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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2012 Office of Secretary Of Defense **DATE:** February 2011

<b>APPROPRIATION/BUDGET ACTIVITY</b>				<b>R-1 ITEM NOMENCLATURE</b>							
0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 6: <i>RDT&amp;E Management Support</i>				PE 0605170D8Z: <i>Support to Networks and Information Integration</i>							
<b>COST (\$ in Millions)</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012 Base</b>	<b>FY 2012 OCO</b>	<b>FY 2012 Total</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	14.363	15.091	9.437	-	9.437	7.708	7.695	5.589	5.704	Continuing	Continuing
001: <i>Command Information Superiority Architecture</i>	5.475	5.752	2.036	-	2.036	-	-	-	-	Continuing	Continuing
002: <i>Defense Architecture Repository</i>	1.258	1.322	1.048	-	1.048	1.091	1.090	1.000	1.020	Continuing	Continuing
003: <i>Integrated Planning and Management</i>	2.025	2.128	1.686	-	1.686	1.756	1.753	1.608	1.641	Continuing	Continuing
004: <i>Support to NII Mission Requirements</i>	5.605	5.889	4.667	-	4.667	4.861	4.852	2.981	3.043	Continuing	Continuing

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

This program element supports studies and analysis in the areas of networks, information integration, defense-wide command and control (C2), and communications. This program is funded under Budget Activity 6, RDT&E Management Support because it includes studies and analysis in support of RDT&E efforts.

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012 Base</b>	<b>FY 2012 OCO</b>	<b>FY 2012 Total</b>
Previous President's Budget	14.796	15.091	15.344	-	15.344
Current President's Budget	14.363	15.091	9.437	-	9.437
Total Adjustments	-0.433	-	-5.907	-	-5.907
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustment	-0.433	-	-	-	-
• OSD Studies Contracts Efficiency	-	-	-0.912	-	-0.912
• DoD Service Support Contracts Efficiency	-	-	-0.599	-	-0.599
• Economic Adjustments	-	-	-0.013	-	-0.013
• NII Contractor Efficiency	-	-	-0.570	-	-0.570
• CISA Program Efficiency	-	-	-3.813	-	-3.813

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<p><b><u>Change Summary Explanation</u></b></p> <p>FY 2010: Program adjustment -0.433 million. FY 2011: No change. FY 2012: CISA program efficiency -3.813 million, Economic Assumptions -0.013million, OSD Studies contracts efficiency -0.912 million, NII Contractor efficiencies -0.570 million, DoD Service Support Contracts efficiency -0.599 million.</p> <p>Studies contract Efficiencies will be realized by reducing the number of studies that we participate in while still supporting enterprise-wide information technology goals critical to DoD Mission. Service Support Contract efficiencies will be realized by reducing the reliance on DoD Service Support Contractors by utilizing in-house government support in a constrained personnel and resource environment. NII reduction to contractor staff efficiencies will be realized by continuing to provide policy, guidance, program oversight, and resource management for command and control (C2), communications, spectrum, information assurance, and Information Technology programs with significantly less contractor support. Economic Assumptions will be realized by reducing our reliance on contractors while still achieving OASD(NII)/DoD CIO goals and objectives while in a constrained personnel and resource environment. In support of the Secretaries direction to achieve efficiencies across the department the CISA program has been reduced in FY12 by \$3.813.</p>		

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**Exhibit R-2A, RDT&E Project Justification:** PB 2012 Office of Secretary Of Defense **DATE:** February 2011

<b>APPROPRIATION/BUDGET ACTIVITY</b>				<b>R-1 ITEM NOMENCLATURE</b>				<b>PROJECT</b>			
0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 6: <i>RDT&amp;E Management Support</i>				PE 0605170D8Z: <i>Support to Networks and Information Integration</i>				001: <i>Command Information Superiority Architecture</i>			
<b>COST (\$ in Millions)</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012 Base</b>	<b>FY 2012 OCO</b>	<b>FY 2012 Total</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
001: <i>Command Information Superiority Architecture</i>	5.475	5.752	2.036	-	2.036	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles											

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

The CISA program provides a structured planning process based on Information Technology (IT) best business practices to define current and objective capabilities for IT support to assigned missions in a net-centric environment. CISA is the DoD program that provides architectures in compliance with the Clinger-Cohen Act, OMB Circular A-130, E-Gov Act and other related higher level guidance from the Federal CIO Council and the Federal Enterprise Architecture Program Management Office, which mandates the development and use of architectures as validation for IT investment decisions. The CISA program develops and maintains the Global Information Grid Enterprise Architecture, the Department's enterprise architecture as directed by Title 40. It supports the development of the framework, processes, and standards for developing and maintaining a DoD federated enterprise architecture. CISA is the leading developer for the net-centric reference model, the standard evaluation guide used by DoD Program Managers at all echelons of command for transitioning DoD programs to the net-centric environment. The CISA program supports the development of architectural standard tools and systems, including the DoD Architectural Framework manual and artifacts as well as facilitating the effective use of architectures in IT portfolio management. Develop and maintain key GIG policy and guidance documents that drive the acquisition, transition to and operation of a net-centric GIG; the implementation of policy/guidance through a set of critical supporting activities such as IT standards management, and DoD transition to Internet Protocol version 6 (IPv6); Real Time Service and IP convergence and enforcing policy through key enterprise governance mechanisms. Review and assess Command and Control, Computers, Communications and Intelligence Support Plans / Information Support Plans for the DoD CIO, identifying interoperability, supportability, net-centric and integration issues.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>
<b>Title:</b> Command Information Superiority Architectures Accomplishments and Plans	5.475	5.752	2.036
<b>FY 2010 Accomplishments:</b> <ul style="list-style-type: none"> <li>- Oversaw the activities of Architecture Standards Review Group.</li> <li>- Completed delivery of repeatable process for Enterprise Reference Architectures. Submit to Office of Management and Budget to support cross-Agency efforts.</li> <li>- Completed development of the DoD IEA, V1.2 with associated mappings to the JCSFLs, the DoD Information Enterprise Transition Plan, the DoDAF 2.0 and where appropriate the GIG 2.0.</li> <li>- Developed a companion Reference Architecture structure and process with net-centric patterns based upon the principles and rules of the DoD IEA.</li> <li>- Developed the Architecture COI vocabulary</li> <li>- Developed the extensions to the FEA Reference Models</li> <li>- Implemented DoDAF Configuration Management (CM).</li> </ul>			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2012 Office of Secretary Of Defense		<b>DATE:</b> February 2011	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 6: <i>RDT&amp;E Management Support</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0605170D8Z: <i>Support to Networks and Information Integration</i>	<b>PROJECT</b> 001: <i>Command Information Superiority Architecture</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2010</b>	<b>FY 2011</b>
<ul style="list-style-type: none"> <li>- Supported Universal Profile for DoDAF &amp; Ministry of Defense Architecture Framework (MODAF) (UPDM)</li> <li>- Continued DoDAF 2.0 Outreach.</li> <li>- Continued Architecture Center of Excellence Pilot for Capability Architectures.</li> <li>- Web Enabled DoDAF .</li> <li>- Develop DoDAF Web Based Training</li> <li>- Participated in NATO Enterprise Architecture policy development</li> <li>- Conducted technical reviews of allied architectural policy, projects, and standards.</li> <li>- Harmonization of DoD's Information Technology Standards and architectural processes with the Federal, Intelligence Community, and allied partners, will increase interoperability and aid in the attainment of an information advantage</li> <li>- Successfully synchronized NetOps policy guidance to support the establishment of USCYBERCOM. Provided Input on NetOps to Cyber section of GDF</li> <li>- Successfully completed the NetOps I-Plan FO/GO/SES Coordination and satisfactorily adjudicated all critical comments</li> <li>- Successfully provided NetOps input to DoD IE Strategic Plan &amp; Roadmap (Goal 3 – Synchronized Operations)</li> <li>- Provided constructive input to the GIG 2.0 I-Plan in order to improve clarity, prioritized tasks and improve task execution feasibility</li> <li>- Provided input to the Enterprise Ops Oversight Committee (EOOC)</li> <li>- Continued to lead the development and execution of NetOps pilots to improve NetOps data sharing between DoD Components</li> <li>- Developed a NetOps prototype (GADSS – Global Information Grid (GIG) Area of Responsibility (AOR) Decision Support System) in partnership with USSTRATCOM and DISA. The successful technical demonstration was achieved Oct 2010 with plans to field as an Enterprise Service integrated into programs of record by April 2011. Additional NetOps services will be developed reusing the GADSS service and rapid development process applied here. .</li> <li>- Initiated four COIs developing Enterprise solutions to meet findings and recommendations in the Ft. Hood Report related to Defense Installation Access Control and Force Protection. (ongoing) .</li> <li>- Developing secure information sharing between DOD users and DOJ (FBI National Crime Information Center), and TSC (Terrorist Screening Data Base) to improve protection of Defense forces and installations globally. (ongoing)</li> <li>- Developed an integrated framework integrating open-source identity management &amp; single-sign on solution with a commercial off-the-shelf content management system and the OZONE Widget Framework and OZONE Marketplace, existing web-application frameworks developed and maintained by an agency in the Intelligence Community.</li> <li>- Fielded technology preview hosted at contractor facility for demonstration and initial prototyping of 3rd party applications.</li> <li>- Developed single-sign on integration toolkit for third-party application providers.</li> <li>- Published storefront developer guide for 3rd parties who want to build applications on top of storefront framework.</li> <li>- Fielded live test and integration environment on DoD network “storefront.mil” for early user test and integration with operational services. This implementation automatically provisions users with DoD-issued Public-Key Infrastructure (PKI) credentials by</li> </ul>			

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>			<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>
<p>accessing existing DoD enterprise directory services operated by DISA that broker data from the Defense Manpower Data Center (DMDC).</p> <ul style="list-style-type: none"> <li>- Developed initial capability for discovery of government mobile applications for iPhone &amp; Android platforms, leveraging existing internet-based distribution channels</li> </ul> <p><b>FY 2011 Plans:</b></p> <ul style="list-style-type: none"> <li>- Continue to provide strategy, policy, oversight, and guidance for Architecture across the DoD Enterprise.</li> <li>- Continue development and delivery of the DoD IEA V2.0.</li> <li>- Publish Essential DoD Architecture Framework Guide</li> <li>- Continue to work with CC/S/As to ensure capabilities for operating and defending the GIG are acquired, managed, integrated and synchronized.</li> <li>- Continue to refine governance structures to address new policies and oversight requirements.</li> <li>- Continue to monitor and assess component compliance regarding new policies and guidance.</li> <li>- Continue refinement of the Net Centric DoD Architecture Framework to address new demands technologies and IA requirements.</li> <li>- Integrate , align and update NetOps architecture (include CND architecture) into IE Architecture construct.</li> <li>- Review and update (as required) the NetOps policy in support of CYBERCOM</li> <li>- Oversee execution of Tasks in NetOps I-Plan</li> <li>- Continue to synchronize NetOps activities across DoD</li> <li>- Continue to provide leadership to the development and implementation of GIG SA data strategy</li> <li>- Provide input to the development of DoD IE Strategic Plan Roadmap</li> <li>- Deliver a NetOps solution (GADSS – Global Information Grid (GIG) Area of Responsibility (AOR) Decision Support System) in partnership with USSTRATCOM and DISA. The successful technical demonstration was achieved Oct 2010 with plans to field as an Enterprise Service integrated into programs of record by April 2011. Additional NetOps services will be developed leveraging the GADSS service and rapid development process applied here.</li> <li>- Deliver a NetOps solution to NETWARCOM leveraging the GADSS COI deliverable.</li> <li>- Deliver an operational prototype data sharing service for DOD Component installations using NCIC data to discover if potential visitors have Federal warrants, wants, or are on the KAST list.</li> <li>- Continue support of the four Defense Installation Access Control (DIAC) COIs developing Enterprise solutions to meet findings and recommendations in the Ft. Hood Report related to Defense Installation Access Control and Force Protection (ongoing). In addition to the DIAC-V COI described above, the DIAC Criminal Justice COI data sharing service supporting NCIS, OSI, and CID, TSDB/Access COI, and the Physical Access Control Systems (PACS) Enterprise data sharing activities started in 2010 will continue through 2011.</li> </ul>					

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B. Accomplishments/Planned Programs (\$ in Millions)							FY 2010	FY 2011	FY 2012		
<div>- Developing secure information sharing service for DOD users authorized for access to Terrorist Screening Data, (TSDB/Access COI), to improve protection of Defense forces and installations globally (ongoing)</div> <div>- Develop a first increment of electronic health records data sharing services supporting DOD and VA given appropriate task authorities, resources, working agreements, and project scope are available.</div> <div>- Develop an initial data sharing service for the C-IED COI if agreement about the scope and priority to deliver services based on the current three-year data modeling effort.</div> <div>- Enhance initial capability for discovery of applications for mobile devices (e.g. smartphones) to support secure distribution</div> <div>- Integrate document management and workflow capabilities to address the capability delta between existing service portal solutions and storefront’s initial capabilities.</div> <div>- Develop and field user account management workflow processes for sponsored access to the storefront environment to mission partners who are not part of the DoD PKI (e.g. coalition partners, non-governmental organizations) or for environments where DoD PKI is not pervasive (such as SIPRnet)</div> <div>FY 2012 Plans:</div> <div>In support of the Secretaries direction to achieve efficiencies across the department the CISA program has been reduced in FY12 by \$3.813 million. The residual funding in FY12 is required to complete the following on-going deliverables:</div> <div>- Implement Net Ops plan designed to enable secure and efficient Net-Centric Operations</div> <div>- Synchronize policy guidance to support cyberspace and GIG operations</div> <div>- Implement capabilities for operating and defending the GIG in support of the National Military Strategy for Cyberspace Operations</div> <div>By the close of FY12 the synchronization of the Net Ops plan and the DoD Architectural Framework manual and artifacts will be complete as will the development portion of the CISA program.</div>											
Accomplishments/Planned Programs Subtotals							5.475	5.752	2.036		
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• 0902198D8Z: Command Information Superiority Architecture	4.391	3.768	3.522		3.522	2.395	0.000	0.000	0.000	9.685	14.076
D. Acquisition Strategy											
N/A											

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**E. Performance Metrics**

CISA Performance is based on the number of initiatives that transition to the net-centric environment to support operations.

Measures include:

- Timely development and issuance of policy, guidance, processes, and technologies to build, populate, govern, operate, and protect the Network.
- Policies developed and issued for GIG design, architecture content management, implementation, and operations.

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0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support				PE 0605170D8Z: Support to Networks and Information Integration				002: Defense Architecture Repository			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
002: Defense Architecture Repository	1.258	1.322	1.048	-	1.048	1.091	1.090	1.000	1.020	Continuing	Continuing
Quantity of RDT&E Articles											

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

DARS is the Department's enterprise registry, catalog and navigation map for enterprise architecture. It serves as the Department's primary catalog of architecture data holdings and provides users the ability to register holdings metadata and search, retrieve, and use DoD architecture data in federated architecture data repositories across DoD. DARS provides a key component of the Department's net-centric data management capability by federating enterprise architecture data across the Department. It enables alignment of program architecture components with the Federal Enterprise Architecture Business Reference Model - consistent with OMB directives for exhibit 300s - via the DoD Business Reference Model. DARS implements a federated search capability and metadata catalog that will interoperate with the Department's Net-Centric Enterprise Discovery Service and enterprise content metadata catalog. Architecture metadata is searchable using the DARS federated discovery web service. The discovery search results provide links to architecture data that is retrievable based on user roles and access permissions. Implementations are accessible on both the NIPRNET (unclassified) and SIPRNET (Collateral Classified). Key features of the DARS program focus on: (1) Making architecture data visible, accessible, trusted, understandable, and interoperable (2) enabling reuse of validated architecture data to build "composite" integrated architectures; (3) enabling architecture analysis; and, (4) integrating architecture data into the DoD mainstream decision-making processes. The Department of the Air Force, Army, and Navy CIO's are collaborating in the development of DARS federation web services via the Federated Joint Architecture Working Group under the auspices of the DoD Enterprise Architecture Summit to ensure DoD-wide access to and usability of all components of the composite DoD enterprise architecture model.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	FY 2010	FY 2011	FY 2012
<b>Title:</b> DARS Accomplishments and Plans	1.258	1.322	1.048
<b>FY 2010 Accomplishments:</b> <ul style="list-style-type: none"> <li>- Supported DARS User Group Meetings, and Functional Capability Document</li> <li>- Delivered Improved DARS Web GUI, AV-1, and AV-2 registration</li> <li>- Delivered Web online Table Graphic EA Architecture Navigator</li> <li>- Delivered DARS Road Map Provide for and continue enterprise-level operational support for the DoD Architecture Registry System.</li> <li>- Enforced transition to a complete services web-based application by expanding the current net-centric services based security and compliant met-data discovery with a collaborate environment that ensures end-to-end information assurance of validated architecture data.</li> <li>- Worked with DoD Component to refine requirements and processes to effectively expose existing architectures for reuse.</li> </ul>			
<b>FY 2011 Plans:</b> <ul style="list-style-type: none"> <li>- Recode all Legacy software code to streamline the Web services</li> </ul>			

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2010</b>	<b>FY 2011</b>
<ul style="list-style-type: none"> <li>- Build out Web measurement and scorecard management capability</li> <li>- Advance Web GUI, AV-1, and AV-2 registration</li> <li>- Continue Table Graphic EA Architecture search, discovery, and delivery</li> <li>- Continue Table Graphic Drilldown Architectures</li> <li>- Continue enterprise-level operational support for the DoD Architecture Registry System.</li> <li>- Continue to work with DoD Component to refine requirements and processes to effectively expose existing architectures for reuse.</li> <li>- Continue to expand and refine DARS to accommodate registration /federation requirements.</li> <li>- Continue integration of DARS data services into the "Core Enterprise Services".</li> </ul> <p><b><i>FY 2012 Plans:</i></b></p> <ul style="list-style-type: none"> <li>- Deliver DARS Architecture</li> <li>- Deliver Web online Architecture management, measurement</li> <li>- Link all architectures to the Enterprise Architecture Core Table Graphic</li> <li>- Deliver /approve DARS Functional Capability Document</li> <li>- Continue enterprise-level operational support for the DoD Architecture Registry System.</li> <li>- Continue to work with DoD Component to refine requirements and processes to effectively expose existing architectures for reuse.</li> <li>- Continue to expand and refine DARS to accommodate registration /federation requirements.</li> <li>- Continue integration of DARS data services into the "Core Enterprise Services".</li> </ul>			
<b>Accomplishments/Planned Programs Subtotals</b>		1.258	1.322
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A			
<b>D. Acquisition Strategy</b> N/A			
<b>E. Performance Metrics</b> DARS Performance Metrics: <ul style="list-style-type: none"> <li>- Timely development and issuance of policy, guidance, processes, and technologies to build, populate, govern, operate, and protect the Network.</li> <li>- Policies developed and issued for GIG design, architecture content management, implementation, and operations.</li> </ul>			

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<b>COST (\$ in Millions)</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012 Base</b>	<b>FY 2012 OCO</b>	<b>FY 2012 Total</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
003: <i>Integrated Planning and Management</i>	2.025	2.128	1.686	-	1.686	1.756	1.753	1.608	1.641	Continuing	Continuing
Quantity of RDT&E Articles											
<b>A. Mission Description and Budget Item Justification</b>											
<p>The Integrated Planning and Management Project encompasses the National and Nuclear Command Capabilities (N2CC) Management Office's (NMO) responsibilities for establishing overall DoD policy and oversight with respect to the capability development, interoperability, standards, and architecture for National and Nuclear Command Capabilities for our National Leadership. The NMO serves as the single point of contact within the Department for policy, long-range plans, programs, integrated mission advocacy, and management of decision-maker capabilities. The objective of the NMO is to ensure capabilities are in place to provide complete and timely situational awareness and decision tools for senior decision-makers. Additionally, the NMO assists the ASD NII/DoD CIO as the Executive Agent and primary OSD advocate for the White House Military Office with oversight of a wide range of DoD command and control (C2) and communications assets and oversees the efforts of the Services and Agencies in the design, integration, and deployment of critical and sensitive C2 capabilities. Three overall areas of focus include: 1) National Senior Leader C3 System to include Emergency Preparedness and DoD support to Civil Authorities; 2) Global Nuclear C2 and Nuclear Strike plus Integrated Missile Defense and Tactical Warning; and 3) Continuity of Government (COG) in conjunction with Mission Assurance (MA).</p>											
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>								<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	
<b>Title:</b> Integrated Planning and Management								2.025	2.128	1.686	
<b>FY 2010 Accomplishments:</b>											
<p>Managed efforts to identify, minimize, or eliminate shortfalls or deficiencies in the C3 programs that support White House and DoD senior leaders</p> <ul style="list-style-type: none"> <li>- The Defense Laboratory system engineering team produced a requirements database, and a Systems Concept Document to fast-track promising technologies and to posture requirements for the long-term</li> <li>- Finalized a comprehensive plan for developing capabilities to support information and mission assurance capabilities, and initiation of processes to insure oversight of the Capabilities Integration Team (CIT) -- an NLCC integrated product team.</li> <li>- Conducted experimentation and identify appropriate technologies that will advance the capabilities needed to support COOP/ COG/ECG requirements</li> <li>- Continued developing integrated schedule, technical architecture features and concepts, and definition of the operating environment</li> <li>- Continued addressing elements for long-term integrated design and development of capabilities that cross multiple DoD agencies, programs of record, and the Leadership Command Information Services (L-CIS).</li> <li>- Continued efforts to enhance technical collaboration among Gov't organizations across multiple key Federal Agencies.</li> </ul>											
<b>FY 2011 Plans:</b>											

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<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 6: <i>RDT&amp;E Management Support</i>		<b>R-1 ITEM NOMENCLATURE</b> PE 0605170D8Z: <i>Support to Networks and Information Integration</i>		<b>PROJECT</b> 003: <i>Integrated Planning and Management</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>			<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>
<p>Continue to work among the various stakeholders – NMO, DISA, ASD(HD), USSTRATCOM, NSA, and both DoD and National Senior Leadership – to identify deficiencies and risks to L-CIS programs, systems, networks, and applications, and coordinate and evolve towards more integrated, sustainable, and distributed capabilities of collaborative voice, video, data, and situational awareness that is secure and survivable.</p> <ul style="list-style-type: none"> <li>- Continue efforts with Defense Laboratories and industry partners to better understand threats and risks to national leadership C2 capabilities</li> <li>- Work towards a Systems Requirements Review, and towards the evolution of engineering plans and software tools for integration of management schedules, requirements, architectures, and facilitating informed decision making for NLCC capabilities</li> <li>- Investigate performance and capabilities of candidate or representative C3 systems and technologies</li> <li>- Continue efforts with UARC/FFRDCs and industry partners to better integrate requirements, schedules, technical architectures and concepts, and definitions of operating environments involving the stakeholders (above).</li> <li>- Continue to support the Capabilities Integration Team (CIT) and governance needs</li> </ul> <p><b><i>FY 2012 Plans:</i></b></p> <p>Continue efforts to assess evolving technologies to integrate White House, DoD senior leader, and inter-Agency requirements for enhanced and informed decision-making, information sharing, coordination, and resolution of issues across all spectra of threat scenarios, regardless of time or senior leadership location.</p> <ul style="list-style-type: none"> <li>- Continue UARCs research and development of analytical tools that will help decision-makers provision senior leadership with enhanced situational awareness, conferencing, and collaboration, courses of action, execution of decisions, and feedback mechanisms to best assure critical and sometimes unanticipated needs are met within a framework of common decision-making objectives.</li> </ul>					
<b>Accomplishments/Planned Programs Subtotals</b>			2.025	2.128	1.686
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A					
<b>D. Acquisition Strategy</b> N/A					
<b>E. Performance Metrics</b> C2 Integrated Planning & Management Performance Metrics: <ul style="list-style-type: none"> <li>- Successfully develop, coordinate, and publish DOD C2 policies and operational concepts.</li> <li>- Establishment of an information integration and decision portfolio of C2 services and applications to demonstrate selected capabilities.</li> <li>- Development of Dynamic Operational Communities of Interest services based on the capabilities provided by the NCES Program.</li> </ul>					

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Office of Secretary Of Defense		DATE: February 2011
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 6: <i>RDT&amp;E Management Support</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0605170D8Z: <i>Support to Networks and Information Integration</i>	<b>PROJECT</b> 003: <i>Integrated Planning and Management</i>
Establishment of an ontological framework and XML data model to permit the meta-tagging of information integration decision portfolio data at the strategic and national C2 level in a manner consistent with other DoD data strategies and modeling efforts.		

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Office of Secretary Of Defense								DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605170D8Z: Support to Networks and Information Integration				PROJECT 004: Support to NII Mission Requirements			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
004: Support to NII Mission Requirements	5.605	5.889	4.667	-	4.667	4.861	4.852	2.981	3.043	Continuing	Continuing
Quantity of RDT&E Articles											
A. Mission Description and Budget Item Justification This program supports studies and analyses in the areas of networks, information integration, defense-wide command and control (C2), and communications.											
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2010	FY 2011	FY 2012	
Title: Support to NII Mission Requirements								5.605	5.889	4.667	
FY 2010 Accomplishments: \$3.500 million - Global Positioning System (GPS) User Equipment Synchronization to conduct OASD/NII oversight of Global Positioning System (GPS) management and planning activities required for the National Space-Based Positioning, Navigation and Timing Executive Committee. Funding supported: - Full time on-site staff support to ASD(NII)/DoD CIO Space Programs and Policy (3 STE) - Full time PNT liaison officer for OASD(NII)/DoD CIO at US STRATCOM (1 STE) - Authored and coordinated International Supplement to GPS Security Policy DODI 4650.0x - Authored and coordinate Information Assurance/COMSEC Supplement to GPS Security Policy DODI 4650.0x - Finalized and executed the GPS Security Policy DODI 4650.0x - Finalized and coordinating Navigation Warfare Concept of Operations DODI 4650.0x within DoD - Finalized Next Generation Air Transport System (NextGen) DODI 5030.x ; presented to PBFA for their disposition - Initiated study of Security Control of Navigation Aids DODI 5030.x in concert with NORAD, NORTHCOM, DHS, and FAA - Developed NextGen interfaces with the GPS Wing, Joint Program Development Office (JPDO), Air Force, and Policy Board for Federal Aviation (PBFA) - Conducted biennial update of the Federal Radio-Navigation Plan (FRP) - Coordinated and implemented Red Key Sundown Policy - Provided staff support, performed research and conducted studies as directed by DEPSECDEF in his role as co-chair of the National Executive Committee for Space-Based PNT and for ASD(NII)/DoD CIO in his role as co-chair of the Executive Steering Group - Performed annual update of National Five-year Plan for Space-Based Positioning, Navigation and Timing (PNT) - Authored DoD portion, conducted interagency coordination and submitted the GPS Biennial Report to Congress for signature by the ASD(NII)/DoD CIO - Oversaw and coordinated execution of U.S National PNT Architecture Transition Plan within DoD and in the interagency forum											

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2012 Office of Secretary Of Defense		<b>DATE:</b> February 2011	
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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2010</b>	<b>FY 2011</b>
<p>- Conducted a study to identify and catalog civil/commercial GPS uses, requirements, service benefits and augmentation dependencies to inform implementation and execution of Navwar CONOP, Security Control of Navaids, the National PNT Architecture, and NextGen</p> <p>\$2.105 million - Command and Control Research:</p> <ul style="list-style-type: none"> <li>- Continued to enhance the tools and instrumented environments that support C2-related research</li> <li>- Continued to pursue research on new approaches to military and civil-military command and control suitable for 21st Century coalition operations including stability and reconstruction.</li> <li>- Continued to fund the Edge Institute at the Navy Post Graduate School (NPS) and selected research efforts at other universities and research centers.</li> <li>- Continued to support the Network Science Center at the USMA at West Point to engage faculty and cadets in network-centric C2 related projects.</li> <li>- Continued, in collaboration with allies and NATO partners, the development and testing of a maturity model for network-enabled coalition command and control and the development of related metrics</li> <li>- Supported DoD organizations in the design and conduct of C2-related experimentation</li> <li>- Continued to work with the DoD community and international partners to improve the understanding of Information Age command and control related concepts, technologies, and experiments.</li> <li>- Conducted 14th International Command and Control Research and Technology Symposium.</li> <li>- Conducted workshops to explore command and control related issues.</li> <li>- Continued to develop manuscripts for widely read and respected C2 publications and outreach program.</li> <li>- Maintained and expanded C2 research community website</li> <li>- Continued campaign of experimentation related to information sharing, collaboration, and trust.</li> </ul> <p><b>FY 2011 Plans:</b></p> <p>\$3.500 million for Global Positioning System (GPS) User Equipment Synchronization to conduct OASD/NII oversight of Global Positioning System (GPS) management and planning activities required for the National Space-Based Positioning, Navigation and Timing Executive Committee. Funding will support:</p> <ul style="list-style-type: none"> <li>- Full time on-site staff support to ASD(NII)/DoD CIO Space Programs and Policy (3 STE)</li> <li>- Oversee execution of International Supplement to GPS Security Policy DODI 4650.0x</li> <li>- Oversee execution of Information Assurance/COMSEC Supplement to GPS Security Policy DODI 4650.0x</li> <li>- Implement GPS Security Policy DODI 4650.0x</li> <li>- Tie DoD user data and populated GPS Protection Profile matrix from Navigation Warfare Concept of Operations DODI 4650.0x into Warfighting Operations Plans (OPLANS) and Contingency Plans (CONPLANS) in coordination with US STRATCOM</li> </ul>			

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2010</b>	<b>FY 2011</b>
<ul style="list-style-type: none"> <li>- Author PNT Navigation Warfare Annexes to all the Operations Plans (OPLANS) and Contingency Plans (CONPLANS) in coordination with US STRATCOM</li> <li>- Oversee execution and conduct Analysis of Alternatives for GPS Enterprise and PNT Assurance alternatives IAW CAPE guidance</li> <li>- Oversee execution and conduct Analysis of Alternatives for Security Control of Navigation Aids DODI 5030.x in concert with NORAD, NORTHCOM, DHS, and FAA</li> <li>- Continue developing NextGen interfaces with the GPS Wing, Joint Program Development Office (JPDO), Air Force, and Policy Board for Federal Aviation (PBFA)</li> <li>- Continue implementation of Red Key Sundown Policy</li> <li>- Conduct studies and programmatic analysis of activities involving OCX and GPS III contract activities</li> <li>- Provide staff support, perform research and conduct studies as directed by DEPSECDEF in his role as co-chair of the National Executive Committee for Space-Based PNT and for ASD(NII)/DoD CIO in his role as co-chair of the Executive Steering Group</li> <li>- Perform annual update of National Five-year Plan for Space-Based Positioning, Navigation and Timing (PNT)</li> <li>- Apply Navigation Warfare Concept of Operations DODI 4650.0x via the Joint Navigation Warfare Center (JNWC) and US STRATCOM to develop Doctrine, Tactics, Techniques and Procedures, Training, Equipment Validation and Material Solutions to Navigation Warfare challenges to the Military Services and Combatant Commanders in the scenarios defined in the CONPLANS and OPLANS.</li> </ul> <p>\$2.389 million - Command and Control Research:</p> <ul style="list-style-type: none"> <li>- Continue to enhance the tools and instrumented environments that support C2-related research</li> <li>- Continue to pursue research on new approaches to military and civil-military command and control suitable for 21st Century coalition operations including stability and reconstruction.</li> <li>- Continue to fund the Edge Institute at the Navy Post Graduate School (NPS) and selected research efforts at other universities and research centers.</li> <li>- Continue to support the Network Science Center at the USMA at West Point to engage faculty and cadets in network-centric C2 related projects.</li> <li>- Continue, in collaboration with allies and NATO partners, the development and testing of a maturity model for network-enabled coalition command and control and the development of related metrics</li> <li>- Support DoD organizations in the design and conduct of C2-related experimentation</li> <li>- 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.</li> <li>- Conduct 14th International Command and Control Research and Technology Symposium.</li> <li>- Conduct workshops to explore command and control related issues.</li> </ul>			

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2010</b>	<b>FY 2011</b>
<ul style="list-style-type: none"> <li>- Continue to develop manuscripts for widely read and respected C2 publications and outreach program.</li> <li>- Maintain and expand C2 research community website</li> <li>- Continue campaign of experimentation related to information sharing, collaboration, and trust.</li> </ul> <p><b>FY 2012 Plans:</b></p> <p>\$3.111 million for Global Positioning System (GPS) User Equipment Synchronization to conduct OASD/NII oversight of Global Positioning System (GPS) management and planning activities required for the National Space-Based Positioning, Navigation and Timing Executive Committee. Funding will support:</p> <ul style="list-style-type: none"> <li>- Full time on-site staff support to ASD(NII)/DoD CIO Space Programs and Policy (3 STE)</li> <li>- Implement and manage the International Supplement to GPS Security Policy DODI 4650.0x</li> <li>- Implement and manage the Information Assurance/COMSEC Supplement to GPS Security Policy DODI 4650.0x</li> <li>- Implement and manage the GPS Security Policy DODI 4650.0x</li> <li>- Implement the GPS Protection Profile matrix from Navigation Warfare Concept of Operations DODI 4650.0x in conjunction with Warfighting Operations Plans (OPLANS) and Contingency Plans (CONPLANS) in coordination with US STRATCOM</li> <li>- Implement and manage PNT Navigation Warfare Annexes to all the Operations Plans (OPLANS) and Contingency Plans (CONPLANS) in coordination with US STRATCOM</li> <li>- Implement the DoD GPSEM and PNT Assurance AoA as part of a Material Development Decision (MDD) IAW DoDD 5000.02</li> <li>- Insure the Analysis of Alternatives for implementation of Next Generation Air Transport System (NextGen) DODI 5030.x is injected into the DoDD 5000.02 decision process in an MDD</li> <li>- Implement the recommendations of the Analysis of Alternatives for Security Control of Navigation Aids DODI 5030.x in the DoD DOTMLPF construct</li> <li>- Continue developing NextGen interfaces with the GPS Wing, Joint Program Development Office (JPDO), Air Force, and Policy Board for Federal Aviation (PBFA)</li> <li>- Continue implementation of Red Key Sundown Policy</li> <li>- Conduct studies and programmatic analysis of activities involving OCX, MGUE, and GPS III contract activities</li> <li>- Provide staff support, perform research and conduct studies as directed by DEPSECDEF in his role as co-chair of the National Executive Committee for Space-Based PNT and for ASD(NII)/DoD CIO in his role as co-chair of the Executive Steering Group</li> <li>- Perform annual update of National Five-year Plan for Space-Based Positioning, Navigation and Timing (PNT)</li> <li>- Draft, coordinate, and publish the 2012 edition of the Federal Radionavigation Plan (FRP)</li> <li>- Apply Navigation Warfare Concept of Operations DODI 4650.0x via the Joint Navigation Warfare Center (JNWC) and US STRATCOM to develop Doctrine, Tactics, Techniques and Procedures, Training, Equipment Validation and Material Solutions to Navigation Warfare challenges to the Military Services and Combatant Commanders in the scenarios defined in the CONPLANS and OPLANS.</li> </ul>			

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>
<p>\$1.556 million - Command and Control Research:</p> <ul style="list-style-type: none"> <li>- Continue to enhance the tools and instrumented environments (ELICIT and abELICIT) that support C2-related research with a focus on mixed human-agent experiments that permits cost-effective exploration of selected individual and team characteristics to extend costly human experimentation</li> <li>- Continue a focused research initiative related to C2 Agility in the context of Complex Endeavors</li> <li>- Continue to pursue research on new approaches to military and civil-military command and control suitable for 21st Century coalition operations including stability and reconstruction.</li> <li>- Continue to fund the Edge Institute at the Navy Post Graduate School (NPS) and selected research efforts at other universities and research centers.</li> <li>- Continue to provide expertise to the Network Science Center at the USMA at West Point and to engage faculty and cadets in network-centric C2 related projects.</li> <li>- Complete the second phase of a research effort, in collaboration with allies and NATO partners, that defines Agility in the context of entity and collective focus and convergence</li> <li>- Support DoD organizations in the design and conduct of C2-related experimentation</li> <li>- 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.</li> <li>- Conduct 17th International Command and Control Research and Technology Symposium</li> <li>- Conduct workshops to explore command and control related issues.</li> <li>- Continue to develop manuscripts for widely read and respected C2 publications and outreach program.</li> <li>- Maintain and expand C2 research community website</li> <li>- Continue campaigns of experimentation using ELICIT and abELICIT to explore issues related to infostructure characteristics and performance and information sharing, collaboration, and trust.</li> </ul>				
<b>Accomplishments/Planned Programs Subtotals</b>		5.605	5.889	4.667
<b>C. Other Program Funding Summary (\$ in Millions)</b>				
N/A				
<b>D. Acquisition Strategy</b>				
N/A				
<b>E. Performance Metrics</b>				
Community participation in command and control research program (CCRP) events.				

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<ul style="list-style-type: none"><li>- Number of requests for / downloads of CCRP publications.</li><li>- Number of international countries engaged in net centric discussions and collaborative research and analysis efforts.</li><li>- Number of researchers using CCRP-developed models, metrics, and experimental environments and tools.</li><li>- Successfully sponsored symposia/workshops to discuss command and control research initiatives.</li></ul>		

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