

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

May 2009

APPROPRIATION/ BUDGET ACTIVITY <b>RDTE, Defense Wide BA# 6</b>		PE NUMBER AND TITLE <b>0605104D8Z - Technical Studies, Support &amp; Analysis</b>						
COST (\$ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate					
Total Program Element (PE) Cost	30.199	36.319	44.760					
P421 Technical Studies, Support & Analysis	30.199	36.319	32.468					
Global Theater Security Cooperation Management Information Systems			12.292					

**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 international 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.

Beginning in FY 2010, this program element includes the budget request for the Global Theater Security Cooperation Management Information Systems (TSCMIS) program, which is an existing program that will be executed by the Joint Staff separately from the Technical Studies, Support, and Analysis program. The Global Theater Security Cooperation Management Information Systems program responds to OSD's Guidance for Employment of the Force so that Combatant Commanders, Military Department Chiefs, CSA Directors, and applicable Defense Agency and Field Activity Directors are able to use a tracking mechanism to account for their steady-state activities that is accessible to other DoD components. Together these tracking mechanisms will provide a global view of all steady-state activities conducted by DoD components. The intent of this program is to encourage further development of tracking mechanisms in order to achieve full visibility of Defense Department activities.

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<u><b>B. Program Change Summary</b></u>	FY 2008	FY 2009	FY 2010	
Previous President's Budget (FY 2008/2009)	34.958	34.520	32.916	
Current BES/President's Budget (FY 2010)	30.199	36.319	44.760	
Total Adjustments	-4.759	1.799	11.844	
Congressional Program Reductions				
Congressional Rescissions		-0.201		
Congressional Increases		2.000		
Reprogrammings	-3.813			
SBIR/STTR Transfer	-0.875			
Other	-0.071		11.844	

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).

There were congressional additions in FY 2009 for the Center for Technology and National Security Policy at the National Defense University (\$1.2 million) and Defense Support to Large Scale Disaster preparedness (\$800K).

The FY 2010 budget amount reflects placement of the Global Theater Security Cooperation Management Information System program in this program element.

**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:

PE 0605104D8Z    Technical Studies, Support & Analysis

FY 2010 BA: \$44,760K    FY 2010 BA Assoc w/Metrics: \$44,760K    Percent FY 2010 BA Assoc w/Metrics: 100%

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APPROPRIATION/ BUDGET ACTIVITY

**RDTE, Defense Wide BA# 6**

PE NUMBER AND TITLE

**0605104D8Z - Technical Studies, Support & Analysis**

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 research and study projects supported by this program are closely integrated with the strategic goals of the Department of Defense. 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 meeting 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.

# OSD RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

May 2009

<b>APPROPRIATION/ BUDGET ACTIVITY</b> <b>RDTE, Defense Wide BA# 6</b>		<b>PE NUMBER AND TITLE</b> <b>0605104D8Z - Technical Studies, Support &amp; Analysis</b>				<b>PROJECT</b> <b>P421</b>	
COST (\$ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate				
P421 Technical Studies, Support & Analysis	30.199	36.319	44.760				

**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 to conduct joint 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 international 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.

Beginning in FY 2010 this program element includes funding for the Global Theater Security Cooperation Management Information Systems (TSCMIS) Program, which is a separate program from the OSD Technical Studies, Support & Analysis program. TSCMIS is an existing program which provides a global view of all steady-state activities conducted by DoD components and enables that information to be accessible by other DoD components. Proposed enhancements to TSCMIS will enable all of the Services and Combatant Commands to access information in this system and will allow the incorporation of data provided by other interagency partners.

**B. Accomplishments/Planned Program:**

<b><u>Accomplishments/Planned Program Title:</u></b>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
Technical Support to OSD and the Joint Staff: FY 2008 Program	30.199		

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

Studies and analyses of:

Rotary wing platform portfolio analyses, aviation system performance and interoperability, rocket motor propulsion systems analyses, unmanned systems investment planning, joint conventional munitions requirements, conventional munitions fuze technologies, weapons systems safety and reliability improvement, hard target defeat capabilities and collateral damage avoidance, NATO materiel stockpile planning, incorporating modeling and simulation design tools into the acquisition process, amphibious warfare shipbuilding and logistical requirements, joint battle management command and control, joint airborne electronic attack capabilities, allied naval warfare capabilities, homeland defense and civil support integration and interagency cooperation (in conjunction with NORTHCOM), developing metrics to forecast acquisition program risk, capabilities detection of weapons of mass destruction, acquisition strategy for homeland defense, DoD energy strategy and incorporating energy costs into the acquisition process, integrated air and missile defense capabilities operational assessment and risk management, joint net-centric operations functional solutions analyses, improving efficiency of weapons system testing, defense industry acquisitions and mergers analyses, effects of restructuring on critical defense industries, globalization in the defense industry and effects of the use of non-US suppliers, export control policy, international armaments cooperation, logistical supply chain operations, analyses of domestic sources of strategic materials, 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:

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<b>APPROPRIATION/ BUDGET ACTIVITY</b> <b>RDTE, Defense Wide BA# 6</b>	<b>PE NUMBER AND TITLE</b> <b>0605104D8Z - Technical Studies, Support &amp; Analysis</b>	<b>PROJECT</b> <b>P421</b>
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Space situational awareness, Joint Light Tactical Vehicle (JLTV) performance, expeditionary seabasing capability, force and infrastructure requirements, aviation tactical networking, analyses of country-specific and sub-region-specific stability operation campaign plans, measuring the impact of allied and enemy strategic communications, shaping rising military powers, Littoral Combat Ship (LCS) anti-submarine warfare capabilities, analytical studies for independent cost estimates, medical cost growth analyses, technical analysis of aviation and ground systems and platforms, mobility capabilities analysis, software cost estimation techniques, program earned value management performance, costing the benefits of competition in acquisition, and operations and maintenance program cost analyses

Technical Support for the USD(Policy): Studies and analyses regarding the following areas:

Policy and defense programs and initiatives in the Asia-Pacific Region, roles and missions of DoD components, various operational assessments in warfighting operations, optimizing exploitation of intelligence collection, DoD organization and management for national security in space, support requirements of allied forces and mitigation of vulnerabilities, responses to asymmetric adversary military strategies, mapping jihadist networks in allied countries, enhancing defense cooperation between France and NATO, evaluations of the defense capabilities of Poland, enhancing and evaluating DoD humanitarian assistance programs, support to international negotiations on cluster munitions, countering jihadist propaganda, 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 regarding the following areas:

Improving strategy in recruiting of older youths, effects of various factors on reserve force recruiting, science and technology education policies and future requirements, stress on military families, DoD retirement policies, improving foreign language proficiency, attrition rates among various categories of high school graduates, modeling of the effects of geopolitical events on recruiting costs, impacts of stop-loss policies on unit readiness and individual career decisions, general and flag officer management, sexual assault and domestic violence prevention, and evaluation of personnel requirements by the military services

Technical Support for the ASD(Networks and Information Integration) and USD(Intelligence): Studies and analyses regarding the following areas:

Stability operations information sharing architecture, DoD use of foreign PNT (positioning, navigation, and timing) sources for conducting military operations, emerging technologies in information assurance, threats to key national command and control infrastructure, and information technology acquisition policy

Technical Support for the Joint Staff conducting joint research with OSD: Studies and analyses regarding the following areas:

Studies and analyses conducted with OSD supporting net-centric operations environment planning, joint supply chain architecture, global munitions distribution, rebalancing special operations forces and general purpose forces, and joint theatre warfare simulation to conduct operational assessments and understand resource requirements

Program 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 Signature Intelligence (\$1.0 million)


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<b><u>Accomplishments/Planned Program Title:</u></b>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
Technical Support to OSD and the Joint Staff: FY 2009 Program		36.319	

Technical Support for USD(Acquisition, Technology & Logistics): New and continued studies and analyses of:  
 Technological capabilities of rotary wing systems, rocket motor development and acquisition, unmanned terrestrial and air systems, joint conventional munitions requirements planning, joint service fuze technology, hard and buried target defeat, improving use of modeling and simulation tools in acquisition and weapons system testing, amphibious warfare programmatic requirements, homeland defense and civil support coordination, test and evaluation capabilities, DoD energy policy, weapons systems safety and reliability, NATO materiel stockpile planning, allied naval capabilities, arms control analyses and treaty verification options, 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 technology investment by industry, 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:  
 Capabilities for non-traditional military challenges, irregular warfare capabilities, force structure changes, building analytical baselines in support of the Analytical Agenda and Multi-Service Force Deployment baselines, technical studies and analysis to support independent cost estimates, alternative weapons systems configurations and force levels, C4ISR capabilities and information assurance, force readiness analyses, homeland defense and consequence management scenarios, shipbuilding infrastructure requirements, weapons systems performance and cost-effectiveness analyses, energy security policy, and analyses of the long-term strength and affordability of the defense program

Technical Support for the USD(Policy): Studies and analyses regarding the following areas:  
 Asia-Pacific basing and defense policy cooperation, reconstitution requirements for military forces, organization and missions of DoD military and civilian manpower assets, protection of space-based assets, evaluations of various Capability Portfolio Managers and Joint Capability Areas, improving the ability of DoD to build security partnerships, projected US AFRICOM capabilities and requirements, counter-proliferation strategy, effects of resource requirements on foreign defense 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 regarding the following areas:  
 Recruiting and retention of active and reserve component members, advancing foreign language capabilities, general/flag officer personnel requirements, improving family counseling services and the impact of such programs on families and member retention, optimizing the effects of compensation on personnel inventory, strengthening care of wounded personnel, evaluating alternate approaches to managing the force, and assessing the impact of foreign-born scientists and engineers on national security programs

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Technical Support for the ASD (Networks & Information Integration) and USD(Intelligence): Studies and analyses regarding the following areas:  
 Tactical edge services architecture evolution, GIG (global information grid) mission assurance architecture and strategy, ongoing evaluations of command and control capabilities to support net-centric operations, Regional Joint Intelligence Training Facility (RJITF) System requirements, Civilian Foreign Area Officer (CIVFAO) Program analyses, improvement of defense intelligence training and education capabilities, architectural improvements to counterintelligence and human intelligence capabilities, investment strategies to improve the survivability of the ISR architecture and optimize ISR collection mission management, and architectural improvements to improve capabilities to access and share national and tactical intelligence information in near real-time

Technical Support for the Joint Staff conducting joint research with OSD:  
 Studies and analyses with OSD supporting evolving warfighting issues in global counterterrorism and stability operations, DoD information assurance, adaptive planning human resource strategy, means to dissuade potential adversaries from obtaining weapons of mass destruction, improving DoD collaborative capabilities, DoD response to pandemics and natural disasters, and various studies directed by the Program Decision Memorandum and the Guidance for Development of the Force

Program additions by Congress:  
 Center for Technology and National Security Policy at the National Defense University (\$1.2 million)  
 Defense Support to Large-Scale Disaster Preparedness (\$0.8 million)

<u>Accomplishments/Planned Program Title:</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
Technical Support to OSD and the Joint Staff: FY 2010 Plans			32.468

Technical Support for USD(Acquisition, Technology & Logistics): Studies and analyses regarding the following areas:  
 Rotary wing aviation capabilities support, innovative shipbuilding designs, electronic warfare, joint conventional munitions requirements planning, joint service fuze technology, hard and deeply buried targets, homeland defense and civil support coordination, domestic industrial base capabilities, mitigating systems integration risk, maritime domain awareness, test and evaluation capabilities, DoD energy policy in acquisition planning, weapons systems safety and reliability, NATO materiel stockpile planning, Littoral Combat Ship mission requirements, identification of new commercial tools for systems engineering, rocket motor development and acquisition, treaty compliance analyses, automatic air collision avoidance technologies in manned and unmanned systems, identifying acquisition program risk, shipbuilding planning and acquisition, supply chain modernization planning, integration of supply chain commercial practices into DoD logistics systems, technical support to various Defense Science Board task forces, evolving technologies and the acquisition process, international cooperative R&D programs, NATO policy planning, programmatic issues in the areas of technology transfer and foreign disclosure, 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:  
 Force structure and weapons systems performance and cost effectiveness, capabilities for non-traditional military challenges and irregular warfare capabilities, building analytical baselines in support of the Analytical Agenda and Multi-Service Force Deployment baselines, technical studies and analysis to support independent cost estimates, alternative weapons systems configurations and force levels, operational availability of assets, DoD energy security policy, and analyses of the long-term strength and affordability of the defense program

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Technical Support for the USD(Policy): Studies and analyses regarding the following areas:  
 Various national security policy reviews as required by the future global security environment, recommendations and analysis regarding military posture, maintaining security relationships with allies, operational assessments of irregular warfare capabilities, potential geopolitical impact of climate change and its effects on DoD planning, DoD space policy, effects of energy cost constraints on DoD planning and operations, 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 regarding the following areas:  
 Effects of incentives and other recent recruiting strategies on personnel readiness and retention, improving DoD foreign language capabilities, long-term impact of deployments on personnel retention, evaluating effectiveness of efforts to balance DoD manpower supply with demand, civilian personnel management and retention, mitigating hardships among military families, management of reserve components, and providing responses to congressional requests and directives as required

Technical Support for the ASD (Networks & Information Integration) and USD(Intelligence): Studies and analyses regarding the following areas:  
 Network approaches and technical solutions in support of net-centric transformation, development of baseline metrics and evaluation approaches to ensure appropriate systems support for defense and national leadership, development of approaches for ensuring adequate electromagnetic spectrum access for military operations, Civilian Foreign Area Officer (CIVFAO) Program requirements, decision based analyses to counter irregular warfare networks, and Optical Non-Imaging Infrared (ONIR) ground architecture analyses

Technical Support for the Joint Staff conducting joint research with OSD:  
 Studies and analyses with OSD supporting evolving warfighting issues in counterterrorism and stability operations, DoD information assurance, adaptive planning human resource strategy, means to dissuade potential adversaries from obtaining weapons of mass destruction, improving DoD collaborative capabilities, DoD response to pandemics and natural disasters, and various studies directed by the Program Decision Memorandum and the Guidance for Development of the Force

<u><b>Accomplishments/Planned Program Title:</b></u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
Global Theater Security Cooperation Management Information Systems Program			12.292

Global Theater Security Cooperation Management Information Systems (TSCMIS) Program. This item is a separate requirement from the Technical Studies, Support, and Analysis program beginning in FY 2010 and will be executed by the Joint Staff apart from the Technical Studies, Support, and Analysis program.

Organizations implementing TSCMIS include all of the Geographic Combatant Commands and the Army, and this program change will facilitate the inclusion of all of the Combatant Commands, all of the military services, DTRA, and DSCA. Future years will result in the integration of other security cooperation databases, including foreign military sales, training databases, and other interagency partner databases into the TSCMIS portal. Overall project costs include two TSCMIS personnel per organization with a TSCMIS system in addition to any personnel currently being used by the organization for TSCMIS support.

This system enhancement will provide support to Unified Commanders, Combatant Commanders, Services, and Interagency Partners which will further US interests by strengthening Military to Military and Civilian to Military relationships with regards to Theater, Regional, and Global Security Cooperation. SPAWAR has successfully demonstrated the capability to connect TSCMIS globally and to import information from partner agencies. This enhanced system will directly assist in providing commanders with an enhanced picture of all security cooperation and security assistance activities taking place in their Area of Responsibility.

Some COCOM and Service components currently use TSCMIS to track security cooperation activities, but not all COCOMS and Services and key defense agencies have access to the system. These planned enhancements will improve user accessibility, facilitate data exchange among components, and establish policy guidance on system use. The information made available by TSCMIS will better prepare commanders in all phases of planning.

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Projected costs for TSCMIS enhancements:

FY 2010 Project management (\$360K); requirements (\$258K); development (\$5,300K); modification to existing TSCMIS (\$1,545K); TSCMIS personnel (\$4,800K)

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

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

**E. Major Performers:**

Category	Name	Location	Type of Work and Description	Award Date
<b>FFRDCs:</b>				
	Institute for Defense Analyses	Alexandria, VA	Various studies and analyses for OSD and the Joint Staff	Dec 09
	Rand NDRI	Santa Monica, CA	Various studies and analyses for OSD and the Joint Staff	Dec 09

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