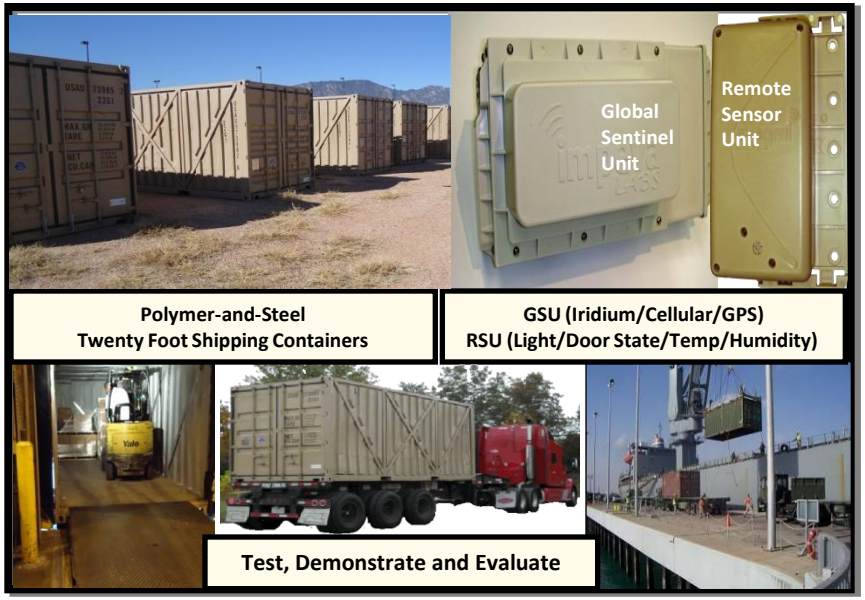
Smart Container Project



DESCRIPTION

The U.S. Army Logistics Agency's Smart Container project integrates state-of-the-art communications, tracking and sensing technologies with an innovative twenty-foot-equivalent (TEU) intermodal shipping container made from light-weight, polymer material providing radio wave penetration. This integration effort seeks to alleviate past problems encountered with active RFID-only applications by providing "infrastructure free", near-real time tracking and monitoring of a TEU container moving anywhere in the world. Advanced sensors integrated with the satellite tracking device provide intrusion detection and send an auto alert with location data to appropriate military authorities in near-real time. The capstone event for the project is to successfully test and evaluate the prototype smart container in a Proof-of-Principle (PoP) demonstration supporting OEF.

Customers: USCENTCOM; Any Combatant Command or ACOM requiring advanced container tracking/security
Stakeholders: USTRANSCOM, USJFCOM, DLA, FORSCOM, AMC (SDDC/AIDPMO, ASC, JMC), PM J-AIT, G-44D and CASCOM
Transition Partners: TRANSCOM, PM J-AIT and/or AIDPMO

MILESTONES

✓ Container Tracking/RF Transparency Test	May 10
✓ Container ISO/CSC-certification	Aug 10
✓ Twelve Prototypes Delivered (1st Contract Ends)	Sep 10
✓ New Contract Award (PoP: 30 Sep 10 – 29 Sep 11)	Sep 10
✓ CONUS "Test Runs" with DDC/DDSP	Nov 10
✓ Risk Reduction Demo with USJFCOM J9	Feb 11
❑ Limited Objective Experiment (LOE) in Afghanistan	Mar-Jul 11
❑ Test/Certify New Container Configurations	
▪ CSC Certification (Stoughton, WI)	Jun 11
▪ Ammunition Grade Testing (McAlester, OK)	Jul 11
❑ Twenty-four Containers and Repair Kits Delivered	Aug 11
❑ Demonstration of Enhanced Capabilities	Sep 11

STATUS

- ❑ Efforts to Date:
  - ➢ Conducted RF transmission analysis and testing of polymer material and proved no decrease in power or transmission loss when the electronics package was placed inside the container
  - ➢ Passed ISO and International Convention for Safe Containers (CSC) testing and obtained American Bureau of Shipping's (ABS) approval
  - ➢ Validated prototype's design and functionality by successfully conducting "test runs" at DLA Distribution Susquehanna, Pa (DDSP)
- ❑ Current Effort:
  - ➢ Partnering with USCENTCOM, USJFCOM, USTRANSCOM, FORSCOM and 4ID to conduct a PoP in Afghanistan during 2nd/3rd QTR, FY11
- ❑ Next Steps:
  - ➢ Continue to optimize the container design and add more capability to the electronics package
  - ➢ Integrate capability to read passive RFID tags on assets being shipped (i.e., track/monitor container contents … not just the container)