

# OSD RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2008

<b>1 APPROPRIATION/ BUDGET ACTIVITY</b> <b>RDTE, Defense Wide BA 06</b>	<b>PE NUMBER AND TITLE</b> <b>0605104D8Z - Technical Studies, Support &amp; Analysis</b>						
COST (\$ in Millions)	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate
P421 Technical Studies, Support & Analysis	35.737	34.958	34.520	32.916	37.035	36.727	36.601

**A. Mission Description and Budget Item Justification:** This program is a key source of funding for the Office of the Secretary of Defense and the Joint Staff for studies, analyses, management, and technical support efforts to improve and support policy development, decision making, management and administration of DoD programs and activities. Studies and analyses will examine current and alternative policies, plans, operations, strategies and budgets, and are essential for understanding and gaining insight into the ever-changing multifaceted international, political, technological, economic, military, and acquisition environments in which defense decisions and opportunities take place. The need for independent analyses has become particularly acute with the evolution of requirements for planning the reconstitution of assets affected by combat and non-combat operations, and there is a strong need to incorporate the effects of operational analyses in force planning assessments. With the persistently complex security, threat, and economic environment, the need for objective analyses and forward looking planning for the mid and long-term is vital.

<b><u>B. Program Change Summary</u></b>	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2008)	36.131	31.263	34.571
Current BES/President's Budget (FY 2009)	35.737	34.958	34.520
Total Adjustments	-0.394	3.695	-0.051
Congressional Program Reductions	-0.280	-0.376	
Congressional Rescissions			
Congressional Increases		4.000	
Reprogrammings	-1.000		
SBIR/STTR Transfer	-0.931	-0.890	
Other	1.817	0.961	-0.051

There were congressional additions in FY 2008 for the Capabilities Study for Improvised Explosive Devices Study (\$1.0 million), Countering Missile-Related Technology Proliferation Study (\$2.0 million), and Foreign Test Range Analysis (\$1.0 million).

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

**D. Acquisition Strategy** Not applicable for this item.

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**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: PE 0605104D8Z    Technical Studies, Support & Analysis

FY 2009 BA: \$34,304K    FY 2009 BA Assoc w/Metrics: \$34,304K    Percent FY 2009 BA Assoc w/Metrics: 100%

This program conducts approximately one-hundred fifty actions per fiscal year to support a wide variety of dynamic goals of the Department and is designed to encourage a collaborative research approach among the components of OSD and the Joint Staff. The focus of studies varies across a wide spectrum including weapons systems cost analysis, strengthening and leveraging alliances, human resource and military personnel management, examination of innovative technologies, application of technology to operational doctrine, and many other issues of timely importance. Most of the actions are long to intermediate-range in outlook, and the program allows high-level managers to plan and to guide their research toward their highest-priority goals and other high-level guidance such as the President's Management Agenda and the National Security Strategy of the United States of America. The research and study projects supported by this program are closely integrated with the Departments strategic goals, especially the objectives stipulated in the Quadrennial Defense Review.

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COST (\$ in Millions)	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	
P421      Technical Studies, Support & Analysis	35.737	34.958	34.520	32.916	37.035	36.727	36.601	

**A. Mission Description and Budget Item Justification:** This program is a key source of funding for the Office of the Secretary of Defense and the Joint Staff for studies, analyses, management, and technical support efforts, to improve and support policy development, decision making, management and administration of DoD programs and activities. Studies and analyses will examine current and alternative policies, plans, operations, strategies and budgets, and are essential for understanding and gaining insight into the ever-changing multifaceted international political, technological, economic, military, and acquisition environments in which defense decisions and opportunities take place. The need for independent analyses has become particularly acute with the evolution of requirements for planning the reconstitution of assets affected by combat and non-combat operations, and there is a strong need to incorporate the effects of operational analyses in force planning assessments. With the persistently complex current security, threat, and economic environment, the need for objective analyses and forward looking planning for the mid and long-term is vital.

**B. Accomplishments/Planned Program:**

<b><u>Accomplishments/Planned Program Title:</u></b>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Technical Support to OSD and the Joint Staff: FY 2007 Program	35.737		

Technical Support for USD(Acquisition, Technology & Logistics):  
Studies and analyses of:

Current and emerging unmanned ground systems spectrum supportability, unmanned systems investment planning, joint conventional munitions requirements, conventional munitions fuze technologies, weapons systems safety, conventional munitions hardened target penetration, NATO materiel stockpile planning, Littoral Combat Ship capabilities and planning scenarios, anti-submarine warfare and mine warfare planning and evaluation, strategic global strike capabilities and the Nuclear Posture Review (including the annual Hard and Deeply Buried Target Defeat report to Congress), homeland defense and civil support integration and interagency cooperation, maritime domain awareness strategy, standoff detection of weapons of mass destruction, acquisition strategy for homeland defense, DoD energy strategy and reducing energy consumption in defense systems, integrated air and missile defense capabilities operational assessment and risk management, joint net-centric operations, defense industry acquisitions and mergers analyses, effects of restructuring on critical defense industries, effects of defense contracting policy on industry, globalization in the defense industry and effects of the use of non-US suppliers, export control policy, international armaments cooperation, logistical supply chain operations, depot and field-level maintenance costs, weapon systems reliability improvement, development of pilot maintenance and transportation concepts, various tasks supporting numerous Defense Science Board task forces, rapid acquisition process standards, international cooperative R&D programs, NATO policy planning, small business investment strategy, and DoD relations with small businesses

Technical Support for the Director, Program Analysis & Evaluation:  
Studies and analyses regarding the following areas:

Non-traditional military challenges, ground-based tactical networking, global defense posture, airborne electronic attack capabilities, electronic warfare operations and irregular warfare, alternative force structures to enhance irregular warfare capabilities, medical cost growth analyses, F-35/Joint Strike Fighter requirements, tactical air warfare, technical analyses of various weapons systems,

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mobility capabilities, earned value management and cost control, space systems resource planning, force and infrastructure requirements, improving cost estimation of software, DoD acquisition execution improvement, airborne ISR (Intelligence, Surveillance and Reconnaissance) operational effectiveness, and personnel cost analyses

Technical Support for the USD(Policy):

Studies, analyses, and activities in the following areas:

Mid-and-long range defense planning scenarios and their effects on force planning requirements, NATO transformation planning, strategic weapons employment policy, unconventional warfare and other DoD contingency defense planning, space policy development and national space strategy, Africa Command implementation planning, irregular warfare case studies, reducing proliferation risk, and strategic-level simulations of areas of interest for senior members of the executive and legislative branches

Technical Support for the USD(Personnel & Readiness):

Studies and analyses in the following areas:

Effects of activation on National Guard and Reserve recruiting, science and technology education policies and future requirements, stress on military families, training capabilities and operational effectiveness, improving foreign language proficiency, underemployment among military families, effects of disabilities on recent military veterans and care of wounded personnel, national security personnel policy, general and flag officer management, sexual assault prevention, enlisted personnel policy, emerging issues in USMC recruiting, and evaluating the effectiveness of military advertising

Technical Support for the ASD(Networks and Information Integration) and USD(Intelligence):

Studies and analyses regarding the following areas:

Advanced signal processing technologies and signal processing simulation, navigation technologies, incorporation of evolving technologies into acquisition planning, defense and intelligence space capabilities integration, implementing advanced technologies into information assurance policy and the Global Information Grid, full-motion video capabilities, and ISR (Intelligence, Surveillance and Reconnaissance) systems investment planning

Technical Support for the Joint Staff:

Studies and analyses conducted with OSD supporting net-centric operations environment planning, rebalancing special operations forces and general purpose forces, and global strike raid portfolio capabilities

Other activities:

Congressional additions for Capabilities Study for Improvised Explosive Devices Detection (\$1 million) and Prompt Global Strike Study (\$5 million)

**Accomplishments/Planned Program Title:**

FY 2007

FY 2008

FY 2009

Technical Support to OSD and the Joint Staff: FY 2008 Program

34.958

Technical Support for USD(Acquisition, Technology & Logistics):

Efforts supported:

New and continued studies on unmanned terrestrial and air systems, joint conventional munitions requirements planning, joint service fuze technology, hard and buried target defeat, homeland

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defense and civil support coordination, maritime domain awareness, test and evaluation capabilities, DoD energy policy, weapons systems safety and reliability, NATO materiel stockpile planning, Littoral Combat Ship mission requirements, mine warfare countermeasures, Prompt Global Strike-related efforts, identifying acquisition program risk, the unmanned vehicle industrial base, effects of global defense industry trends, defense industry acquisition and merger policy, industrial base assessments of critical defense sectors, facilitation of defense industry competition and emergence of new suppliers, microelectronics investment strategy, supply chain modernization planning, integration of supply chain commercial practices into DoD logistics systems, tasks supporting various Defense Science Board task forces, evolving technologies and the acquisition process, international cooperative R&D programs, NATO policy planning, small business investment strategy, and DoD relations with small businesses

Technical Support for the Director, Program Analysis & Evaluation:

Studies and analyses regarding the following areas:

Identifying requirements for the next Quadrennial Defense Review, the long-term trends and sustainability of the defense program, force structure and manpower issues, alternative systems and weapon configurations, software cost estimation, operations and support costs of weapons systems, evaluation and planning for stability operations, modeling and simulation master planning, cost estimation and joint requirements evaluation of weapons platforms shared with US allies, operational availability of assets, and multi-service force deployment baseline planning

Technical Support for the USD(Policy):

Studies, analyses, and activities in the following areas with an emphasis upon planning for the QDR:

Asia-Pacific basing and defense policy cooperation, defense against evolving biological and chemical weapons of mass destruction, strategic weapons employment policy, improving the ability of DoD to build security partnerships, strengthening capabilities of African states to combat terrorism, counter-proliferation strategy, development of defense planning scenarios and improving contingency planning, and strategic-level simulations of areas of interest for legislative and executive branch decision-makers

Technical Support for the USD(Personnel & Readiness):

Studies and analyses in the following areas:

Effects of incentives on personnel retention, advancing foreign language proficiency, effects of the National Security Personnel System, long-term impact of deployments on personnel retention, civilian personnel management and retention, hardships among military families, civilian education and professional development, and management of reserve components

Technical Support for the ASD (Networks & Information Integration) and USD(Intelligence):

Studies and analyses of:

Net-centric tactical wireless issues, command and control in coalition operations, developing net-centric enterprise communication capabilities, developing standards for joint data exchange, evaluation of emerging communication technologies, DoD information assurance, improving effectiveness of wireless systems, DoD security systems and policies, battlespace awareness capabilities, disruptive tagging technologies, DoD satellite communications strategic planning, persistent intelligence collection capabilities, improving capabilities to discern intentions of adversarial entities, and management of intelligence community personnel assets

Technical Support for the Joint Staff:

Studies and analyses with OSD supporting information sharing risk management, adaptive planning human resource strategy, means to dissuade potential adversaries from obtaining weapons of mass destruction, and improving DoD collaborative capabilities

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Specific additions by Congress:

Capabilities Study for Improvised Explosives Detection (\$1.0 million)  
 Countering Missile-Related Technology Proliferation (\$2.0 million)  
 Foreign Test Range Analysis-Measurement and Signals Intelligence (\$1.0 million)

<b><u>Accomplishments/Planned Program Title:</u></b>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Technical Support to OSD and the Joint Staff: FY 2009 Plans			34.520

Technical Support for USD(Acquisition, Technology & Logistics):  
 Efforts supported:

New and continued studies on unmanned terrestrial and air systems, electronic warfare, joint conventional munitions requirements planning, joint service fuze technology, hard and deeply buried target defeat, homeland defense and civil support coordination, maritime domain awareness, test and evaluation capabilities, DoD energy policy, weapons systems safety and reliability, NATO materiel stockpile planning, Littoral Combat Ship mission requirements, mine warfare countermeasures, Prompt Global Strike-related efforts, identifying acquisition program risk, the unmanned vehicle industrial base, effects of global defense industry trends, defense industry acquisition and merger policy, industrial base assessments of critical defense sectors, facilitation of defense industry competition and emergence of new suppliers, reserve vessel management policy, supply chain modernization planning, integration of supply chain commercial practices into DoD logistics systems, support to various Defense Science Board task forces, evolving technologies and the acquisition process, international cooperative R&D programs, NATO policy planning, small business investment strategy, and DoD relations with small businesses

Technical Support for the Director, Program Analysis & Evaluation:  
 Studies and analyses regarding the following areas:

Various requirements for the Quadrennial Defense Review, the long-term trends and sustainability of the defense program, force structure and manpower issues, alternative configurations of weapons systems, software cost estimation, operations and support costs of weapons systems, evaluation and planning for stability operations, modeling and simulation master planning, cost estimation and joint requirements evaluation of weapons platforms shared with US allies, operational availability of assets, and multi-service force deployment baseline planning

Technical Support for the USD(Policy):  
 Studies, analyses, and activities in the following areas:

Global basing and defense policy cooperation, defense against evolving biological and chemical weapons of mass destruction, strategic weapons employment policy, improving the ability of DoD to build security partnerships, strengthening capabilities of African states to combat terrorism, counter-proliferation strategy, development of defense planning scenarios and improving contingency planning, and strategic-level simulations of areas of interest for legislative and executive branch decision-makers

Technical Support for the USD(Personnel & Readiness):  
 Studies and analyses in the following areas:

Effects of incentives on personnel retention, improving foreign language proficiency, effects of the National Security Personnel System, long-term impact of personnel deployments on retention,

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civilian personnel management and retention, mitigating hardships among military families, civilian education and professional development, and management of reserve components

Technical Support for the ASD (Networks & Information Integration) and USD(Intelligence):

Studies and analyses of:

Net-centric tactical wireless issues, command and control in coalition operations, developing net-centric enterprise communication capabilities, developing standards for joint data exchange, evaluation of emerging communication technologies, DoD information assurance, improving effectiveness of wireless systems, DoD security systems and policies, battlespace awareness capabilities, detection of infectious disease events, persistent intelligence collection capabilities, and management of intelligence community personnel assets

Technical Support for the Joint Staff:

Studies and analyses with OSD supporting theater security cooperation, homeland defense consequence management, information assurance, pandemic control, and other issues directed by developing DoD planning guidance

**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.