OSD RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

May 2009

APPROPRIATION/ BUDGET ACTIVITY	PE NUMBER AND TITLE
RDTE, Defense Wide BA# 6	**0605798D8Z - Defense Technology Analysis**

COST ($ in Millions)		FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate					
	Total Program Element (PE) Cost	11.375	10.979	11.005					
P797	Defense Technology Analysis	5.335	5.669	5.674					
P798	DDR&E Support Teams	6.040	5.310	5.331					

A. Mission Description and Budget Item Justification:

The Director of Defense Research and Engineering (DDR&E) is the principal staff advisor to the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) and the Secretary and Deputy Secretary of Defense for research and engineering matters. In this capacity, the DDR&E has the responsibility to conduct analyses and studies; develop policies; provide technical leadership, oversight and advice; make recommendations; and issue guidance for the DoD Research and Engineering plans and programs. Additionally, the DDR&E provides technical support to the USD(AT&L) on R&E aspects of programs subject to review by the Defense Acquisition Board, to include assessments of technology readiness consistent with DoD acquisition policy.

This program element provides mission support to the Office of the DDR&E (ODDR&E). It covers a wide range of studies and analyses in support of the R&E program and impacts the Department's decision to fund RDT&E efforts. The DoD's key expertise for reviewing and guiding research and engineering programs resides in the ODDR&E. The ODDR&E staff augments their responsibilities through their connections to technology experts in various fields throughout academia, industry, and government. This project supports the directed responsibilities by building DDR&E Support Teams (DSTs) of technology experts to conduct program technical assessments. The DSTs will analyze the key engineering problem areas and offer adjustments in the development and test plan; alternate technical approaches; or new technologies that could enable successful development. The DSTs will constitute expert non-advocate reviews and gather advice from the Nation's leading technical experts. Future capabilities will depend on today's R&E investment. Consequently, the mission of the DoD R&E program is to create, demonstrate, prototype, and apply technology that enables affordable and decisive military superiority to defeat any adversary on any battlefield. Pursuing the R&E mission requires attention to: identification and development of new technological opportunities; insertion of new technologies into warfighting systems and operations; and management and evaluation of the effectiveness of technology programs. A successful R&E program is connected to the acquisition Program Managers/Program Executive Officers to ensure the best possible technology is being integrated into acquisition systems.

This program element provides engineering, scientific and analytical support to the Office of the Deputy Under Secretary of Defense (Science and Technology) (ODUSD(S&T)) in its responsibility for direction, overall quality, and content of the Science and Technology (S&T) program and ensures that the technology being developed is affordable and minimizes system development risk. The primary purpose of this program element is to facilitate the development of the S&T program and conduct assessments and analyses of the S&T program to ensure maximum utilization of Research and Development funds to accomplish the overall objectives of the S&T program. Funds are required for technical, analytical and management support; equipment and supplies; travel; and publications.

Technology Integration activities advance international science and technology (S&T) cooperation of specific projects of bilateral or multilateral interest. It provides the management support for U.S. participation in NATOs Research and Technology Organization (RTO) and The Technical Cooperative Program (TTCP). Technology Integration oversees, coordinates and reviews RTO and TTCP activities in which the U.S. has an interest including ongoing and proposed collaborative programs, technical symposia and conferences, and standard operating procedures. This effort will leverage Tri-Service S&T dollars through new and ongoing international partnerships. Technology Integration also provides selective funding support for administration, travel, conferences, and technical evaluations related to RTO activities carried out by the Services and other organizations.

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B. Program Change Summary	FY 2008	FY 2009	FY 2010	
Previous President's Budget (FY 2008/2009)	13.608	11.040	11.215	
Current BES/President's Budget (FY 2010)	11.375	10.979	11.005	
Total Adjustments	-2.233	-0.061	-0.210	
Congressional Program Reductions				
Congressional Rescissions		-0.061		
Congressional Increases				
Reprogrammings	-1.824			
SBIR/STTR Transfer	-0.381			
Other	-0.028		-0.210	

C. Other Program Funding Summary: Not applicable for this item.

D. Acquisition Strategy: Not applicable for this item.

E. Performance Metrics:

FY	Strategic Goals Supported	Existing Baseline	Planned Performance Improvement / Requirement Goal	Actual Performance Improvement	Planned Performance Metric / Methods of Measurement	Actual Performance Metric / Methods of Measurement
08						

Comment:

(U) Several indicators allow the Department to measure the success of the Defense Technology Analysis program element:

- The number of technological introspections as evidenced by completed Technology Readiness Assessments and the DDR&E's influence on acquisition decisions serve as valuable indicators of the program's effectiveness.
- The establishment and outputs of Defense Support Teams and Joint Analysis Teams are additional indicators of program metrics.
- Feedback into the oversight mechanisms of the S&T program to guide investment decisions serve as additional metrics.

OSD RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

May 2009

APPROPRIATION/ BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
RDTE, Defense Wide BA# 6	**0605798D8Z - Defense Technology Analysis**	**P797**

COST ($ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate					
P797 Defense Technology Analysis	5.335	5.669	5.674					

A. Mission Description and Budget Item Justification:

This project provides engineering, scientific and analytical support to the Office of the Deputy Under Secretary of Defense (Science and Technology) (ODUSD(S&T)) in its responsibility for direction, overall quality, and content of the Science and Technology (S&T) program and ensures that the technology being developed is affordable and minimizes system development risk. The primary purpose of this program element is to facilitate the development of the S&T program and to conduct assessments and analyses of the S&T program to ensure maximum utilization of Research and Development funds to accomplish the overall objectives of the S&T program. Funds are required for technical, analytical, and management support; travel; and publications.

Technology Integration activities advance international science and technology (S&T) cooperation of specific projects of bilateral or multilateral interest. It provides the management support for U.S. participation in NATOs Research and Technology Organization (RTO) and The Technical Cooperative Program (TTCP). Technology Integration oversees, coordinates and reviews RTO and TTCP activities in which the U.S. has an interest including ongoing and proposed collaborative programs, technical symposia and conferences, and standard operating procedures. This effort will leverage Tri-Service S&T investments through new and ongoing international partnerships. Technology Integration also provides selective funding support for administration, travel, conferences, and technical evaluations related to RTO activities carried out by the DoD Components.

B. Accomplishments/Planned Program:

Accomplishments/Planned Program Title:	FY 2008	FY 2009	FY 2010	
DoD Technical Analysis	5.335	5.669	5.674	

FY2008 Accomplishments - Provided engineering, scientific, analytical, and managerial support to the ODDR&E via contract vehicles to private industry and Federally Funded Research and Development Centers. Publications supported include the Defense Research and Engineering Strategy, the Joint Warfighting Science and Technology Plan, the Defense Science and Technology Success Stories, and the Defense Basic Research Strategy. Other efforts supported congressional reports, interagency initiatives, and internal ODUSD(S&T) requirements.

The Technical Cooperation Program (TTCP) celebrated the 50th year of defense science and technology collaboration between Australia, Canada, New Zealand, the United Kingdom, and the United States on October 25, 2007 in Washington, DC. The International Technology Programs Office successfully executed the 50th Anniversary meetings and its related events. The program promotes joint research through alignment of national efforts and superior technological input to the warfighter.

The International Technology Programs Office successfully enabled information exchange between Finnish and Service communications researchers. This exchange prompted the Air Force, Army and Navy to jointly fund a Finnish research program that explores new approaches for improving telecommunications network management by leveraging Finnish excellence in cognitive network development. NII has also begun MOU discussions with Finland to formalize and expand this partnership to address other communication research areas.

FY 2009 Plans - Provide engineering, scientific, analytical, and managerial support to the ODUSD(S&T) in developing strategies, plans, and policies to exploit and develop technology. Provide engineering, scientific, analytical, and managerial support to the ODUSD(S&T) in conducting technology analyses, making recommendations, and developing guidance for science and technology plans and programs. Provide engineering, scientific, analytical, and managerial support to the ODUSD(S&T) in reviewing proposed and approved science and technology programs and make recommendations to optimize effectiveness of the DoD investments in science and technology. Provide engineering, scientific, analytical, and managerial support to the ODUSD(S&T) in oversight of science and technology issues and initiatives and responding to Congressional special interests. Through an international technology watch effort, identify ongoing and proposed S&T efforts that could complement efforts or fill shortfalls in meeting U.S. S&T requirements, objectives and goals. Foster international bilateral and multilateral cooperative agreements in high value science & technology areas with allies, nonaligned nations and former Soviet Block nations. Establish data exchange agreements, engineer and scientist exchange program visits, international technology assessments and new cooperative programs. Seek opportunities for international cooperation in high priority S&T. Conduct intradepartmental coordination to achieve goals as necessary.

FY 2010 Plans - Provide engineering, scientific, analytical, and managerial support to the ODUSD(S&T) in developing strategies, plans, and policies to exploit and develop technology. Provide engineering, scientific, analytical, and managerial support to the ODUSD(S&T) in conducting technology analyses, making recommendations, and developing guidance for science and technology plans and programs. Provide engineering, scientific, analytical, and managerial support to the ODUSD(S&T) in reviewing proposed and approved science and technology programs and make recommendations to optimize effectiveness of the DoD investments in science and technology. Provide engineering, scientific, analytical, and managerial support to the ODUSD(S&T) in oversight of science and technology issues and initiatives and responding to Congressional special interests. Through an international technology watch effort, identify ongoing and proposed S&T efforts that could complement efforts or fill shortfalls in meeting U.S. S&T requirements, objectives and goals. Foster international bilateral and multilateral cooperative agreements in high value science & technology areas with allies, nonaligned nations and former Soviet Block nations. Establish data exchange agreements, engineer and scientist exchange program visits, international technology assessments and new cooperative programs. Seek opportunities for international cooperation in high priority S&T. Conduct intradepartmental coordination to achieve goals as necessary.

C. Other Program Funding Summary: Not applicable for this item.

D. Acquisition Strategy: Not applicable for this item.

E. Major Performers: Not applicable for this item.

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RDTE, Defense Wide BA# 6	**0605798D8Z - Defense Technology Analysis**	**P798**

COST ($ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate					
P798 DDR&E Support Teams	6.040	5.310	5.331					

A. Mission Description and Budget Item Justification:

The DoD's key expertise for reviewing and guiding research and engineering programs resides in the ODDR&E. The ODDR&E staff augments their responsibilities through their connections to technology experts in various fields throughout academia, industry, and government. This project supports the directed responsibilities by building DDR&E Support Teams (DSTs) of technology experts to conduct program technical health check-ups. The DSTs will analyze the key engineering problem areas and offer adjustments in the development and test plan; alternate technical approaches; or new technologies that could enable successful development. The DSTs will constitute expert non-advocate reviews and gather advice from the Nation's leading technical experts. Future capabilities will depend on today's R&E investment. Consequently, the mission of the DoD R&E program is to create, demonstrate, prototype, and apply technology that enables affordable and decisive military superiority to defeat any adversary on any battlefield. Pursuing the R&E mission requires attention to: identification and development of new technological opportunities; insertion of new technologies into warfighting systems and operations; and management and evaluation of the effectiveness of technology programs. A successful R&E program is connected to the acquisition Program Managers/Program Executive Officers to ensure the best possible technology is being integrated into acquisition systems.

B. Accomplishments/Planned Program:

Accomplishments/Planned Program Title:	FY 2008	FY 2009	FY 2010	
DDR&E Support Teams	6.040	5.310	5.331	

FY 2008 Accomplishments - Defense Support Teams (DSTs) for biometrics, full-motion video, the National Security Personnel System, and the Joint Tactical Radio System were conducted. Joint Analysis Teams (JATs) for energy security, networks, radars, network enabled command capability, sensor-weapon pairing, and unmanned aircraft were completed or initiated. Contract vehicles to obtain diverse technical expertise were put into place or were initiated.

FY 2009 Plans - Establish support teams and conduct technology analyses to support R&E program investment decisions. Continue or complete teams established in FY 2008. For selected acquisition programs and efforts, review in technical detail the respective program issues and offer technical solutions to program managers. Assessing the maturity of technology that is a candidate for transitioning to an acquisition program is important for efficient and timely fielding of improved military systems. The execution of a technology maturity assessment at all acquisition milestone decisions is now formally required by the Defense Acquisition Board. It is essential that the R&E community maintain close ties with the acquisition Program Managers and Program Executive Officers to enable the best possible technology maturity assessments.

FY 2010 Plans - Establish support teams and conduct technology analyses to support R&E program investment decisions. For selected acquisition programs and efforts, review in technical detail the respective program issues and offer technical solutions to program managers. Assessing the maturity of technology that is a candidate for transitioning to an acquisition program is important for efficient and timely fielding of improved military systems. The execution of a technology maturity assessment at all acquisition milestone decisions is now formally required by the Defense Acquisition Board. It is essential that the R&E community maintain close ties with the acquisition Program Managers and Program Executive Officers to enable the best possible technology maturity assessments.

C. Other Program Funding Summary: Not applicable for this item.

D. Acquisition Strategy: Not applicable for this item.

E. Major Performers: Not applicable for this item.

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