| Exhibit R-2, RDT&E Budget Item Justification | | | Date: February 2006 | | | |
|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY | | | R-1 ITEM NOMENCLATURE | | | |
| RDT&E, Defense-Wide/07 | | | Distributed Common Ground/Surface Systems/PE 0305208K | | | |
| COST (in millions) | FY05 | FY 06 | FY07 | FY08 | FY09 | FY10 | FY11 |
| Distributed Common Ground/Surface Systems (DCGS)/NF1 | 0.000 | 0.000 | 7.451 | 15.960 | 3.281 | 3.386 | 3.794 |

A. Mission Description and Budget Item Justification: The Joint Interoperability Test Command (JITC), as the sole joint interoperability certification agent, will establish and maintain a Distributed Development and Test Enterprise (DDTE) for the DoD Distributed Common Ground/Surface System (DCGS) Program. DCGS is an integral and critical component of the overall DoD Intelligence, Surveillance, and Reconnaissance (ISR) interoperability and data integration strategy. The DCGS provides world-wide ground/surface capabilities to receive, process, exploit, and disseminate data from airborne and national reconnaissance sensors/platforms and commercial sources. The ability for any user to discover, access, and understand the data are key tenets of network-centric operations which is the future of DCGS operations.

JITC will implement the DDTE providing DCGS an operationally relevant environment by establishing and maintaining connectivity between National Agency and Service facilities at unclassified, collateral, Sensitive Compartmented Information (SCI), and coalition levels. JITC will coordinate with the Services and Agencies on integrating modeling and simulation capabilities, and performing Joint/DCGS event coordination, configuration, and integration functions on the DDTE. This will enable improved systems engineering and test and evaluation throughout all phases of the DCGS life-cycle.

DCGS will use the DDTE to integrate architecture, standards, and capabilities for implementation of the DCGS Integration Backbone (DIB) and support the migration to net-centricity, including convergence with Net-Centric Enterprise Services (NCES), for the following DCGS programs: DCGS-Army (DCGS-A), DCGS-Navy (DCGS-N), Air Force DCGS (AF DCGS), DCGS-Marine Corps (DCGS-MC). National Agency capabilities supporting DCGS including Imagery Intelligence (IMINT), Signals Intelligence (SIGINT), Measurement and Signature Intelligence (MASINT) and Human Intelligence (HUMINT) capabilities will also be integrated and tested in the DDTE. The DCGS programs will use the DDTE to improve / validate interoperability with the reconnaissance platforms and sensors, and integration into the Joint Command and Control environment.

JITC will develop a formal interoperability certification program and provide interoperability testing service to the DCGS program manager to document interoperability test requirements, provide standards conformance and interoperability test capabilities, develop standards conformance and interoperability test planning documents, conduct standards conformance and interoperability test events, develop DCGS program reporting documents, and conduct joint interoperability certification. Standards addressed for DDTE will include those defined in coordination with DISA for Joint Command and Control (JC2) and NCES, as well as Common Data Link (CDL), Intelligence Broadcast System (IBS),

| Exhibit R-2, RDT&E Budget Item Justification | | | Date: February 2006 | | | | |
|---|---|---|---|---|---|---|---|
| **APPROPRIATION/BUDGET ACTIVITY** | | | **R-1 ITEM NOMENCLATURE** | | | | |
| RDT&E, Defense-Wide/07 | | | Distributed Common Ground/Surface Systems/PE 0305208K | | | | |
| COST (in millions) | FY05 | FY 06 | FY07 | FY08 | FY09 | FY10 | FY11 |
| Distributed Common Ground/Surface Systems (DCGS)/NF1 | 0.000 | 0.000 | 7.451 | 15.960 | 3.281 | 3.386 | 3.794 |

National Imagery Text Format (NITF), LINK 11/11B/16, United States Message Text Format (USMTF), Extensible Markup Language (XML), and Information Assurance (IA).

B.  Program Change Summary:

|  | FY 05 | FY 06 | FY 07 |
|---|---|---|---|
| Previous President's Budget | 0.000 | 0.000 | 0.000 |
| Current President's Budget | 0.000 | 0.000 | 7.451 |
| Total Adjustments | 0.000 | 0.000 | 7.451 |

Change Summary Explanation:

FY 2007 adjustment due to identified need for interoperability certification (IAW DOD policy & guidance) and a distributed development and test enterprise.

C.  Other Program Funding.  N/A

D.  Acquisition Strategy.  DCGS uses an evolutionary acquisition approach.  JITC will support the effort by leveraging its existing three prime contracts, with multiple sub-contracts, to support this project.  These competitively awarded, performance-based, non-personal-services contracts provide maximum flexibility for JITC supporting its' numerous customers for cost and technical effectiveness, and allows for expansion and contraction of staff years as workload expands and contracts.  The current prime contractors that will support this effort are Northrop Grumman Mission Systems and INTEROP Joint Venture.

E.  Performance Metrics.
    Number / Percentage of DDTE supported DCGS Systems/Capabilities
    Number / Percentage of standard compliant DDTE supported DCGS System/Capabilities
    Number / Percentage of Interoperability certified DDTE supported DCGS System/Capabilities
    Number / Percentage of DDTE supported DCGS Systems/Capabilities achieved IOC

UNCLASSIFIED

| Exhibit R-3 Cost Analysis | | | | | | DATE: February 2006 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **APPROPRIATION/BUDGET ACTIVITY** <br> RDT&E, Defense-Wide/07 | | | | **PROGRAM ELEMENT** <br> Distributed Common Ground/Surface Systems/PE 0305208K | | | | **PROJECT NAME AND NUMBER** <br> Distributed Common Ground/Surface Systems/NF1 | | | |

Test and Evaluation

| Cost Category | Contract Method & Type | Performing Activity & Location | Total PYs Cost | | FY 06 Cost | FY 06 Award Date | FY 07 Cost | FY 07 Award Date | Cost to Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Engineering/Technical Services | FFP/LOE | INTEROP Joint Venture, Fort Huachuca, AZ | N/A | | N/A | N/A | 6.701 | Oct 06 | Cont'g | Cont'g | Cont'g |
| | FFP/LOE | Northop Grumman Mission Systems Fort Huachuca, AZ | N/A | | N/A | N/A | 0.750 | Oct 06 | Cont'g | Cont'g | Cont'g |
| Subtotal Contracts | | | | | | | 7.451 | | | | |
| In-House | | | | | | | | | | | |
| Total Project | | | | | | | 7.451 | | | | |

| **Exhibit R-4 Schedule Profile** | | | | | | | | | | | | | | | | | | | | | | | **Date: February 2006** | | | | |

| **Appropriation/Budget Activity**<br>**RDT&E, Defense-Wide/07** | | | | **Program Element Number and Name**<br>**Distributed Common Ground/Surface Systems**<br>**/ PE 0305208K** | | | | | | | | | | | | | | | | **Project Number and Name**<br>**Distributed Common**<br>**Ground/Surface Systems / NF1** | | | | | | | |

| **Fiscal Year** | | | | **2005** | | | | **2006** | | | | **2007** | | | | **2008** | | | | **2009** | | | | **2010** | | | | **2011** | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |

DCGS T&E IPT

Establishment of Infrastructure

Connectivity to Other Testbeds & Test Event Conduct

O&M and Event Conduct

| Exhibit R-4a Schedule Detail | | DATE: February 2006 | |
|---|---|---|---|
| **APPROPRIATION/BUDGET ACTIVITY**<br>RDT&E, Defense-Wide/07 | **PROGRAM ELEMENT**<br>Distributed Common Ground/Surface<br>Systems/PE 0305208K | **PROJECT NAME AND NUMBER**<br>Distributed Common Ground/Surface<br>Systems/NF1 | |

| Schedule Profile | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 |
|---|---|---|---|---|---|---|---|
| DCGS T&E IPT | | | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q |
| Establishment of Infrastructure | | | 1-4Q | | | | |
| Connectivity to Other Testbeds<br>& Test Event Conduct | | | | 1-4Q | | | |
| O&M and Event Conduct | | | | | 1-4Q | 1-4Q | 1-4Q |