

## Global Combat Support System – Marine Corps (GCSS-MC)

### Executive Summary

- In November 2009, the Marine Corps Operational Test and Evaluation Activity (MCOTEA) conducted a developmental/operational test of Release 1.1 with representative users in a laboratory environment in Dumfries, Virginia. The developmental/operational test was adequate to demonstrate the readiness to proceed to IOT&E.
- MCOTEA conducted the IOT&E of Release 1.1 from May 24 – August 6, 2010, in Dumfries, Virginia, and in Okinawa, Japan, with actual users in a live environment at the Third Marine Expeditionary Force (III MEF).
- Based on the IOT&E data, DOT&E assessed the system to be operationally effective and operationally suitable.

### System

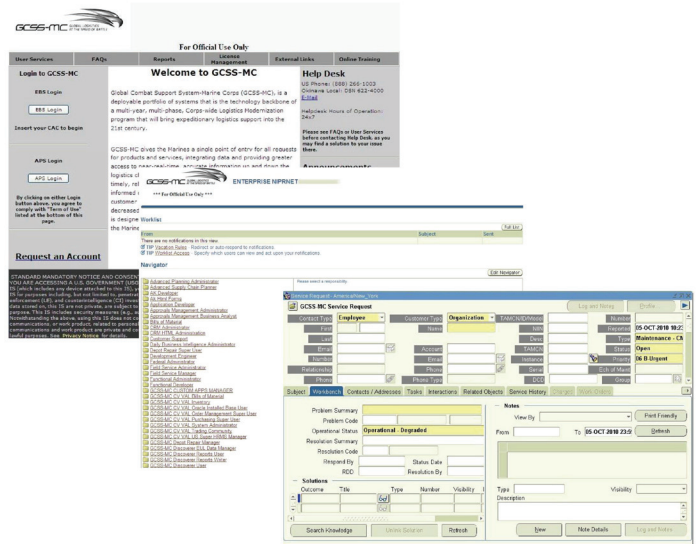
- The Global Combat Support System – Marine Corps (GCSS-MC) is the Marine Corps component of the joint GCSS Family of Systems. Its evolutionary acquisition strategy comprises three blocks, with Block 1 having two sub-releases that support garrison and deployed operations. Each subsequent Block will build on the Block 1 functions and capabilities and retire additional legacy systems.
- GCSS-MC is a commercial off-the-shelf Enterprise Resource Planning (ERP) system that uses the Oracle E-Business Suite to provide logistics chain management.

### Mission

- The Marine Air-Ground Task Force will use GCSS-MC to obtain a strategic and tactical view of logistics chain

### Activity

- In November 2009, MCOTEA conducted a developmental/operational test event for GCSS-MC Release 1.1 with representative users in a laboratory environment in Dumfries, Virginia. This test event provided information in support of a Milestone C limited deployment decision.
- MCOTEA Information Assurance (IA) evaluators conducted independent verification and validation testing to assess system survivability at locations in Virginia during the period spanning May 3-28, 2010.
- MCOTEA conducted an IOT&E of Release 1.1 from May 24 – August 6, 2010, in Dumfries, Virginia, and in Okinawa, Japan, with actual users in a live environment at III MEF.



management in both garrison and deployed expeditionary environments.

- The initial block provides request management, supply, maintenance, financial management, and system administration functions.

### Major Contractor

Oracle Corporation – Reston, Virginia

### Assessment

- The developmental/operational test was adequate to demonstrate that Release 1.1 was potentially effective. The developmental/operational test uncovered some IA vulnerabilities in the government laptops, but these were corrected prior to the IOT&E.
- Based on IOT&E results, DOT&E assessed the system to be operationally effective and operationally suitable.
- During the IOT&E, Release 1.1 reduced supply times, improved financial responsiveness, and increased the accuracy of certain maintenance-related information compared to the legacy systems. However, there were difficulties with the GCSS-MC interfaces with the web-based Storage, Retrieval, Automated Tracking, Integrated System (STRATIS) and with

the Total Force Structure Management System (TFSMS) that resulted in inventory inaccuracies. Additional personnel resources will be needed for manual intervention to address the interface shortfalls.

- Release 1.1 demonstrated high availability. The system experienced nine operational mission failures but only one affected the entire system. Operational mission performance failed only 0.2 percent of the time.
- More than 100 trouble tickets reported to the Helpdesk remained open at the end of test. Eight of these were severity level two deficiencies. Many trouble tickets cited long delay times that could indicate inadequate network communications.
- Helpdesk policies and procedures were not available in sufficient detail and resulted in the Helpdesk sometimes closing trouble tickets before they were resolved to the users' satisfaction.
- While the formal classroom training appeared to be adequate to meet the threshold requirements, 35 percent of the users felt confident that the training prepared them to operate the system in their assigned role.
- The IA penetration team determined the IA risk to GCSS-MC to be low based on the system's ability to protect, detect, react,

and restore information. However, the testing did not include an IA penetration test on the Defense Information Systems Agency (DISA) Defense Enterprise Computing Center in Mechanicsburg, Pennsylvania, which hosts GCSS-MC. Furthermore, there is no disaster recovery plan in place to protect vital logistics business processes in the event of catastrophic destruction of the host location. GCSS-MC data, however, are backed up and stored at an alternate DISA location and can be used to restore services in case of host location destruction.

## Recommendations

- Status of Previous Recommendations. This is the first annual report for this program.
- FY10 Recommendations. The Marine Corps should:
  1. Develop a plan for improving interfaces, training, and helpdesk procedures.
  2. Address the disaster recovery plan and arrange for a comprehensive IA test, including a penetration test in conjunction with testing of Release 1.2.