FY19 NAVY PROGRAMS

Distributed Common Ground System – Navy (DCGS-N) Fleet Capability Release (FCR) 1

DCGS-N - Distributed Common Ground System - Navy

FNMOC - Fleet Numerical Meteorology and Oceanography Center

DDG - Destroyers

Executive Summary

- The Navy conducted a series of integrated developmental/operational test (DT/OT) events from September 2018 through February 2019, for the Distributed Common Ground System Navy (DCGS-N) Increment 2, Fleet Capability Release (FCR) 1.
- Based on the poor performance during testing, the Navy decided not to field Increment 2, FCR 1 after the OT, and also canceled plans for testing future Increment 2 FCRs.
- The Navy will continue to deliver small incremental updates to the currently fielded DCGS-N Increment 1 capabilities.

Navy interfaces with Intelligence Community (IC) architecture via Navy Ashore Data Analytics Node (DAN) or individual Afloat Nodes located forward on afloat force-level units Other DoD Data Nodes IC Big Data Node(s) e.g., FNMOC DCGS FoS Airborne ISR DCGS-N Data Analytics Node Carrier Strike Group Legend TACAIR **Expeditionary Strike Group** or JFMĆC afloat DCGS-N Inc 2 Nodes C Cloud Afloat Node forward Cloud Access BMD - Ballistic Missile Defense IC - Intelligence Community

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 is fielded to the Force-Level ships and shore sites.
- The Navy planned to deliver DCGS-N Increment 2 in five FCRs. FCR 1 was designed to deliver situational awareness functionality in an updated, cloud-based architecture to the DCGS-N Data Analytics Node (DAN). The DAN processes, correlates, and fuses all source data and provides a web-based intelligence picture.

Mission

• Operational commanders use DCGS-N to participate in the Joint Task Force-level targeting and planning processes and to share and provide Navy-organic intelligence, reconnaissance, surveillance, and targeting data to Joint Forces.

- Units equipped with DCGS-N will:
 - Identify, locate, and confirm targets through multi-source intelligence feeds

ISR - Intelligence, Surveillance and Reconnaissance

JFMCC - Joint Force Maritime Component Command

MIOC - Maritime Intelligence Operations Center

TACAIR - Tactical Air Support

 Update enemy track locations and provide situational awareness to the Joint Force Maritime Component Commander by processing data drawn from available sensors

Major Contractors

- Leidos San Diego, California, and Charleston, South Carolina
- General Dynamics Information Technology San Diego, California
- SRC, Inc. San Diego, California, and Charleston, South Carolina

Activity

• The Navy Commander, Operational Test and Evaluation Force (OPTEVFOR) and the Program Office conducted a series of

integrated DT and OT events from September 2018 through February 2019.

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- OPTEVFOR conducted a Cooperative Vulnerability and Penetration Assessment at the Naval Information Warfare Center – Pacific (NIWC-PAC), September 24 – 28, 2018.
- OPTEVFOR and the Program Office conducted an integrated DT/OT event in the NIWC-PAC laboratory, October 16 – 21, 2018.
- OPTEVFOR conducted integrated DT/OT at the Commander, Fourth Fleet Maritime Information Operations Center, January 21 24, 2019.
- The OPTEVFOR cybersecurity test team conducted an Adversarial Assessment at NIWC-Atlantic, February 4 8, 2019.
- DOT&E published the DCGS-N FCR 1 operational test report on August 16, 2019.
- Based on the poor performance of FCR 1 during testing, the Navy decided not to deploy FCR 1. The Navy also stopped test planning for FCR 2. The Navy plans to continue integrating updated technologies to Increment 1 in small increments.

 The Navy is working to update the acquisition strategy and the Test and Evaluation Master Plan.

Assessment

- DCGS-N FCR 1 could not perform the required functions during the integrated test events.
- The agile testing process did not adequately test external interfaces. The DT strategy worked as designed and identified critical data integrity shortfalls with the interfacing systems providing air and sea tracks. However, the test schedule did not include the time to fix major performance shortfalls between DT and OT.
- OT was adequate to inform the acquisition decision-makers.

Recommendation

1. The Navy should continue to work with DOT&E to conduct adequate testing of DCGS-N updates.