In the business world, it is common knowledge that superior information technology (IT) can lead to competitive advantage and successful return-on-investment. The Army’s business is conducted on the battlefield and IT systems are key to ensuring that Soldiers, our greatest investment, stay safe and succeed in their missions. Several hundred Program Executive Office Enterprise Information Systems (PEO EIS) staff work side-by-side with Soldiers in Iraq and Afghanistan on a wide range of IT projects that deliver important capabilities. They are not alone: project and product offices in the U.S. partner with the defense industry to develop and deploy systems that deliver identity intelligence, electronic medical information, network connectivity, and computer-based business and logistics tools to ensure troops stay ahead of the technology curve and out of harm’s way.

Acting ASAALT Dean G. Popps met with MAJ Robert Ciccolella of PM J-AIT during a visit to Afghanistan in early 2009. (U.S. Army photo by COL Jonathan Maddux.)
Biometric Data Aids Identity Intelligence

U.S. and coalition forces guarding security checkpoints at airports, bases, ports, and mobile locations need to know quickly if a person requesting access is friend or foe. For a rapid identity check at the scene, and to gather crucial intelligence for future use, troops rely on systems developed by Project Manager Department of Defense (PM DOD) Biometrics. Hand-held scanners capture facial features, fingerprints, palm prints, and retina scans and check them against a central repository. The Office of the Assistant Secretary of the Army for Acquisition, Logistics, and Technology (OASAALT) calls these biometric capabilities a “game changer” in identifying and capturing known or suspected terrorists.

PM DOD Biometrics recently upgraded its database to significantly improve matching capabilities and cut down on the time it takes to return match results to the warfighter. The new repository manages more than 3 million biometric records, providing field commanders with responses up to 28 times faster than the previous system. “These improvements enhance the survivability of deployed forces and enable them to apprehend more perpetrators who might otherwise have concealed their true identity and avoided detection,” according to PM COL Theodore J. Jennings.

Electronic Medical Information Coordinates and Enhances Patient Care

Continuity of patient care is difficult enough to achieve in the United States. When Soldiers are wounded on the battlefield, the complexity increases significantly—along with the sense of urgency to ensure that patients receive the best medical treatment available—whether they are in theater, a field hospital, or for follow-up care at an Army medical facility at home. PM Medical Communications for Combat Casualty Care (MC4) helps this complicated process along. MC4 integrates, fields, and supports thousands of medical information management systems in hundreds of medical treatment facilities throughout Afghanistan and 13 other countries. To date, military medical personnel have captured more than 10 million electronic patient encounters using MC4.

“Complete implementation of MC4 and the consistent use of the systems in theater are critical to the presidential goals concerning the electronic medical record [EMR], the capture of appropriate health data, and the quality of health care delivered to service members,” said LTC Thomas C. Burzynski, Former Medical Command and Control Officer, Combined Joint Task Force-101, Afghanistan.

MC4 mobile training and support teams provide 24/7 assistance to commanders, systems administrators, medical logisticians, and health care professionals who manage critical medical information on the battlefield. As a result of the close coordination between MC4 and medical forces in Afghanistan, system users are making the most of the system by making best business practices the standard, resulting in improved continuity of care and decision making.

Systems Enable Connectivity and Productivity

Soldiers in the war zone have a lot on their minds. There are supplies, weapons, and equipment to be ordered, moved, and tracked. There is infrastructure to be set up and maintained. There are facilities to be managed. And above all is the mission.

Product Director for Defense Communications Systems-Southwest Asia (DCS-SWA), an organization that is part of the PEO EIS Network Service Center Project Management Office, works to ensure that Soldiers have the bandwidth they need to stay connected and access mission-critical tools. In 2008, DCS-SWA implemented more than 90 separate projects to improve IT services in Iraq, Afghanistan, and Kuwait. The team’s successful efforts provided as many as 60,000 Soldiers through three troop rotations with increased combat capability at a time when they needed it most—the surge.

The team traveled extensively through high-risk areas to upgrade communications capabilities and connect joint forces at multiple locations, supporting every major command in theater. Significant projects modernized network infrastructure at command and operation centers, bringing superior communications capabilities to locations where little or none previously existed.

With everything else deployed Soldiers need to think about day-to-day, figuring out how to share a PowerPoint presentation with a colleague a continent away or securely chat with family back home should be the least of their worries. For secure electronic communications, they log on to Army Knowledge Online (AKO), the Army’s enterprise Web portal. AKO serves more than 2.1 million personnel in the Army community and provides secure knowledge management, communications, and collaboration tools anytime, anywhere in the world. Warfighters can, for example, set up an AKO group to communicate with all the members of their unit prior to deployment,
store and access critical forms and documents, share with other troops and units in the AKO forums, and e-mail anyone on the Internet with AKO mail. Warfighters can also create their own Web page, start a blog to let the folks back home know how things are going, or use AKO instant messaging to chat with loved ones and colleagues.

An important new electronic tool being fielded to the Army acquisition community worldwide is Green Force Tracker (GFT) with IBM Sametime Technology. Developed by PM Acquisition Business, the tool allows Soldiers in different geographic locations to collaborate, send, and receive instant messages and maintain presence awareness. “I depend on GFT because of the reliable connection,” commented MAJ Robert Ciccolella, who works in Arifjan, Kuwait, for one of the PEO EIS product offices. “I use it to bounce ideas, troubleshoot servers, and send screenshots to my guys in Kuwait,” said Chad Cobb, who works with the Expeditionary Contracting Command. GFT operates in low bandwidth environments and provides reachback to the U.S. It is mission critical as phone and e-mail may not always be available.

Complete implementation of MC4 and the consistent use of the systems in theater are critical to the presidential goals concerning the EMR, the capture of appropriate health data, and the quality of health care delivered to service members. Securing the Safety of Defense Supplies and Equipment

GEN Dwight D. Eisenhower once said, “You will not find it difficult to prove that battles, campaigns, and even wars have been won or lost primarily because of logistics.” The Army has come a long way technologically since World War II, but it will always need supplies, equipment, and vehicles. To track whether items traveling through the war zone are secure, DOD turns to another PEO EIS office, PM Joint-Automated IT (J-AIT).

In early 2009, the Army issued guidance to equip all containers transiting between Afghanistan and Pakistan with a Container Intrusion Detection Device (CIDD), to enhance force protection and to deter theft and pilferage. With many containers destined to travel back to the United States, the use of the CIDD also works toward enhancing homeland security. The CIDD is a

CIDDs in theater enhance force protection by detecting any intrusion into containers, such as those shown here. (U.S. Army photo by MAJ Robert Ciccolella.)
recent capability added to the suite of Radio Frequency In-Transit Visibility (RF-ITV) technologies that is capable of providing environmental condition and security monitoring.

The current CIDD has sensors that can monitor conditions inside the container. Once programmed and set, the CIDD will detect any unauthorized intrusion into the container and provide a breach alert at the next RF identification interrogator that reads the tag. That information is then sent to the RF-ITV system, which will automatically send an e-mail notification of the breach to selected personnel so that appropriate action can be initiated.

PM J-AIT manages the RF-ITV system and worldwide infrastructure that monitors and reports progress of these shipments and provides the breach alert notifications. PM J-AIT also provides CIDD training and oversees the acquisition of the CIDD as well as other automatic identification technology products.

The Movement Tracking System (MTS) tracks vehicle locations and gives commanders visibility of in-transit assets. It links ground-level operators with commanders and staff planners, providing the ability to control transportation movements and mobile logistics elements from anywhere in the world. To date, PM MTS teams have installed more than 7,700 systems in 7 forward operating bases in Iraq. MTS currently has 24 personnel deployed in Kuwait and Iraq who provide technical assistance and post installation support. Additionally, PM MTS is coordinating to provide satellite coverage for operations in Afghanistan and is working with the U.S. Army Central Command to establish the way ahead and identify the number of MTS systems needed to potentially support the theater in the future.

PM Transportation Information Systems (TIS) operates an enterprise architecture supporting Soldiers worldwide to move personnel and cargo in deployments, redeployments, and sustainment. In first quarter 2009, PM TIS established a regional office in Kuwait and completed fielding its theater operations (TOPS) product to Afghanistan. In addition to its existing field service engineers in Iraq and Afghanistan, PM TIS is adding a much-needed server infrastructure to support locations throughout SWA. Once installed, the architecture will provide improved connectivity and performance for the Transportation Coordinators’ Automated Information for Movements System II (TC-AIMS II) users.

PM TIS recently opened a new training facility in Kuwait and also plans to open one in Balad, Iraq, offering unit move and TOPS training for TC-AIMS II users. At the request of the 101st Airborne Division (Air Assault) and working with the Rapid Equipping Force, PM TIS is also developing a new capability needed to track air movements.

As Army requirements evolve and technology advances, PEO EIS programs will continue to adapt to Soldiers’ needs with projects and products that help them achieve their missions, whatever and wherever they are in the world.

JILL FINNIE works in the PEO EIS Public Affairs Office and has more than 20 years’ experience in strategic communications working with government, business, and media organizations. She holds a B.S. from James Madison University in communications and English and is pursuing a master’s degree in humanities from American Military University.