

Exhibit R-2, RDT&E Budget Item Justification					Date: February 2004		
Appropriation/Budget Activity RDT&E Defense-Wide, BA 6				R-1 Item Nomenclature: Support to C3I PE 0605116D8Z			
Cost (\$ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	21.853	25.529					
<p>A. Mission Description and Budget Item Justification: The program element supports technical and analytic efforts to evaluate and improve the management oversight of DoD command and control (C2), communications, space, and information superiority programs. Support is focused on reviewing resources and acquisition issues for existing and planned space programs; exploring new command and control research concepts that exploit emerging technologies to improve DoD’s understanding of the national security implications of the Information Age; integration and overarching requirements/ planning process for national and nuclear C2 capabilities; development and integration of Command Information Superiority Architectures (CISA) to better define command capabilities; oversight of information operation activities; development of the Joint C4ISR Architecture Planning/Analysis System (JCAPS) as the common planning and coordination tool across the Global Information Grid (GIG); This program is funded under Budget Activity 6, RDT&E Management Support because it includes studies and analysis in support of RDT&E efforts.</p> <p>Program Accomplishments and Plans:</p> <p>FY 2003 Accomplishments: (\$21.853 million)</p> <ul style="list-style-type: none"> • Conducted research into the nature of networked organizations. • Published “Power to the Edge”, describing the NII vision of Information Age Transformation. • Published “Command and Control in the Information Age” • Conducted Command and Control Research and Technology Symposium. • Continued analytic research support for information operations classified program. • Developed a White House Communications Agency requirements process. • Prepared Senior Leadership Communications Systems (SLCS) mission needs statement and capstone requirements document. • Completed critical Presidential modifications to SLCS aircraft and core White House Infrastructure. • Developed DoD Directive 4660.3 Secretary of Defense Communications. • Developed C3I implementer for Nuclear Posture Review (NPR). • Completed the Unified Command Structure (UCS) Roadmap. 							

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IT Database

- Reprogrammed all objects from ASP to secure JSP and to meet other enclave security requirements.
- Developed, Tested, and Implemented Database Collection of Capital Investment Reports to meet Congressional and OMB requirements.
- Implemented Extensible Markup Language (XML) data exchange with OMB. Expanded electronic interfaces to all Services.
- Implemented Air Force Extension of system.

GWOT - CIP

- Identified Combatant Commander critical functional capabilities necessary to support Global Strike mission OPLAN deployment phase.
- Identified commercial infrastructure support to Combatant Commander warfighters.
- Assisted Combatant Commander in identifying and developing Consequence Management initiatives.

GWOT – DERIS

- Established a Homeland Security architecture that improved the timely, integrated and coordinated access to information. The architecture initiatives addressed Border Security, Emergency Response, Weapons of Mass Destruction, and Intelligence Warning.

Pacific Disaster Center

- Completed the architectural design of a distributed information and decision support system for disaster management and humanitarian support. This included a detailed gap analysis for research and development opportunities and a data requirements study.
- Developed a prototype system for transition to the U.S. Southern Command, including a comprehensive training package, for use in the Caribbean Region, and initiated discussions and agreements for incrementally implementing such in the Asia Pacific Region.
- Completed several assessments for the Insular States of the Pacific Region. The “*Natural Hazards Risk and Vulnerability Assessment*” prepared for the Government of American Samoa is being used to create policies for future development on the Island. A tsunami inundation assessment and report was completed for Efate Island, Vanuatu and is being used to help that developing nation protect its citizens. The methodologies used in these efforts were briefed to the Prime Minister of Fiji who expressed keen interest in having similar products developed for his country.
- Continued to support the US Pacific and Southern Commands in exercises dealing with humanitarian relief. Supported other federal, local, and regional organizations in homeland security, disaster management, and human health (disease vector)

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related exercises and activities.

- Organized and conducted several high-level workshops in support of State of Hawaii and Federal Agencies involved in Homeland Security and Homeland Defense focused on the data and information needs of the decision-maker. Led several interagency working groups designing and implementing national conferences in support of Homeland Security and Homeland Defense.

CISA

- Completed Global Information Grid (GIG) Architecture Version 2.0 (an objective architecture that describes strategic, operational, and tactical operations in a future, Net-Centric environment).
- Completed Net Centric Operations and Warfare (NCOW) Reference Model (RM) v0.9 (initial draft version that describes Net-Centricity at the DoD enterprise level).
- Expanded NORTHCOM Homeland Security/Homeland Defense Architecture.
- Initiated the integration of the Federal Enterprise Architecture (FEA) into the GIG.
- Initiated modeling and simulation of architectures for acquisition, requirements, and PPBS.
- Completed the Joint Force Provider architecture.
- Completed integration of CENTCOM coalition architecture into the GIG.
- Developed an overarching DoD architecture configuration management program.
- Established two Enterprise Software Initiatives (ESI) for COTS architecture tool to reduce resources.
- Developed and implemented an enforceable enterprise-level architecture (EA) that supports portfolio management for the Defense Transportation System (DTS) at USTRANSCOM.
- Completed the integration of Operational, Systems and Technical Views for each of the 22 separate OPLAN 5027 architectures into a comprehensive Integrated Operational Architecture.
- Initiated development of a CFC/USFK C4I Integrated Objective Architecture to include coalition partners.
- Developed a USFK Logistics operational architecture.
- Supported the development of a USFK C4ISR Master Plan for future theater intelligence requirements.
- Developed the USCENTCOM CENTRIXS operational architecture.
- Initiated the Joint National Training Capability (JNTC) architecture supporting requirements, budgeting, and M&S that supports all Unified Commands and Services.
- Completed development of the USSTRATCOM Intelligence, Surveillance, and Reconnaissance Architecture-Operational View (ISR-OV).
- Initiated integration of NCOW RM and NCES in the USSTRATCOM ISR-OV.
- Completed USEUCOM-wide expansion of the Electronic Tactics, Techniques, and Procedures (ETTP) for Joint Task Force

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(JTF) and Combined JTF (CJTF) operations that provides web-based JTF/CJTF operational guidance.

- Initiated the Command Enterprise Communications Architecture (CECA) documenting USEUCOM's end-to-end C2 information flow. The CECA embraces several DoDAF compliant tools for data manipulation and modeling.

JCAPS

- Successfully demonstrated the feasibility of using CADM XML to provide an interface between COTS Architecture tools and the DOD Architecture Repository System.
- Determined new database requirements for architecture based on DoD Architecture Framework.
- Completed SIPRNET Accreditation for the DARS.
- Implemented new capability as defined in DoD Architecture Framework.
- Modified data schema to reflect new requirements in CADM.
- Completed graphical capability for preparing architecture products.

FY 2004 Plans: (\$25.529million)

- Continue efforts to research the nature of networked organizations and the implications for command and control, military operations, and organizations.
- Continue to work with the DoD community and international partners to improve the understanding of Information Age command and control related concepts, technologies, and experiments.
- Conduct workshops to explore command and control related issues.
- Continue publications and outreach programs.
- Initiate development and program management of a classified intelligence resource management system which supports the policy and oversight responsibility of the USD (I).
- Continue to enhance functionality of the Information Technology Management application.
- Support classified information operations program.
- Develop Unified Command Structure (UCS) Policy, Architecture and Organizational Framework Report (POAF) for DepSecDef.
- Develop Unified Command Structure (UCS) implementation plan for DepSecDef.
- Develop Unified Command Structure (UCS) Operational Concept.
- Develop ASD(NII) Continuity of Operations Plan (COOP) Integrated Network Capabilities Report.
- Develop ASD(NII) Business Resumption Plan.
- Develop C2 Policy Roadmap and C2 Policy in our ASD(NII) role as PSA for DoD-Wide C2.

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- Includes analytical research support for DoD National C2 policy issues including investigation and development of C2 policy for Information Operations (IO), Information Superiority (IS) Programs, Missile Defense C2, and Offensive Defensive Integration.
- Continue White House and Senior Leaders requirements planning and modernization strategies including network centric operations and integration into the GIG architecture.

CISA

- Complete Net-Centric Operations and Warfare Reference Model Version 1.0 (initial approved version that describes Net-Centricity at the DoD enterprise level).
- Complete initial Net-Centric architecture integration training and development to Unified Commands.
- Initiate GIG 3.0 Enterprise Architecture (develop a GIG Architecture that serves as a complete DoD enterprise architecture and supports integration of all other DoD IT architecture).
- Continue to integrate the NCOW RM into the Federal Enterprise Architecture (FEA) under the GIG.
- Initiate development of a NCOW RM Compliance Analysis program under the GIG.
- Expand DoD Homeland Defense architecture interfaces to other Federal, State, and Local emergency centers.
- Continue to implement the GIG architectures at the Unified Commands by incorporating net centric capabilities and artifacts.
- Expand Counterterrorism architectures to appropriate Unified Commands and other components.
- Expand coalition architectures at the Commands; integrate coalition access for coalition users.
- Initiate Net-Centric capabilities and artifacts in coalition architectures at the commands.
- Develop a new version of CADM that will eliminate unnecessary entities (CADM Streamline).
- Develop an NCES transition plan for all Combatant Commands.
- The Command Enterprise Communications Architecture (CECA) program moved into an advanced phase documenting USEUCOM's end-to-end C2 information flow.
- Increase CECA's role in USEUCOM's transformation efforts, and use to model the effects of Command transformation scenarios to senior decision makers.

JCAPS

- Integrate new architecture data requirements into design.
- Integrate remaining Architecture Framework products into graphical requirements.
- Expand O-O Architecture development within the Framework, CADM, and Tool Kit along with training programs to implement O-O use in architecture development.
- Implement distance learning capabilities and integrate into the training program; implement DoD wide training course for

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repository use.

- Implement NIPRNET version with security guards and permissions.

IT Rapid Acquisition Incentives

- A Net Centric pilot application process was designed and implemented and Executive Agent support received from the Department of Navy.
- Selection and evaluation criteria were designed and applied against candidate pilots. Structured templates and guidelines are provided to assist each pilot with developing a Project Charter, Project Plan, and Project Spend Plan.
- The RAI-NC pilot program process and selected pilots are available from the DoD CIO home page (<http://www.dod.mil/nii>). The site provides information about the program, approved pilots, OSD and EA oversight, program milestones, program documents and project templates, and links to DoD and government sources to assist users in researching, understanding and executing the objectives of net centric transformation goals.
- The first DoD-wide data call for pilot candidates resulted in 120 submitted projects with representation from all Military Services, DoD Agencies, all DoD Domains including technical infrastructure. The DoD CIO office was provided a list of 12 recommended pilot projects for final approval.
- Four pilots supporting the Military Departments and AT&L were selected and funds provided by DoD CIO:
 - Virtual Mission Operations Center - The pilot will deploy a web based global, enterprise-level interface allowing the warfighter access to satellite information if available, or provide the ability to directly request information from a satellite. It will provide an IP based satellite C2 system that provides survivability and rapid reallocation and prioritization of C2 bandwidth configuration in response to operational changes.
 - Implementation of WEBLOG Technology to Accelerate Test/Eval Programs - This pilot will develop a secure community of interest to exchange proprietary technology data. It will apply multi-role security to permit free communication of proprietary technologies among industry partners on the same team and to accelerate DoD use of cutting edge technology..
 - Enterprise Spend Analysis Pilot - To develop and deploy a web based global, enterprise-level business intelligence tool for integrating procurement contract, acquisition and financial data across the DoD Acquisition Community. Using a common data model and a service oriented architecture and an improved business decision making processes the pilot will provide data with differing characteristics from multiple systems and locations into a common enterprise understanding.
 - Standard Access Functions for Common Access Card (CAC) - The pilot will develop a standard set of CAC enterprise basic services that include calls to encryption, authentication, and digital signature. Additional functionality will be based on a user survey. It will accelerate new security capabilities for DoD applications using the CAC by enabling the secure ID, encryption and signature features of the CAC and DoD PKI.

- The results of each pilot project will be documented in the Opportunity Analysis (OA). The OA includes metrics data to calculate Return on Investment, qualitative results to show values in a balanced scorecard format, lessons learned from the pilot, a business case analysis as represented by the OA document template, an implementation plan as part of the OA, and post-pilot actions. The Domain owners then review pilots with successful business cases to develop functional deployment plans.
 - Each of the four pilots will execute project plans under EA oversight and CIO review.
 - An estimated 200 candidate pilots for FY05 RDT&E funds will be nominated and evaluated against formal selection criteria.
 - Selection of 20 pilot proposals for funding in FY2005.
 - Measure FY 2004 pilots against established metrics

Pacific Disaster Center

- Expand the concept, architectural development, and implementation of a distributed information network in the PACOM and SOUTHCOM AORs.
- Work with major funding entities (World Bank, Asian Development Bank, etc.) to develop natural hazard mitigation strategies and enabling policies in the development plans of emerging nations. Participate with foreign planning organizations in policy development and risk assessment.
- Continue to expand the PDC presence in the Asia-Pacific Region capitalizing on existing efforts being undertaken by the East-West Center, US State Department and other international entities concerned with the rising cost, both in human lives and property, of natural and manmade disasters.
- Continue to support the US Military Commands, State and Federal Agencies, and regional organizations with unique products critical to decision makers in managing risk posed by, and emergencies caused by, nature and/or mankind.

FY 2005 Plans: N/A

B. Program Change Summary: (Show total funding, schedule, and technical changes for the program element that have occurred since the previous President's Budget Submission)

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
Previous President's Budget	21.874	24.638	35.614
Current BES	21.853	25.529	-
Total Adjustments	-.021	.891	-35.614
Congressional program reductions			
Congressional rescissions, Inflation Adjustments	-.021	-.218	
Congressional increases	6.000	8.800	

Reprogrammings SBIR/STTR Transfer	5.098
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Change Summary Explanation:

FY 2003: Non-pay purchase inflation adjustment -.021 million

FY 2004: Congressional add 1.369 million; FFRDC Reduction -.131 million; Management Improvements -.069 million; Management Efficiencies -.278 million.

FY 2005: Funding transferred to PEs 0605170D8Z, 0303169D8Z, and 0605200D8Z to implement restructuring of Defense Intelligence – 35.614 million .

C. Other Program Funding Summary: N/A

D. Acquisition Strategy. N/A