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Exhibit R-2, RDT&E Budget Item Justification						February 2008	
Appropriation/Budget Activity RDT&E, Defense Wide, BA 06			R-1 Item Nomenclature Joint Mission Environment Test Capability (JMETC), PE 0605100D8Z				
Cost (\$ in millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Total PE Cost	10.409	6.865	8.834	9.523	10.314	10.477	10.639

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Joint Mission Environment Test Capability (JMETC) Program provides the infrastructure for distributed testing of systems during development. The JMETC program implements the infrastructure capabilities defined in the Testing in a Joint Environment Roadmap to provide Acquisition Program Managers a robust nation-wide capability to “Test like We Fight.” JMETC provides a persistent distributed test and evaluation (T&E) capability that otherwise would not be readily available to Service/Component development programs. This program is funded within the RDT&E Management Support Budget Activity because it is intended to provide test capability in support of RDT&E programs.

JMETC creates a common corporate capability to link live systems with virtual and constructive representations to generate a realistic joint mission test environment for the system(s) being tested. JMETC is a widely applicable, persistent, service provider for Department acquisition and net-centric programs. Key JMETC products include readily available connectivity over existing Department networks, standard data transport solutions, tools and utilities for planning and conducting distributed integrations, and a reuse repository. This common integration capability ensures compatibility between JMETC and the Joint National Training Capability (JNTC), streamlining reuse of technical resources across test and training communities and, in the future, enabling combined test and training exercises. JMETC capabilities will eventually migrate to a mature Global Information Grid (GIG).

By linking distributed facilities, JMETC allows customers to efficiently evaluate their warfighting capability in a realistic joint environment. This enables a customer-defined joint mission test environment for systems engineering and testing, extensible to training and experimentation, in a timely and cost effective manner.

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<p>JMETC's institutional funding builds, maintains, and operates the JMETC, and pays for persistent availability of national connectivity for testing; data communications middleware; identification of interface standards; common software tools and components; and a data archive and reuse repository. It also funds JMETC program management, facilities, equipment, operating costs, and special studies and analysis related to test capabilities and infrastructure. Key attributes of the JMETC include: persistency; interoperability; reuse; various combinations of distributed capabilities (reconfigurable infrastructure to meet customer requirements); Modeling and Simulation (M&S) linkage; Live Virtual Constructive (LVC) integration; and common support to both Service and Joint needs. System engineering, training, and experimentation will all benefit from a corporate JMETC developed for T&E.</p> <p>The Test Resource Management Center (TRMC) is the Department's lead for the JMETC program, and oversees both its development and its operations.</p> <p><u>Program Accomplishments and Plans:</u></p> <p><u>FY 2007 Accomplishments:</u></p> <ul style="list-style-type: none">- Initiated the JMETC program. Established the JMETC Program Office.- Established the JMETC Virtual Private Network (VPN) and associated security agreements on the Secure Defense Research and Engineering Network (SDREN). Integrated 8 test sites into the JMETC VPN network. Sites were determined on the basis of customer requirements and potential for reuse. Test Events supported include Integral Fire 07 Test Event Air Force Integrated Collaborative Environment (AF-ICE), Joint Forces Command (JFCOM), and Joint Test and Evaluation Methodology (JTEM), and the InterTEC Spiral 2 Test Event. Initiated requirement analysis planning for FY08 events in support of CVN-21, Single Integrated Air Picture (SIAP), and Future Combat Systems (FCS) Combined Test Organization event.- Used the Aggregation Router, originally sponsored by JFCOM/JNTC, to integrate and reuse former AF-ICE and Joint Systems Integration Command (JSIC) sites to support Integral Fire 07.- Established Customer Support to provide a single-face-to-the-customer for using the JMETC. Customer Support provides programs and test ranges with information about JMETC capabilities, standards, interfaces, tools, available nodes, and expertise in planning and conducting distributed tests. JMETC assists acquisition program managers and test organizations in designing their distributed test plans to exploit the joint mission infrastructure capabilities.		

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<ul style="list-style-type: none"> - Established JMETC Users' Group to provide technical user input to the JMETC Program. - Collaborated with the AF-ICE to demonstrate efficiencies through use of the JMETC provided infrastructure. - Assessed DoD Joint Distributed Test Capabilities status and presented the results to the Joint Capabilities Board. - Initiated long range planning efforts to support future test events for Multi-Mission Aircraft (MMA), DD1000, CVN-21, FCS, and Joint Strike Fighter (JSF) programs. - Initiated development of the Reuse Repository to store software interfaces, tools, utilities, and test metadata making all available to the test community for reuse. The Repository's purpose is to improve the efficiency in using the JMETC and other distributed test assets that are to operate in a joint mission environment. It will primarily support programs and net-centric capabilities that are either a part of or interfaces the joint mission infrastructure. <p><u>FY 2008 Plans:</u></p> <ul style="list-style-type: none"> - Provide support to customer events, particularly InterTEC and CVN-21 (Jun 08, Aug 08), and FCS (Jul 08). Assist the Net-Enabled Command Capability (NECC) Program with distributed test tools and expertise for planning their distributed events. - Establish the infrastructure needed to support the SIAP event in October/November 08. - Assume former Joint Distributed Engineering Plant (JDEP) functions supporting connectivity and distributed test infrastructure for the SIAP program. - Continue collaboration with AF-ICE to leverage efficiencies through use of the JMETC provided infrastructure. - Cultivate relationship with Navy Distributed Engineering Plant (DEP), supporting their distributed events where connectivity outside the Navy is required. - Continue providing requirements analysis support to programs such as DD1000, MMA, and Littoral Combat Ship. - Working with the JMETC Users Group, facilitate development and incorporation of the highest priority improvements for the middleware and standard interfaces to meet customer requirements. - Continue development of the JMETC Reuse Repository to store software interfaces, tools, utilities, and test metadata making all available to the test community for reuse. - Continue to develop Customer Support providing programs and test ranges with information about JMETC capabilities, standards, interfaces, tools, available nodes, and expertise in planning and conducting distributed tests. 		

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<ul style="list-style-type: none"> - Expand the JMETC VPN from 8 sites (established in FY07) to 24 sites (16 new sites). Connections will continue to use the SDREN. Continue to use the JNTC - sponsored Network Aggregator at Patuxent River NAS; providing the capability of bridging the JMETC VPN to sites on other classified networks (i.e., JNTC Joint Training and Experimentation Network (JTEN), DISN Secret Internet Protocol Router Network (SIPRNET), AF-ICE Enclave, Army Test and Evaluation Command (ATEC) Test and Integration Network (ATIN) Enclave, and other DREN classified enclaves). Begin coordination with HPCMO to develop plans to transition to the Global Information Grid (GIG (DISN-Core)) when SDREN transitions. - Monitor the development of existing Service tools for joint application and commercially available software tools for utilization with the standard distributed test support tools. - Begin development and testing of “Best of Breed” distributed test tools selection process. <p><u>FY 2009 Plans:</u></p> <ul style="list-style-type: none"> - Provide support to approximately 3major customer events, such as SIAP, InterTEC Spiral 3, FCS, and CVN-21and 3-10 minor test activities. Assist the NECC Program with distributed test tools and expertise for planning their distributed events. - Continue out reach efforts to new programs with requirements to demonstrate compliance with Net-Ready Key Performance Parameter requirements. - Continue planning support to on-going programs, particularly SIAP, CVN-21, FCS, NECC, and InterTEC. - Provide planning support to JSF and MMA for their distributed test events. - Continue collaboration with AF-ICE and Navy DEP distributed test events to leverage efficiencies through use of the JMETC infrastructure. - Continue to develop the Reuse Repository to store software interfaces, tools, utilities, and test metadata making all available to the test community for reuse. - Expand the JMETC VPN from 24 sites (VPN at end of FY07) by 2 to 7 sites, based upon customer requirements and potential for reuse. Connections will continue to use the SDREN. Continue coordination with HPCMO to develop plan to transition to the Global Information Grid (GIG (DISN-Core)) when SDREN transitions. - Begin selection of “Best of Breed” distributed test tools selection process thru the JMETC Users Group. 		

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B. (U) <u>PROGRAM CHANGE SUMMARY:</u>			
	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Previous President's Budget:	10.539	6.925	8.850
Current BES/President's Budget:	10.409	6.865	8.834
Total Adjustments:			
Congressional Program Adjustments:		-0.060	
Congressional Rescissions:			
Congressional Increases:			
Other Program Adjustments:	-0.130		-0.016
C. (U) <u>OTHER PROGRAM FUNDING:</u> N/A.			
D. (U) <u>ACQUISITION STRATEGY:</u> N/A.			
E. (U) <u>PERFORMANCE METRICS:</u>			
<ul style="list-style-type: none"> - Establishment of initial capability to support major acquisition program test requirements, providing distributed capability to test systems and demonstrating required joint capability. - Successful use of integration software compatible with the JNTC and Joint Training infrastructure. - Number of test sites/locations that are reused to support distributed tests using the JMETC infrastructure. 			