Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Office of Secretary Of Defense	DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 6: *RDT&E Management Support*	R-1 ITEM NOMENCLATURE PE 0303166D8Z: *Support to Information Operations Capabilities*

COST ($ in Millions)	All Prior Years	FY 2012	FY 2013#	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	16.011	11.767	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	27.778
001: *IO Range*	4.708	9.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	13.708
002: *IO Capability Activities*	11.303	2.767	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	14.070

FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

The FY 2014 OCO Request will be submitted at a later date

A. Mission Description and Budget Item Justification

This program was part of the Defense Department's coordinated effort to integrate Information Operations (IO), Cyber, and Intelligence Operations Integrations (IOI) test and evaluation capabilities to assess IO, Cyber, and IOI technologies and tactics in a representative operational environment against realistic targets. The Defensewide IO Program Review revalidated a suite of automated data analysis and decision support software tools to facilitate joint-IO. The advent of critical Cyberspace Operations mandate Cyber Technologies be assessed in a like environment. In addition, joint warfighter requirements were driving the integration of intelligence and operations capabilities/capacities. This program enabled users to accomplish Joint Intelligence Preparation of the Operational Environment (JIPOE), develop effective IO, Cyber, and operational strategies and candidate campaign targets, plan missions, and monitor and assess execution of operations. The objectives of this program were to create a flexible, seamless and persistent environment enabling Combatant Commanders to achieve the same level of confidence and expertise in employing IO and Cyber capabilities that they have in kinetic weapons; to lead the development of joint IOI capabilities and capacity that facilitate operational and intelligence planning activities by the Services and COCOMs; and to transform IO, Cyber, and IOI activities to support joint IO training, education, and exercises.

B. Program Change Summary ($ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	11.771	0.000	0.000	-	0.000
Current President's Budget	11.767	0.000	0.000	-	0.000
Total Adjustments	-0.004	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustment	-0.004	-	-	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2014 Office of Secretary Of Defense			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 6: *RDT&E Management Support*	R-1 ITEM NOMENCLATURE PE 0303166D8Z: *Support to Information Operations Capabilities*	PROJECT 001: *IO Range*	

COST ($ in Millions)	All Prior Years	FY 2012	FY 2013#	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
001: *IO Range*	4.708	9.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	13.708
Quantity of RDT&E Articles												

FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

The FY 2014 OCO Request will be submitted at a later date

A. Mission Description and Budget Item Justification

The National Military Strategy of the United States stressed the importance of integrating Information Operations (IO) capabilities for the success of Joint Operations and Decision Superiority. The Defense-Wide IO Program Review revalidated a requirement for an integrated range supporting “exercises, testing, and development of IO capabilities.” Further direction by the Office of the Secretary of Defense (OSD) identified the need for an “integrated IO test and evaluation capability to assess IO technologies and tactics in a representative operational environment against realistic targets.” The 2006 National Security Strategy identified "Strengthening Alliances to Defeat Global Terrorism and Work to Prevent Attacks Against Us and Our Friends", which involves significant Information Operations (IO) and Cyber operations as a goal. Through the Defense Planning Guidance (DPG) and the Integrated Priority Lists, COCOMs repeatedly stated the need to expand IO/Cyber training and education for the developing cadre of IO/Cyber professionals and provide an environment for analysis, testing, training, combat assessments, and measures of effectiveness for more reliable IO/Cyber capabilities. The Deputy Secretary of Defense Memorandum on the IO Range had established the requirement for creating a cooperative IO range among the Military Services.

The IO Range provided a secure, flexible, and seamless environment for the Military Services and Joint warfighters to test, train, develop tactics, and exercise selected IO/Cyber capabilities. The basis of the functional structure of the IO Range was the integration of existing ranges, laboratories, information warfare centers, and other Government facilities that currently support IO/Cyber test, training, exercise, and experimentation events. Capabilities at the selected sites were securely connected and integrated into the IO Range. A key feature of this concept was a persistent, secure connection that linked the sites together, allowing the exchange of data and the visualization of effects as we employed capabilities. Creation of a “virtual range” based on persistent connections significantly reduced the amount of lead-time required to set up each new warfighter event. The IO Range was a full spectrum IO/Cyber Range supporting: operations security (OPSEC), computer network operations (CNO), electronic warfare (EW), military information support operations (MISO), and military deception (MILDEC). This environment enabled warfighters to visualize non-kinetic weapons effects, understand the intricate and interactive effects generated by kinetic and non-kinetic weapons and achieve the same level of confidence and expertise in employing IO/Cyber capabilities as they have with kinetic capabilities.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Title: IO Range	9.000	0.000	0.000
FY 2012 Accomplishments: - Developed, tested and evaluated IO Range concepts during events based on a list of prioritized requirements and available funding. - Moved toward full spectrum IO and Cyber and evolved with the addition of a more robust set of targets.			

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
- Implemented IO and Cyber capabilities at field sites. This effort supported progress toward reaching full capability in which more than 90 persistent IO Range sites were connected and integrated for IO Range use. ***FY 2013 Plans:*** N/A ***FY 2014 Plans:*** N/A			
Accomplishments/Planned Programs Subtotals	9.000	0.000	0.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

The acquisition, management, and contracting strategy followed guidance outlined in DoD 5000 series directives, Federal Acquisition Regulation (FAR), and FAR supplement policies and procedures. Management used project management tools and meetings to ensure delivery of stated capabilities performance criteria.

E. Performance Metrics

Performance metrics were measured through internal management controls and external assessments. Performance metrics included, but were not limited to time, money, realism, and fidelity as defined below:

- Time – Enabled the warfighter to speed up processes faster than past capabilities allowed.
- Money – Enabled the warfighter to reduce duplication of effort and to prepare and execute events at a more effective and efficient cost than past capabilities allowed.
- Realism – Enabled the warfighter to create an environment that was closer to the real world environment than past capabilities allowed.
- Fidelity – Ensured unity of efforts throughout the IO, Cyber, and IOI Communities.

Exhibit R-2A, RDT&E Project Justification: PB 2014 Office of Secretary Of Defense			DATE: April 2013
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COST ($ in Millions)	All Prior Years	FY 2012	FY 2013#	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
002: *IO Capability Activities*	11.303	2.767	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	14.070
Quantity of RDT&E Articles												

FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

The FY 2014 OCO Request will be submitted at a later date

A. Mission Description and Budget Item Justification

This project supported new and cutting-edge operational activities that addressed the issues of rapidly changing technology and the complex inter-relationships associated with data exchange and analysis. This included support of data analysis tools for assessment of machine-based and electromagnetic spectrum-based information transmittal.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Title: IO Capability Activities	2.767	0.000	0.000
FY 2012 Accomplishments: Supported development of IO, cyber and IOI cutting-edge capabilities that supported COCOMs and Services executing operations during current and future conflicts.			
FY 2013 Plans: N/A			
FY 2014 Plans: N/A			
Accomplishments/Planned Programs Subtotals	2.767	0.000	0.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

IO Capability Activities acquisition, management, and contracting strategy followed guidance outlined in DoD 5000 series directives, Federal Acquisition Regulation (FAR), and FAR supplement policies and procedures. Management used project management tools and meetings to ensure delivery of stated capabilities performance criteria.

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E. Performance Metrics

Performance metrics were measured through internal management controls and external assessments. Performance metrics included, but were not limited to time, money, realism, and fidelity as defined below:

- Time – Enabled the warfighter to speed up processes faster than past capabilities allowed.
- Money – Enabled the warfighter to reduce duplication of effort and to prepare and execute events at a more effective and efficient cost than past current capabilities allowed.
- Realism – Enabled the warfighter to create an environment that was closer to the real world environment than past capabilities allowed.
- Fidelity – Ensured unity of efforts throughout the IO, Cyber, and IOI Communities.