All Source Analysis System (ASAS)

Executive Summary

- The IOT&E was completed in April 2005. DOT&E delivered the assessment report to the Milestone Decision Authority and the Army Acquisition Executive in June 2005.
- The All Source Analysis System (ASAS) Block II is operationally effective, suitable, and survivable with limitations in all areas.
- The ASAS Program Office is correcting immediate limitations in interoperability and software problems to support deployment of forces to Operation Iraqi Freedom.
- The Army is working longer-term solutions for networking products and training.

System

- ASAS is an information system to support commanders and staff from battalion through unit of employment (corps/division).
- ASAS is a family of components:
  - Remote Workstation (RWS – desktop computer)
  - Light (laptop computer)
  - Communications Control Set (CCS)
  - Analysis Control Team Enclave (ACT-E)
  - Analysis Control Element (ACE)
- The ACE and CCS are located at the unit of employment, ACT-E at the brigade combat team, and the ASAS-Light at all echelons.
- Key functions of ASAS include intelligence preparation of the battlefield and collection management; developing situation templates; producing overlays, graphics, and other products; planning intelligence collection; and interoperating with the Army's Advanced Field Artillery Tactical Data System for targeting.
- ACE functions focus on various intelligence disciplines (e.g., human and signal intelligence), data handling, and correlation.
- ASAS uses publish and subscribe services, and a query function to share data with and obtain data from other Army battle command systems.

SITUATION UNDERSTANDING | SITUATION DEVELOPMENT | MISSION PLANNING | MISSION EXECUTION

Mission

- Commanders and staff employ ASAS to provide:
  - Intelligence support to attain situational awareness
  - Execution of battle command
  - Collaboration and to attain battlefield visualization
  - Planning of operations
  - Protecting the force
- ASAS allows the intelligence staff to manage and integrate information to:
  - Support intelligence functions including enemy situation development
  - Targeting
  - Intelligence preparation of the battlefield
  - Collection management

Activity

- Developmental activities included developmental testing of ACE and Intra-Army Interoperability Certification testing for ACE and ASAS-Light.
- IOT&E began in March 2005 and concluded in April 2005, and was conducted in accordance with the DOT&E-approved Test and Evaluation Master Plan (TEMP) and test plan.
- IOT&E testing centered around a 4th Infantry Division command post exercise as part of the Joint Red Flag/Roving Sands 2005 exercise. Command posts from battalion through Unit of Employment (division) participated.
- IOT&E missions executed include high intensity offensive and defensive operations and low intensity operations including counter insurgency, and security and stability operations. IOT&E also included information assurance testing and displacement of the division tactical operations center.

Assessment

- Operational testing was adequate. Interoperability and information assurance require additional testing to confirm corrections.
- ASAS is operationally effective, suitable, and survivable with limitations. The system performed its critical missions to include:
  - Supporting the battle staff in managing the available information to develop the enemy situation, answer priority intelligence requirements, and requests for information
  - Identifying targets using automated alert functions, and then nominating them
- The ASAS system gathered and disseminated information horizontally and vertically across the family of Army Battle Command Systems. However, limitations still exist:
  - The network management and information distribution tools need improvement. Establishing the networks and information flows presented significant challenges that affected exchange of information and thus the ability of the ASAS to provide an accurate and consistent picture, be interoperable, and react to unit task reorganizations.
  - The processing speed of the workstations needs improvement. Operators expressed frustration with database updates and dissemination.
  - Interoperability shortfalls affected distribution of database updates within the ASAS and exchange of the enemy situation with the Maneuver Control System. In addition, ASAS does not currently have the proper Joint certifications to operate with other Service systems.
  - The training program did not prepare the unit to employ the ASAS as an integrated intelligence support element within the Army Battle Command System. Record test was suspended after three days to allow additional training on system operations, staff functions, and collective tasks.
  - There are system-of-systems issues that impact ASAS capabilities. These include the need for a flexible networking schema and products, and sufficient collective training focused on the integrated Army Battle Command System.

Recommendations

1. Demonstrate that all high priority software problems are corrected.
2. Obtain Intra-Army Interoperability Certification to ensure ASAS products integrate with the other Army Battle Command Systems.
3. Correct information assurance deficiencies and validate in an appropriate venue.
4. Complete Joint interoperability certification.
5. Improve the analyst tools and the process for disseminating database information between ASAS workstations to increase responsiveness to the unit's needs.
6. Resolve system-of-system shortfalls in networking products and create improved collective and sustainment training programs to increase utility to the warfighter.