

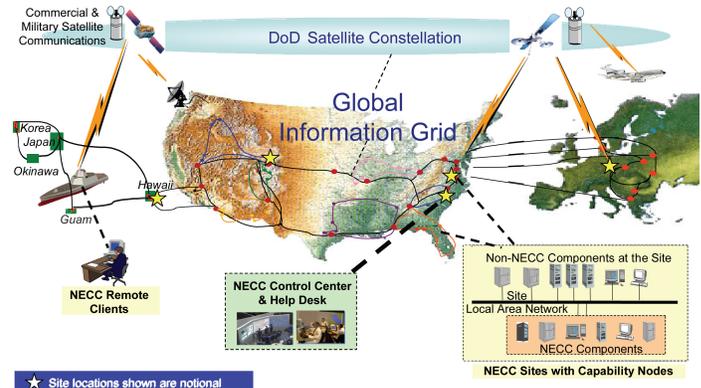
Net Enabled Command Capability (NECC)

Executive Summary

- The Net Enabled Command Capability (NECC) program continues in the Technology Development phase. In July 2008, the Defense Acquisition Executive authorized continued work to refine cost estimates, confirm technical maturity, and clarify management provisions prior to entry into the System Development and Demonstration phase.
- Program Decision Memorandum II in November 2007 focused the NECC program on development of an initial increment of capability that will enable the retirement of the Global Command and Control System-Joint family of systems.
- During 3Q-4QFY08, the NECC program completed an end-to-end exercise of development and test processes that provided significant lessons. The program demonstrated the ability to share, access, and display information using a service-oriented architecture across the Global Information Grid; however, the software was unstable and the delivered capability would not have had sufficient utility to warrant fielding. The demonstration highlighted that fielding of user-defined operational capability sets could better align the expenditure of test and evaluation resources with delivered capability.
- The NECC Joint Program Management Office plans to complete an event-driven program leading to a Milestone B decision in 2009.

System

- NECC is the DoD's principal Command and Control Capability (C2C) that will provide access to a net-centric strategic, operational, and tactical environment.
- NECC is a family of net-centric services comprised of software applications and databases implemented using service-oriented architecture technology.
- Functionality is provided through a software architecture composed of Capability Modules that are collections of net-centric services or data providing an operationally useful capability.
- Operators will access NECC via a standard Global Information Grid computing node on a physical network architecture consisting of operator clients and sites/nodes that access Capability Modules (on both classified and non-classified networks).
- The objective "mission space" for the NECC encompasses command capabilities and command and control (C2) activities that extend from the National Military Command



System (NMCS) through the domain of the existing Global Command and Control System (GCCS) Family of Systems (FoS).

- The DoD will develop NECC in three increments:
 - Increment 1 is intended to provide net-centric capabilities which will replace the existing GCCS FoS. Beginning in FY10 and completing in FY17, the DoD will initially extend NECC capabilities to a Service Joint Task Force at one geographic Combatant Command, with subsequent NECC fieldings to users where GCCS FoS is currently accessed and used.
 - Increments 2 and 3 will provide NECC capabilities beyond that of the current GCCS FoS.

Mission

- Joint Commanders will use the NECC to accomplish joint global command and control.
- Commanders intend to use the NECC to:
 - Link the National Command Authority to the Joint Task Force and Service/functional components down to the unit level
 - Access, display, and understand information necessary for the warfighter to make efficient, timely, and effective decisions
 - Achieve decision superiority and to execute joint operations planning

Prime Contractor

- Government Integrator (DISA)

Activity

- Program Decision Memorandum II in November 2007 defined the scope of NECC Increment 1 to include transitioning the Global Command and Control System FoS to NECC service-oriented architecture capabilities. The FoS Transition Plan was developed to establish the current capability and support transition planning.
- The NECC Acquisition Decision Memorandum of February 1, 2008, authorized several activities including exercising developmental and operational test processes and fielding decision procedures to support efforts to better define Increment 1, providing evidence of technical maturity, and gathering data to improve the NECC cost estimate. The program exercised these processes using the initial “spiral one” version of five NECC capability modules.
- The pilot effort included planning, conducting, and reporting for two test activities: a Developmental Test B1 conducted by the Navy Component Program Management Office from December 2007 through May 2008 and an Early User Test conducted by the U.S. Army Test and Evaluation Command in June 2008.
- The Defense Acquisition Executive reviewed the NECC program in July 2008 and issued the NECC Acquisition Decision Memorandum of August 16, 2008, authorizing continued NECC investment and directing further refinement of cost estimates, confirmation of technical maturity, and clarification of management provisions in order to inform a Milestone B decision in FY09.

Assessment

- The test activities confirmed for DOT&E that the program processes delivered a service-oriented architecture that was capable of sharing, accessing, and displaying information across a distributed network. Testing also confirmed that the delivered “spiral one” capability was unstable and would not

have had sufficient operational utility to warrant fielding. As demonstrated, DOT&E assesses that the original NECC program processes could lead to the development, operational testing, and fielding of entities that of themselves have minimal operational utility.

- The proposed test process demonstrated significant challenges with supporting the on-demand testing and fielding of individual capability modules. The Joint Program Management Office’s emphasis on fielding individual NECC capability modules does not efficiently align expenditure of test and evaluation resources with delivered capability.
- Both the test community and the operational users identified the need to shift the focus from testing and fielding individual NECC capability modules to testing and fielding user defined operational capability sets that provide utility to the warfighter.
- The existing Test and Evaluation Master Plan (TEMP) no longer accurately describes the test strategy that is emerging from lessons learned.

Recommendations

- Status of Previous Recommendations. The NECC program addressed one of the three FY07 recommendations. The recommendations to update the TEMP at Milestone C and develop Annexes to define an adequate and executable test strategy remain valid.
- FY08 Recommendations. The NECC Program Management Office should:
 1. Define and implement an integrated test strategy that emphasizes fielding user-defined operational capability sets that provide discrete capabilities to the warfighter rather than individual capability modules.
 2. Update the TEMP to support the event-driven Milestone B and Milestone C, as required.