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Exhibit R-2, RDT&E Budget Item Justification						Date: February 2004	
Appropriation/Budget Activity RDT&E Defense-Wide, BA 7				R-1 Item Nomenclature: Program Element (PE) Name and Number Information Systems Security Program PE 0303140D8Z			
Cost (\$ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost		14.576	11.135	12.262	12.563	12.781	13.219
A. Mission Description and Budget Item Justification:							
<p>The NII Information Systems Security Program (ISSP) provides focused research, development, testing and integration of technology and technical solutions critical to the Defense information assurance program (10 USC 2224) through pilot programs and technology demonstration; investment in high leverage, near-term programs that offer immediate Information Assurance (IA) benefit; federal and multi-national initiatives; and short-term studies and research critical to protecting and defending information systems by ensuring their availability, integrity, authentication, confidentiality, and non-repudiation. These efforts focus on Computer Network Defense (CND) and the restoration of information systems by incorporating protection, detection, analysis and reaction and response capabilities; emerging cryptographic technologies; technology transition and IA research capabilities. This program is designed to meet the requirements of 10 USC 2224 (Defense Information Assurance Program), 44 USC 3544, (Federal Information Security Management Act of 2002), OMB Circular A-130, and DoD Directives 8500.1, and 0-8530.1.</p> <p>FY2003 Accomplishments (N/A):</p> <p>FY2004 Plans (\$14.576 million):</p> <ul style="list-style-type: none"> • Continue development of the Digital DITSCAP an automated security certification and accreditation process for DOD information systems. Begin expansion of Digital DITSCAP design into a more robust web-based design called the Enterprise Mission Assessment Support System (eMASS) using shared information to deliver improved functionality over all the core IA processes by interconnecting all data transactions via a common database. • Develop IA architecture, policy and identify IA capabilities necessary to support and “end-to-end” IA capability for the GIG – including Transformational Communications, GIG Bandwidth Expansion, JTRS, and GIG Enterprise Services (GES)/Net Centric Enterprise Service (NCES) capabilities such as discovery, collaboration, messaging, mediation, data tagging, etc. • Development of information assurance techniques/processes for allied and coalition operations, including continued research and testing with Combined Communications Electronics Board (CCEB) with Australia, Canada, New Zealand and the U.K., 							

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the Multinational Interoperability Council (MIC) with Australia, Canada, France, Germany and U.K., and with the international test bed at the Joint Battle Center. Develop alternative network design and security concepts for improved coalition operations.

- IA research process improvement with NSA, Service IA laboratories, and leveraging venture capital models such as In-Q-Tel; development of a Commercial Innovation Integration (CII) process to better leverage commercial research activities for DoD Information Assurance.
- PKI and PKE. Exploration of design alternatives to current PKI tokens (PC and SmartCard) for the tactical and classified environment. Analysis of design and policy changes needed for multiple security domain tokens (one token for both unclassified/classified use). Support for software development necessary to enable mission critical programs for use with PKI. Continue support for the Defense Cross-credentialing Information System (DCIS) pilot, which is focused on identifying and resolving interoperability issues between the electronic credentials of the Defense Department and its commercial partners.
- Support for improved detection of the “insider threat” (DPG 04 task). Research and Analysis of new and enhanced attribution and trace back tools on enterprise level (local enclave through Service CERT to DoD CERT/JTF-CNO). Develop design requirements for improved auditing capabilities to identify, alert and analyze anomalous insider activities.
- Research and analyze enhanced Computer Network Defense (CND), vulnerability management and situational awareness tools that can be used and integrated throughout the DoD enterprise.

FY2005 Plans (\$11.135 Million):

- Continue development of eMASS into a deployed enterprise information assurance management tool. Develop capability to map IA policy to IA metrics to standard validation methods; standardize and integrate IA processes (traceability, resourcing, vulnerability management, ports and protocols management, incident management, and decision support); integrate the C4ISR architectural overlay into IA data exchange standards.
- Continue development of IA architecture, policy and identify IA capabilities necessary to support and “end-to-end” IA capability for the GIG – including Transformational Communications, GIG Bandwidth Expansion, JTRS, and GIG Enterprise Services (GES)/NetCentric Enterprise Service (NCES) capabilities such as discovery, collaboration, messaging, mediation, data tagging, etc.

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- Continue development of the Commercial Innovation Integration (CII) process to leverage commercial research activities for DoD Information Assurance.
- Insider Threat (DPG 04 task). CND/Information Assurance/Information Operations Attribution Capability Initiative. Leveraging work done in FY2003 and FY2004, prototype and test enterprise attribution and trace back tools.
- Develop and prototype enterprise CND, vulnerability management and situational awareness tools identified in FY2003/FY2004.
- Design and test prototype networks to improve information assurance and information sharing on coalition networks (CCEB, MIC, etc.); develop design criteria for improved “guards” for connection between differing security domains; selected prototype development of high priority guarding solutions.

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		14.790	15.178
Current BES	-	14.576	11.135
Total Adjustments			-4.043
Congressional program reductions			
Congressional rescissions, Inflation adjustments		-214	-.043
Congressional increases			
SBIR/STTR Transfer			
Reprogrammings			-4.000

Change Summary Explanation:

FY 2004: FFRDC Reduction -.057 million; Management Improvement -.031 million; Management Efficiencies -.126 million.
 FY 2005: Realignment to O&M - 4.000 million; Non-pay Purchase Inflation -.043 million.