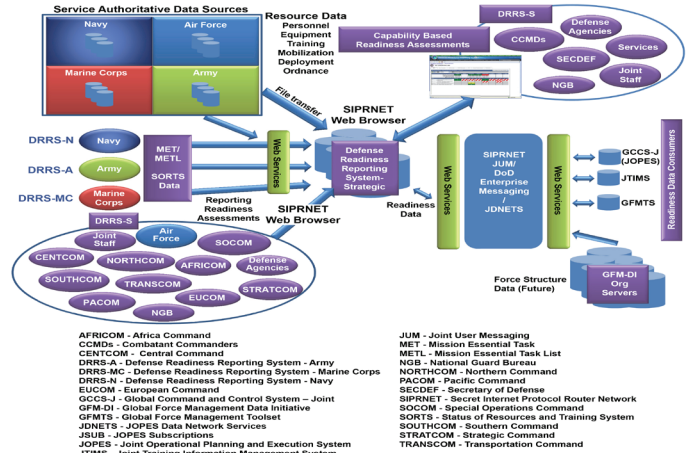


# Defense Readiness Reporting System (DRRS)

## Executive Summary

- The Joint Interoperability Test Command (JITC) conducted an operational assessment (OA) of the Defense Readiness Reporting System – Strategic (DRRS-S) from April 1 through May 31, 2013. Additionally, JITC and the Navy Information Operations Command (NIOC) conducted an Information Assurance (IA) assessment from November 19, 2012, through April 12, 2013. Based upon the system deficiencies and lack of functionality demonstrated during the OA, the system is not ready to proceed to IOT&E.
- Defense Readiness Reporting System – Army (DRRS-A), DRRS – Marine Corps (DRRS-MC), and DRRS – Navy (DRRS-N) mission readiness and unit status data exchanges with DRRS-S were successful. However, DRRS-N mission readiness data exchanges with DRRS-S were not fully assessed because the Navy Mission Essential Task List data were not following the data route described in the requirements documents and the JITC test instrumentation was configured to capture data from the documented route. The actual data route was not identified until after the test was complete.
- Air Force and joint reportable units were able to input, manage, and assess mission readiness data using the DRRS-S system. Air Force users successfully entered unit status data, including the Commander’s and Personnel ratings, within DRRS-S using the Air Force Input Tool (AF-IT). However, additional AF-IT development is required to allow input of the Resource, Supply, and Training ratings.
- DRRS-S adequately supports the Joint Force Readiness Review and Quarterly Readiness Report to Congress.
- JITC partially assessed the DRRS to Joint Operational Planning and Execution System (JOPES) interface, critical to Global Status of Resources and Training System (GSORTS) retirement, showing that exchanged data were accurate and complete. However, the DRRS-S to Global Combat Support System – Joint (GCSS-J) interface, also critical to GSORTS retirement, was not available during the OA.
- DRRS-S met reliability, availability, and maintainability thresholds. The DRRS-S help desk effectively supported both the system under test and production system. Review of help desk logs showed that the system employed effective patch management and that the software was mature. Users were satisfied with system training and documentation.
- JITC discovered a number of IA vulnerabilities during IA testing. The DRRS program manager must resolve or mitigate all vulnerabilities prior to IOT&E.



## System

- DRRS-S is a Secret Internet Protocol Router Network (SIPRNET)-accessible web application designed to replace the GSORTS, a Force Readiness component of GCCS-J.
- The Fleet Forces Command hosts DRRS-S on commercial off-the-shelf (COTS) hardware consisting of a server enclave of application and database servers using Microsoft Windows® operating systems.
- DRRS-S receives and processes readiness reports and data from Service-specific increments of the larger DRRS enterprise including DRRS-A, DRRS-MC, and DRRS-N. Combatant Commanders (CCDRs) (and subordinates they direct), DoD agencies, and Air Force units report directly within DRRS-S.

## Mission

- CCDRs, Military Services, Joint Chiefs of Staff, Combat Support Agencies (CSAs), and other key DoD users (e.g., SECDEF and National Guard) use the DRRS collaborative environment to evaluate the readiness and capability of U.S. Armed Forces to carry out assigned and potential tasks.
- Reporting organizations input both mission readiness and unit (i.e., GSORTS) readiness data into DRRS-S and use DRRS-S to make mission readiness assessments against standardized missions and tasks.

## Major Contractor

InnovaSystems International, LLC – San Diego, California

## Activity

- JITC conducted an OA on DRRS-S from April 1 through May 31, 2013. JITC and the NIOC conducted an IA assessment from November 19, 2012, through April 12, 2013.
- In October 2013, DOT&E submitted an OA report on DRRS-S to the Under Secretary of Defense on Personnel and Readiness.
- JITC conducted all testing in accordance with the DOT&E-approved Test and Evaluation Master Plan and OA plan.

## Assessment

- Service DRRS-A and DRRS-MC mission readiness data exchanges with DRRS-S were accurate, timely, and complete. Air Force and joint reportable units were able to input, manage, and assess mission readiness data using the DRRS-S system. Following the OA, JITC discovered the DRRS-N was exchanging mission readiness data in the legacy format and not in accordance with the data route described in the requirements documents. JITC test instrumentation was configured to capture data from the documented route and as a result, JITC was not able to fully assess Navy mission readiness data exchanges.
- Service DRRS-A, DRRS-MC, and DRRS-N unit status data exchanges with DRRS-S were accurate, timely, and complete. Air Force users successfully entered unit status data, including the Commander's and Personnel ratings, within DRRS-S using the AF-IT. Additional AF-IT development is required to allow input of the Resource, Supply, and Training ratings. During testing, an Air Force policy changed the personnel readiness rating calculation method, creating uncertainty about calculation accuracy among users, invalidating satisfaction ratings. The incomplete AF-IT and calculation method changes prevented a full evaluation.
- JITC verified unit registration during developmental testing. However, no new units completed unit registration during the operational test window in either GSORTS or DRRS-S, preventing a full evaluation.
- DRRS-S adequately supports the Joint Force Readiness Review and Quarterly Readiness Report to Congress.
- DRRS-S business intelligence capabilities allow users to aggregate, filter, and display data to support mission assessments. Features such as data views, watch lists, and groups were effective. However, the user success rate with quick look reports was 61 percent and user satisfaction with the query tool was 46 percent.
- The DRRS-S historical data warehousing capability, which allows users to query archived readiness data to evaluate trends, was used once during operational testing and could not be characterized.
- JITC partially assessed the DRRS to JOPES interface, critical to GSORTS retirement, during testing. Results show that exchanged data were accurate and complete. However, JITC did not evaluate timeliness. The Defense Information Systems Agency is developing capabilities to check and restore synchronization between DRRS and JOPES. Additional testing is required to fully evaluate the DRRS to JOPES interface.
- The DRRS-S to GCSS-J interface, also critical to GSORTS retirement, was not available during the test. The interface is currently under development and will be available for test in 1QFY14.
- DRRS-S met reliability, availability, and maintainability thresholds. The DRRS-S help desk effectively supported both the system under test and production system during the operational test window. A review of help desk logs showed that the system employed effective patch management and that the software was mature. Users were satisfied with system training and documentation.
- JITC discovered a number of IA vulnerabilities during IA testing. The DRRS program manager must resolve or mitigate all vulnerabilities prior to IOT&E.
- Based upon the system deficiencies and lack of functionality, the system is not ready to proceed to IOT&E.

## Recommendations

- Status of Previous Recommendations. This is the first annual report for this program.
- FY13 Recommendations.
  1. Once DRRS-S includes all capabilities required for GSORTS retirement, JITC should conduct IOT&E to determine the operational effectiveness, suitability, and survivability.
  2. A certified Red Team must conduct penetration and exploitation testing to verify correction of IA findings and evaluate the DRRS-S ability to protect, detect, react, and restore against an operationally relevant cyber-security threat.