

## UNCLASSIFIED

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>				Date: May 2009				
Appropriation/Budget Activity RDT&E, Defense-Wide/05				R-1 Item Nomenclature Joint Command and Control Program (JC2)/PE 0303158K				
Cost (\$ in millions)	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Joint Command and Control Program (JC2)/JC01	56.461	56.618	49.047					

**A. Mission Description & Budget Item Justification**

The Net-Enabled Command Capability (NECC) is the DoD's principal command and control capability focused on providing the Warfighter with the data and information needed to make timely, effective and informed decisions. Commanders use NECC to adapt rapidly to changing mission needs by defining and tailoring their information environment and drawing on capabilities that enable the efficient, timely and effective command of forces and control of engagements. NECC provides the DoD with next-generation C2 capabilities using a Service Oriented Architecture (SOA) on the Global Information Grid (GIG). NECC draws from the C2 community to evolve current and provide new C2 capabilities into a fully integrated, interoperable, collaborative Joint solution. NECC replaces the Global Command and Control System (GCCS) Family of Systems (FoS) with a single joint C2 architecture and capabilities-based implementation that enables advanced distributive, collaborative information sharing vertically and horizontally. NECC provides additional critical C2 functionality not present today, and establishes the C2 SOA foundation for future net-centric C2 capabilities. NECC will facilitate exchange of information across multiple security domains and reduce logistics and support requirements.

## Accomplishments/Planned Program:

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
<b>Subtotal Cost</b>	<b>56.461</b>	<b>56.618</b>	<b>49.047</b>
Capability Module Development	10.313	22.281	25.000
Systems Eng/T&E	30.216	23.469	16.258
Program Management	15.932	10.868	7.789

FY 2008: In early FY 2008, the Director of Defense Research and Engineering (DDRE) reviewed NECC's technology readiness assessment, and together with the Director of Operational Test and Evaluation raised issues regarding technical risk, aggressive and overly optimistic scheduling, and unclear testing and deployment strategies. The DDRE assessment stated a lack of definition of the program as to requirements or agreement on program definition with stakeholders. These issues were also noted in the FY 2009 Senate Armed Services Committee (SASC) report which also expressed a need for a transition plan for the information systems that the Services are currently developing under the GCCS FoS, which are planned for integration into a single NECC architecture.

Program Definition. The NECC Program understood and concurred with the concerns regarding lack of agreement with program definition. To resolve this issue, the Joint Program Executive Officer (JPEO) worked with US Joint Forces

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Command (JFCOM) to create Mission Capability Area (MCA) Teams. The MCA Teams were led and staffed by the Services, and focused on describing the NECC capabilities with respect to the GCCS FoS. The MCA Teams documented the program definition in the GCCS FoS to NECC Functionality Transition Plan. Further decomposition of the Program by the joint, Service-led MCA Teams into System Requirements Specifications and Requirements Traceability Matrices formed the basis for all Capability Module development activities to be conducted in FY 2009.

Integration. The NECC Program understands the concerns regarding integration. The Program agrees that the previous approach to integration was insufficiently defined, and integration must be a focus area to achieve success. To that end, the NECC Program worked the integration issue throughout FY 2008's Systems Engineering (SE) process execution. The Program addressed gaps in the integration process and integration environment identified during the technical development phase, and produced an Integration Strategy to document the integration way forward. The program's draft integration plan includes process activities derived from and synchronized with the SE process, the Integration Strategy, the Federated Development and Certification Environment (FDCE) stages and the Test, Evaluation and Piloting processes.

Technical Risk. The NECC Program concurred with expressed concerns and addressed technical risk in FY 2008 by conducting prototyping activities, detailed modeling and simulation, comprehensive testing, and SE efforts to better portray the NECC architecture. The prototyping activities consist of: 1) Market Research, 2) Competitive Analysis, 3) both competitive and non-competitive Technology Maturity Experiments, and 4) both competitive and non-competitive Capability Prototypes. These activities support program maturity and readiness by contributing to risk reduction, design and cost validation, process evaluation, requirements refinement and fielding time reduction. All NECC prototyping activities began with market research which produced a C2 Catalog of Capabilities describing 48 existing DoD C2 IT capabilities that may fulfill NECC capability needs. Market research activities included virtualization experiments to select cross platform solutions for further evaluation in a Technology Maturity Experiment. Competitive Analysis, inherent to the NECC SE process, was continuously applied and refined as the SE process matured in FY 2008, by referencing the C2 Catalog of Capabilities, identifying existing potential solutions, and then performing analysis of competing solutions. This process was exercised over 20 times as the initial capability module design efforts were completed in FY 2008, and it continues into FY 2009. In order to determine the level of risk posed by a proposed technology or process, the NECC Program conducts formal Technology Maturity Experiments. In these experiments, the program is working to achieve Technology Readiness Level (TRL) 6 criteria in conjunction with guidance from DUSD (S&T). To examine the maturity of NECC processes, the program has conducted 21 separate events to date and a detailed evaluation of the FDCE.

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Testing. The NECC Program addressed concerns regarding testing by revising the test strategy to resolve the gap between CM functionality and minimum acceptable "warfighter utility". The program stood up a tri-chaired board called the Joint System Team (JST), with representatives from the program, the operational sponsor, and the operational test agency each having co-equal voices for decisions. The JST established the concept of Operational Capability Sets (OCSs) and testing of these OCSs using real-world mission threads.

Schedule. To address concerns with schedule, the NECC Program reworked activities to provide for more event-driven activities. The program reassessed the capability module development schedules to add more design and coding time and to reduce overhead activities. Early schedules did not allow enough time for learning and assumed more of an end-state development schedule. The new schedule approach factors in the time required to work through design solutions with Services and stakeholders. As a long-term schedule activity, the Milestone B event is scheduled after a full system preliminary design review as directed by the new DoD 5000.02, which ensures the system design is ready for developmental activities before the Milestone is authorized. In this regard, the program incorporates successful events prior to moving forward to a Milestone.

Development. On February 1, 2008 the Defense Acquisition Executive (DAE) directed NECC to develop five capability modules (CMs), use the FDCE to pilot the CMs through the end-to-end systems engineering process, demonstrate the full developmental and operational test process and the fielding decision procedures, demonstrate cost control to monitor execution performance and provide data to support Milestone B cost estimate development, and continue experimentation and other risk reduction activities.

FY 2008, NECC developed the first planned spiral of five NECC capabilities, exercising the systems engineering end-to-end process, as directed by the DAE. A successful Early User Test (EUT) and Mock Fielding Decision Review were conducted for the five Situational Awareness CMs in June 2008. Additionally, FY 2008 RDT&E funds supported the initial design and development of three cross functional capabilities.

In July 2008, a DAE review evaluated the delivery of the first five CMs. The evaluation included a review of cost returns, and the program acquisition strategy and milestones. The review was positive and the DAE directed NECC to move forward into FY 2009 by conducting planning activities throughout the remainder of FY 2008 and executing those activities in FY 2009.

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FY 2009: FY 2009 funds support program development, testing, production, and activities to prepare for delivery, fielding and operations all aimed at conducting a September 2009 End-to-End (E2E) integration test event. These activities are specifically designed to improve the cost estimating process by gathering data on capability development activities, and the tasking to demonstrate technology maturity. The NECC Program efforts regarding technology maturity further emphasize the program's agreement with expressed concerns and the JPEO's desire to meet those concerns and demonstrate a strong technological foundation.

Capability Development. NECC planned to develop 61 CMs in FY 2009. Due to the funding reduction, NECC will develop and test 14 interim releases of CMs, leveraging and expanding beyond the CMs started in FY 2008. The FY 2009 CMs are designed to demonstrate a Joint Mission Thread (JMT) provided by JFCOM in coordination with the Military Services. JMTs are a functional grouping of mission specific, synchronized activities (materiel and non-materiel), tasks and associated attributes directed toward a comprehensive C2 capability from its beginning to its desired end state. The thread consists of specific aggregated tasks that must be performed by Warfighters to succeed in their mission. The JMT is the Joint Personnel Recovery, and contains the Operational Sponsor's highest priority capability needs for Shared Situational Awareness. By 4QFY2009, interim capability releases in four functional areas are planned, with five CMs providing Shared Situational Awareness, five CMs for Cross Functional Capabilities, three CMs for Force Projection, and one CM providing Intelligence capabilities.

Integration. In FY 2009, to further address integration concerns, the program is establishing an integration environment to include the Net-Centric Enterprise Service (NCES) capabilities and the Military Services' SOAs or prototypes. This integration environment includes a cross-functional reference implementation to support the development and integration of the functional capability modules. The establishment of the integration environment and governance process will significantly reduce the risk in development by providing a common environment for all developers to reference and use. This approach directly addresses the stakeholders' concerns regarding integration.

Engineering and Prototyping. The development and demonstration of the integrated capabilities within the mission threads demonstrates the end-to-end NECC SE process, and is tightly integrated with critical activities designed to respond to concerns within the stakeholder community. Continued engineering activities will support FDCE maturity, with three FDCE deliveries in FY 2009. The FDCE is a key tool to support NECC capability development, certification, test and delivery, and fully supports the 14 CMs, their use in the mission threads, and the necessary testing activities to demonstrate CM completion. While the mission threads and CMs show the operational relevance of NECC development activities, concurrent FY 2009 prototyping activities are designed to demonstrate future capabilities and

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integration processes not yet available, such as interdependencies with NCES and the Military Services' infrastructures.

Modeling and Simulation. The NECC Program recognizes the need to understand the scalability and performance of the NECC architecture and deployed capabilities. Detailed modeling and simulation activities show scalability of the NECC architecture beyond the operationally relevant test environment to a much larger installation throughout the Global Information Grid. In FY 2009, the program uses data gathered from prototyping activities to produce models which will simulate the operational environments using enterprise and Service infrastructures, network environments including disadvantaged communication conditions, the deployed component of capability modules, and two intended mission threads. These simulations will be used to run a series of scalability analyses designed to produce a stressing load while executing the simulated mission threads. Data from all simulation activities will be provided to the DUSD(S&T) and used to update the architecture, design, deployment strategies, and other relevant technical activities within NECC.

Testing. Comprehensive testing culminates the FY 2009 activities. The NECC Program will conduct an End-to-End (E2E) Developmental Test (DT) which tests a set of capability modules within the context of the Joint Personnel Rescue (JPR) Mission Thread using the operational environment to the maximum extent possible. The Operational Tester community supports the E2E DT event. An Operation Test Agency (OTA) Milestone Assessment Report will be completed by the Lead OTA to inform Milestone B. Through the FY 2009 testing events, the program will demonstrate a mature and repeatable testing process that has been fully coordinated with DOT&E and directly responds to the testing concerns. The program is updating the Test and Evaluation Master Plan (TEMP) to further define the details of this strategy, and DOT&E and DDRE are major stakeholders in the TEMP development process. The JST has overseen significant improvements to testing governance using the Test, Evaluation, and Certification Criteria and the FDCE. Process improvements have been made in the areas of test planning and test execution.

In FY 2009, NECC will complete a Preliminary Design Review (PDR) as directed by the DAE and the DoD 5000.02, prior to a Milestone B decision to reduce risk and provide a better program baseline. The PDR establishes the allocated baseline and the underlying architecture to support a high-confidence design. The PDR describes requirement trade-offs, improves the program office estimate, and identifies residual design, integration and development risks. The PDR will include participation from all key NECC stakeholders. The PDR report will be provided to the Milestone Decision Authority at Milestone B and include the recommended requirements trades based upon an assessment of cost, schedule, and performance risk.

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FY 2010: The NECC Program anticipates achieving a Milestone B decision for Increment 1 in early FY 2010, at which point NECC will enter the Integrated System Design effort of the Engineering and Manufacturing Development phase. FY 2010 will continue the migration of current GCCS FoS system functionality to NECC through extensive engineering and CM development activities. FY 2010 funds will be used to provide the required program development, testing, production, and activities to prepare for delivery, fielding and operations of interim and final releases of three (3) additional CMs. FY 2010 continues and expands upon FY 2009 development with approximately 14 CMs focused on Shared Situational Awareness, Deployment Planning and Cross Functional CMs. From a Warfighter perspective, FY 2010 is crucial to providing common solutions across the Combatant Commands, Joint Task Forces, and Services; providing significantly improved capabilities at reduced sustainment cost. The development schedule is established to provide operational capability for the Warfighter in a cost effective and timely manner, and will be organized to demonstrate the capabilities in Joint Mission Threads.

FY 2010 funding will also provide for the standup of servers at the Enterprise GIG Computing Nodes (GCNs); information assurance technical support; OTA support; training; and establishment of the required piloting activities, especially with the interim releases to the Warfighter for early assessment. FY 2010 will continue engineering and development activities for the FDCE, incorporating new features based upon input from FY 2009 experience.

In FY 2010, NECC will conduct a Critical Design Review (CDR) and submit a report to the DAE providing an overall assessment of design maturity and a summary of the system-level CDR results. A successful CDR will grant NECC authority to enter the System Capability and Manufacturing Process Demonstration effort within the Engineering and Manufacturing Development phase. FY 2010 funding is critical to begin the realization of significant enhancements and capability improvements for the Warfighter. NECC plans to demonstrate the use of newly-developed and integrated CMs in the context of additional Joint Mission Threads. The span of C2 capability to be demonstrated in FY 2010 includes not only the Situational Awareness prioritized tasks but also expands into the Deliberate and Adaptive Planning domain, the second priority for the Operational Sponsor. The Situational Awareness and Deliberate and Adaptive Planning threads include the use of operational Business Process Models (BPMs) of specific Warfighter functions selected to linked dependencies of activities and events within the threads to materiel and non-materiel capability needs. A BPM represents both the current ("as is") and future ("to be") processes of an enterprise, so that the current process may be analyzed and improved. By including the non-materiel capability needs into the mission thread demonstrations of FY 2010, the NECC Program moves beyond simple CM development into the exploration of doctrine, organization, training, leadership development and education, personnel, facilities, and policy (DOT-LPF-P) issues that should be modified by the department to take advantage of new and innovative C2 capabilities. For example, by using NECC capabilities

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through the Enterprise and exploring reachback activities for Deliberate and Adaptive Planning, the department may realize the benefits of smaller-deployed headquarters footprints with greater reliance on US-based assets, creating more agile and capable forward headquarters while increasing their responsiveness with greater access to US-based people, capabilities, and systems. The holistic solutions provided by NECC capabilities combined with DOT-LPF-P changes provide force-multiplying benefits from the modern C2 architectures. By 4QFY2010 NECC anticipates achieving a Milestone C decision, entering the Production and Deployment phase.

**B. Program Change Summary:**

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
FY 2009 President's Budget	57.913	147.339	201.236
FY 2010 Budget Estimate	56.461	56.618	49.047
Total Adjustments	(1.452)	(90.721)	(152.189)

FY 2009 changes reflect the Congressional mark (\$90M) and reductions due to Economic Assumptions as cited in Section 8101 of the FY 2009 Conference Report. FY 2010 changes reflect an internal realignment of funds to adjust the NECC funding profile to correspond with FY 2009 funding reductions and revised inflation rates.

**C. Other Program Funding Summary:**

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
O&M, DW	14.813	10.893	9.602
Procurement, DW	0.000	3.988	2.835

**D. Acquisition Strategy:** NECC acquires CMs, services, and materials from various full and open, competitively awarded, performance-based and performance-driven outcome contracts. NECC uses indefinite-delivery-indefinite-quantity (IDIQ) contracts to develop CMs; the NECC JPMO, acting as NECC systems integrator, has the flexibility to award multiple Task Orders (TOs) under these vehicles. The program leverages various types of existing and logical follow-on contracts associated with GCCS FoS programs and general purpose IDIQs. In many cases, NECC TOs are competed among the

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numerous vendors available under these IDIQ contracts through the fair opportunity to compete process required by the Federal Acquisition Streamlining Act (FASA). In instances in which using an existing IDIQ contract is not feasible, NECC acquires services and materials through a full and open competitively awarded contract. NECC uses Federally Funded Research and Development Centers (FFRDC), Systems Engineering and Technical Assistance (SETA) and small business procurement opportunities. NECC accesses some services and material through Military Interdepartmental Purchase Requests (MIPRs) to a fee-for-service Government Agency/Service. NECC evaluates performance by conducting thorough Post-award Contract Reviews (PCRs) and periodic Contract Performance Reviews (CPRs).

**E. Performance Metrics:** NECC developed a cost control plan in conjunction with the Cost Analysis Improvement Group (CAIG), Office of the Secretary of Defense for Acquisition, Technology and Logistics (OSD AT&L), and Office of the Secretary of Defense for Program Analysis and Evaluation (OSD PA&E). The Cost Control Plan Version 3.0, dated November 2008, describes both earned value (EV) management and performance metrics.

In FY 2008, NECC implemented an EV pilot that would provide NECC and OSD (AT&L) with EV information for monitoring the program's cost/schedule/and technical performance. NECC's EV pilot has two foci: NECC Joint Program processes and CM development. NECC Joint Program processes provides technical and program control services to complete programmatic responsibilities. Under the pilot, NECC internal support costs are consolidated monthly and tracked against a Planned Value baseline and EV milestones. EV is realized when a milestone is considered to be 100 percent complete. EV for the CM development approach includes establishing a Planned Value baselines and milestones for each CM. Monthly reports define the actual costs incurred and the dates when milestones were. EV for CM development is realized when a milestone is considered to be 100 percent complete. In FY 2008, EV data collected for NECC Joint Program processes reported a 1.0 for both CPI and SPI. EV data for three CMs developed by the Navy reported a .90 CPI and a .94 SPI.

The Program Office is collecting and analyzing a broad set of performance metrics to evaluate performance of the end-to-end NECC process. Essential criteria for validating the NECC business strategy is being gathered through performance measurement data that will be collected over the course of the program. Performance data (metrics) is a contract requirement for all development activities. The aggregated data obtained from NECC end-to-end process surveillance and CM development metrics are being used to define a baseline of repeatable performance for all stages of the acquisition process.

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APPROPRIATION/BUDGET ACTIVITY				PROGRAM ELEMENT						PROJECT NAME AND NUMBER				
RDT&E, Defense-Wide/05				PE 0303158K						Joint Command and Control Program (JC2)/JC01				
<u>Cost Category</u>	<u>Contract Method &amp; Type</u>	<u>Performing Activity &amp; Location</u>	<u>Total PY Cost (\$000)</u>	<u>FY08 Cost (\$000)</u>	<u>FY08 Award Date</u>	<u>FY09 Cost (\$000)</u>	<u>FY09 Award Date</u>	<u>FY10 Cost (\$000)</u>	<u>FY10 Award Date</u>	<u>FY11 Cost (\$000)</u>	<u>FY11 Award Date</u>	<u>Cost To Complete (\$000)</u>	<u>Total Cost (\$000)</u>	<u>Target Value of Contract</u>
PEO C2C Operations	F&O	Various	7.207	0.117	1-Oct	1.607	1-Oct	1.074	1-Oct			Cont'g	Cont'g	10.007
DISA CPMO Management Operations	F&O	Various	2.002	2.578	1-Oct	3.455	1-Oct	2.313	1-Oct			Cont'g	Cont'g	10.348
JPMO Management Operations	MIPR	SSC San Diego, CA	0.470	0.489	1-Oct	0.338	1-Oct	0.226	1-Oct			Cont'g	Cont'g	1.523
NECC Program Control (PC) Financial Management Support	SBSA/FFP	GS5 LLC; Dumfries, VA	1.991	1.800	1-Jan	0.800	1-Jan	0.536	1-Jan			Cont'g	Cont'g	5.127
NECC PC Acquisition Support	T&M	BIT; Falls Church, VA	2.861	1.127	12-Jan	N/A	N/A	N/A	N/A			3.988	3.988	3.988
NECC PC Acquisition Support	F&O/TBD	TBD Merlin International; Vienna, VA	N/A	N/A	N/A	0.551	23-Feb	0.732	23-Feb			Cont'g	Cont'g	1.283
BEA Licenses	F&O/FFP	Vienna, VA	1.906	0.879	N/A	N/A	N/A	N/A	N/A			2.785	2.785	2.785
System Documentation Federated Development and Certification Environment Engineering Design, Development, and Operations	MIPR	SSC San Diego, CA	0.803	N/A	N/A	N/A	N/A	N/A	N/A			0.803	0.803	0.803
	F&O/CPFF	FGM; Reston, VA	N/A	2.632	12-Dec	1.807	12-Dec	1.390	12-Dec			Cont'g	Cont'g	5.829

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RDT&E, Defense-Wide/05				PE 0303158K						Joint Command and Control Program (JC2)/JC01			
FDCE													
Engineering Design, Development, and Operations	F&O/CPFF	TBD	N/A	N/A	N/A	N/A	N/A	N/A	N/A		Cont'g	Cont'g	0.000
FDCE Hardware	F&O/FFP	Various	N/A	0.285	1-Jan	N/A	N/A	N/A	N/A		0.285	0.285	0.285
FDCE Cots													
Software Tools	F&O/FFP	Various	N/A	1.302	1-Jan	N/A	N/A	N/A	N/A		1.302	1.302	1.302
Piloting / Test and Evaluation (T&E) Support Contract	F&O/CPFF	SYZYGY; San Diego, CA	N/A	3.083	18-Oct	2.334	18-Oct	N/A	N/A		5.417	5.417	5.417
Piloting / T&E Support Contract	F&O/CPFF	TBD	N/A	0.000	N/A	N/A	N/A	1.563	18-Oct		Cont'g	Cont'g	1.563
Piloting/CPAS Operational Test Agency (OTA) Support Joint Interoperability Testing Center (JITC) OTA Support Operational Test and Evaluation Force (OPTEVFOR)	MIPR	SSC San Diego, CA	N/A	0.522	18-Oct	0.114	18-Oct	0.076	18-Oct		Cont'g	Cont'g	0.712
	MIPR	DISA	0.642	1.000	18-Oct	0.577	18-Oct	0.386	18-Oct		Cont'g	Cont'g	2.605
	MIPR	Navy	N/A	0.356	18-Oct	0.356	18-Oct	0.239	18-Oct		Cont'g	Cont'g	0.951

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OTA Support - Army Test and Evaluation Center (ATEC)	MIPR	Army	0.125	0.830	18- Oct	1.055	18- Oct	0.707	18- Oct	Cont'g	Cont'g	2.717
OTA Support - Marine Corps Test and Evaluation Activity (MCOTEA)	MIPR	Marine Corps	0.115	0.293	18- Oct	0.189	18- Oct	0.127	18- Oct	Cont'g	Cont'g	.724
OTA Support - Air Force Operational Test and Evaluation Center (AFOTEC)	MIPR	Air Force	0.125	0.382	18- Oct	0.382	18- Oct	0.255	18- Oct	Cont'g	Cont'g	1.144
Transformational Command and Control (TC2) Information Assurance (IA)	FFRDC	MITRE; Reston, VA	6.665	3.315	1-Oct	1.808	1-Oct	1.210	1-Oct	Cont'g	Cont'g	12.998
Technical Support Systems Engineering Support	MIPR	SSC Charleston , SC	0.632	1.842	18- Oct	3.433	18- Oct	2.218	18- Oct	Cont'g	Cont'g	8.125
Architecture and Design Systems Engineering Integration Support Systems Engineering Integration Support	MIPR	SSC San Diego, CA S&T Assoc; Arlington, VA	3.413	2.243	18- Oct	0.800	18- Oct	0.536	18- Oct	Cont'g	Cont'g	6.992
Architecture and Design Systems Engineering Integration Support Systems Engineering Integration Support	F&O/FFP	VA	3.963	7.044	1-Apr	6.405	1-Apr	4.288	1-Apr	Cont'g	Cont'g	21.700
Engineering Integration Support Systems Engineering Integration Support	F&O/CFPP	SAIC; McLean, VA	N/A	4.490	7-Nov	N/A	N/A	N/A	N/A	4.490	4.490	4.490
Engineering Integration Support Capability Modules (CMs)	F&O/CFPP	TBD	N/A	N/A	N/A	2.513	8-Nov	1.784	8-Nov	Cont'g	Cont'g	4.297
Engineering Integration Support Capability Modules (CMs)	MIPR	CPMO's	4.110	10.013	Vario us	22.281	Vario us	25.000	Vario us	Cont'g	Cont'g	61.404

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Logistical Support Development	MIPR	SAIC; McLean, VA	N/A	1.818	24- Oct	0.874	24- Oct	N/A	N/A	2.692	2.692	2.692
Logistical Support Development	MIPR	TBD SSC	N/A	N/A	N/A	N/A	N/A	0.636	24- Oct	Cont'g	Cont'g	0.636
Tier 1 Help Desk	MIPR	Charleston , SC SSC	N/A	0.552	18- Oct	0.494	18- Oct	0.331	18- Oct	Cont'g	Cont'g	1.377
Tier 2 FDCE Help Desk	MIPR	Charleston , SC	N/A	0.079	18- Oct	0.226	18- Oct	0.151	18- Oct	Cont'g	Cont'g	0.456
Tier 2/3 Help Desk (Allocated to CPMO's)	MIPR	CPMO's Naval Research Lab (NRL) / SSC - San Diego	N/A	0.000	N/A	0.240	18- Oct	0.161	18- Oct	Cont'g	Cont'g	0.401
Training Enterprise Node Joint Technical Operations Control Capability (JTOCC) Operations	MIPR	SSC Charleston , SC	N/A	0.250	18- Oct	0.500	18- Oct	0.335	18- Oct	Cont'g	Cont'g	1.085
Technical Operations Support Piloting Framework and other Operational support Piloting Framework and other Operational support	MIPR	SSC San Diego, CA	N/A	N/A	N/A	0.430	1-Oct	0.288	1-Oct	Cont'g	Cont'g	0.718
Operational support Piloting Framework and other Operational support	MIPR	SAIC; McLean, VA	N/A	0.682	30- Oct	0.553	30- Oct	N/A	N/A	1.235	1.235	1.235
Operational support	MIPR	TBD	N/A	N/A	N/A	N/A	N/A	0.426	30- Oct	Cont'g	Cont'g	0.426

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Exhibit R-3 RDT&E Project Cost Analysis										Date: May 2009		
APPROPRIATION/BUDGET ACTIVITY					PROGRAM ELEMENT					PROJECT NAME AND NUMBER		
RDT&E, Defense-Wide/05					PE 0303158K					Joint Command and Control Program (JC2)/JC01		
Electronic Performance Support System (e.g. DMI) Environment	MIPR	NRL	N/A	0.500	18-Oct	0.450	18-Oct	0.302	18-Oct	Cont'g	Cont'g	1.252
Joint Training Integration Support	MIPR	SSC San Diego, CA	N/A	N/A	N/A	0.175	18-Oct	0.117	18-Oct	Cont'g	Cont'g	0.292
FDCE Development Nodes for CPMO's	MIPR	CPMO's UMES; Princess Anne, MD	N/A	0.781	1-Jan	0.000	Variou us	N/A	Vario us	Cont'g	Cont'g	0.781
I&TP Technical IPA	MOD	NSMA	0.402	0.000	N/A	0.000	N/A	N/A	N/A	0.402	0.402	0.402
CTF Support	MIPR	DISA	0.160	0.000	N/A	0.000	N/A	N/A	N/A	0.160	0.160	0.160
DISN LES / BN12 and ACTD Lab Net Enabled Command Capability (NECC) Federated Development Certification (FDC) and Capability Provisioning Activities (CPA)	MIPR	DISA	0.418	0.312	31-Dec	0.174	31-Dec	0.157	31-Dec	Cont'g	Cont'g	1.061
Integration & Tech Piloting	F&O/CPFF	FGM; Reston, VA	3.470	N/A	N/A	N/A	N/A	N/A	N/A	3.470	3.470	3.470
FDCE / T&E / OILS / IA / I&TP Support	F&O/CPFF	SAIC; McLean, VA	6.963	N/A	N/A	N/A	N/A	N/A	N/A	6.963	6.963	6.963
	F&O/CPFF	SAIC; McLean, VA	5.443	N/A	N/A	N/A	N/A	N/A	N/A	5.443	5.443	5.443

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Exhibit R-3 RDT&E Project Cost Analysis										Date: May 2009		
APPROPRIATION/BUDGET ACTIVITY				PROGRAM ELEMENT						PROJECT NAME AND NUMBER		
RDT&E, Defense-Wide/05				PE 0303158K						Joint Command and Control Program (JC2)/JC01		
ASAP ACTD	MIPR	Air Force	0.050	0.300	1-Jan	N/A	N/A	N/A	N/A	Cont'g	Cont'g	0.350
AEC	MIPR	Army	N/A	0.225	31-Dec	N/A	N/A	N/A	N/A	0.225	0.225	0.225
DAA Support	MIPR	DISA	N/A	N/A	N/A	0.210	1-Oct	0.140	1-Oct	Cont'g	Cont'g	0.350
Command and Control (C2) Catalog Support	F&O/FFP	BIT; Falls Church, VA	N/A	0.630	1-Feb	0.124	4-Oct	0.151	N/A	Cont'g	Cont'g	0.905
Certification Agents	MIPR	DISA / STRATCOM	N/A	N/A	N/A	N/A	18-Oct	0.280	18-Oct	Cont'g	Cont'g	0.280
Prototyping	MIPR	CPMO's	0.569	1.329	Vario us	1.362	Vario us	0.912	Vario us	Cont'g	Cont'g	4.172
<b>TOTAL</b>			<b>54.505</b>	<b>56.461</b>		<b>56.618</b>		<b>49.047</b>				<b>216.632</b>

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Exhibit R-4, RDT&E Program Schedule Profile																Date: May 2009																
Appropriation/Budget Activity RDT&E, Defense-Wide, 05								Program Element Number and Name PE 0303158K, Joint Command and Control Program (JC2)								Project Number and Name JC01, Joint Command and Control Program (JC2)																
Fiscal Year	FY 2008				FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	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	1	2	3	4
Engineering and Manufacturing Development Activities - Increment I									X	—	—	X																				
System Engineering									X	—	—	X																				
Operate Federated Development Certification Environment									X	—	—	X																				
Tech Risk Reduction/Piloting									X	—	—	X																				
Piloting Integration									X	—	—	X																				
Define/Design/Dev Capability Modules																																

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Exhibit R-4a, RDT&E Program Schedule Detail		Date: May 2009							
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME							
RDT&E, Defense-Wide/05	PE 0303158K/Joint Command and Control Program (JC2)	Joint Command and Control Program (JC2)/JC01							
<u>Schedule Profile</u>		<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>
<u>Technology Development (TD) Activities - Increment I</u>									
System Engineering		1Q-4Q	1Q-4Q						
Establish Federated Development Certification Environment		1Q-4Q	1Q-4Q						
Tech Risk Reduction/Piloting		1Q-4Q	1Q-4Q						
Piloting Integration		1Q-4Q	1Q-4Q						
Define/Design/Dev Capability Modules		1Q-4Q	1Q-4Q						
<u>Engineering and Manufacturing Dev Activities - Increment I</u>									
System Engineering				1Q-4Q					
Operate Federated Development Certification Environment				1Q-4Q					
Define/Design/Dev Capability Modules				1Q-4Q					