prepare for exercise Saber Guardian 2016. (Photo by Sgt Jairo Cruz)*

mary logistics enterprise system. For high-priority requisitions, the 21st TSC has created a search that looks across the AOR and passes requests to SSAs in the theater, rather than passing them stateside. This saves time and money.

Additionally, the 21st TSC uses a manual process to redirect stocks from one SSA to another by identifying parts on hand and directing shipments to SSAs with high-priority requirements. The 21st TSC uses the same process to redistribute excess among SSAs in order to reduce zero balances (inventory lines that are out of stock) and decrease requisition wait times.

GCSS–Army incorporates all elements of materiel readiness: supply, maintenance, and equipment. This integration gives the 21st TSC the ability to track customer wait times and to identify any systemic problems in the supply chain. With all of these elements in one system, the 21st TSC is able to easily analyze ASL requirements based on the modified table of organization and equipment authorizations or equipment on hand and determine trends.

For example, rather than researching the overall ASL performance, 21st TSC sustainers can analyze the performance of individual items. Using these combined functions empowers sustainers to anticipate requirements and prevent supply chain disruptions.

## Munitions Management

Ammunition management in Europe is accomplished using the Standard Army Ammunition System–Modernization (SAAS–MOD), the National Level Ammunition Capability, and the Total Ammunition Management Information System (TAMIS). Employing these systems, the 21st TSC forecasts requirements, accesses decision support tools, monitors expenditures, and analyzes transaction history to create accurate sustainment estimates.

Most of our recurring USAREUR missions are training events distributed across the Atlantic Resolve AOR. Ongoing Atlantic Resolve rotations keep our munitions processes continually engaged at the tactical and operational levels. The 21st TSC uses SAAS–MOD and TAMIS to validate and view projected requirements and direct the movements of stocks from one ammunition supply activity (ASA) to another.

Given the distance that RAF units operate across, their limited transportation assets, and the projected increase in ammunition required for training, the 21st TSC is developing a forward ASA concept that will allow it to push anticipated ammunition requirements through to the ASA. This concept provides direct support to the RAF, minimizes retrograde after each rotation, and potentially eases transportation requirements over time.

The remainder of the Army's European operations are strategically and operationally focused to ensure that the United States is postured to reassure its allies and deter aggression. The 21st TSC continually assesses and modifies its sustainment stockage objectives to ensure it has the right types and quantities of munitions on hand to supply the ever changing composition and mix of units operating in the theater.

In close coordination with Headquarters Department of the Army and USAREUR, the 21st TSC determines requirements using SAAS–MOD in conjunction with the National Level Ammunition Capability to requisition and, when directed, retrograde stocks.

In this complex and dynamic European security environment, where NATO is faced with increased security threats from a multitude of sources, the ability to strengthen the alliance by improving NATO's sustainment capabilities is indicative of the benefits of the U.S. presence in Europe. The 21st TSC, working in unison with many other sustainment organizations and agencies throughout the theater, harnesses sustainment enterprise capabilities in order to overcome these threats.

By leveraging enterprise data systems, including JOPES, GCSS–Army, SAAS–MOD, and TAMIS, the 21st TSC has successfully increased warfighter readiness, improved the speed of supply delivery, and enabled anticipatory sustainment in support of units based in and deploying to the European AOR.

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