

Distributed Common Ground System – Navy (DCGS-N)

Executive Summary

- The Commander, Operational Test and Evaluation Force (COTF) conducted an FOT&E of the Distributed Common Ground System – Navy (DCGS-N) Increment 1, Block 1 Early Adopters (EAs) Engineering Change Proposal (ECP) from November 2011 through August 2012.
- DOT&E evaluated DCGS-N Increment 1, Block 1 EA ECP to be effective and suitable for the Navy to conduct intelligence missions but recommended more robust Information Assurance testing.

System

- DCGS-N is the Navy Service component of the DoD DCGS family-of-systems, providing multi-Service integration of Intelligence, Surveillance, Reconnaissance, and Targeting capabilities.
- DCGS-N Increment 1 uses commercial off-the-shelf (COTS) and mature government off-the-shelf (GOTS) software, tools, and standards. It interoperates with the DCGS family-of-systems via implementation of the DCGS Integration Backbone and Net-Centric Enterprise Services standards.
- Increment 1 is divided into two blocks: Block 1 delivered initial capability on the legacy ship networks and Block 2 was intended to host the DCGS-N application on the Consolidated Afloat Networks and Enterprise Services (CANES).
- When the CANES program was delayed, the Navy proceeded to update ships equipped with the legacy networks with new COTS and GOTS hardware and software. These updated networks were called EAs. The DCGS-N program was forced to implement an ECP so that it could work with the modernized EA networks, vice the legacy networks.
- Block 2 is intended to be hosted on CANES and is expected to deliver enhanced functionalities, including newer versions of both COTS and GOTS applications.



Mission

- The operational commander will use DCGS-N to participate in the Joint Task Force-level targeting and planning processes and to share and provide Navy-organic Intelligence, Surveillance, and Reconnaissance, and Targeting data to Joint Forces.
- Users equipped with DCGS-N will:
 - Identify, locate, and confirm targets through multi-source intelligence feeds
 - Update enemy track locations and provide situational awareness to the Joint Force Maritime Component Commander by processing data drawn from available sensors

Major Contractor

BAE Systems, Electronics, Intelligence and Support (EI&S) – San Diego, California, and Charleston, South Carolina

Activity

- COTF conducted an FOT&E of DCGS-N Increment 1, Block 1 EA ECP from November 2011 through August 2012 in accordance with the DOT&E-approved test plan. The FOT&E used data from two integrated tests conducted onboard the USS *Bonhomme Richard* from November 2011 through March 2012, and onboard the USS *Nimitz* from June through July 2012. COTF published the FOT&E test report on February 26, 2013.
- From November 5 – 16, 2012, the Navy conducted Developmental Test (DT)-1, the first of three Block 2 developmental tests, in the Navy's Enterprise Engineering and Certification laboratory in San Diego, California, in

accordance with the DOT&E-approved Test and Evaluation Master Plan. On March 27, 2013, COTF published the Operational Assessment report.

- DOT&E submitted a memorandum report to the Milestone Decision Authority on the results of Block 1 EA ECP and Block 2 tests on March 25, 2013.
- The Navy will conduct two more developmental test events: DT-2 in the Navy's Enterprise Engineering and Certification laboratory and DT-3 onboard a CANES-equipped ship. The Navy will conduct an FOT&E on the same ship in 2Q/3QFY15.

NAVY PROGRAMS

Assessment

- DOT&E evaluated the Block 1 EA ECP system to be operationally effective and suitable, but Information Assurance testing was not adequate to assess survivability against cyber threats to the system.
- The first developmental test of the Block 2 software (DT-1) did not demonstrate software maturity. The Program Office is working towards the resolution of all Priority 1 and 2 software problems before the IOT&E.

Recommendations

- Status of Previous Recommendations. The Navy addressed all previous recommendations.
- FY13 Recommendations. None.