

# 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>0605790D8Z - Small Business Innovative Research (SBIR)Challenge Admin</b>						
COST (\$ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate					
P518 SBIR Administration	2.981	5.733	2.163					

**A. Mission Description and Budget Item Justification:**

(U) The Small Business Innovation Research (SBIR) Program and the Small Business Technology Transfer (STTR) Program fund over one billion dollars annually in mission oriented research and development projects at small technology companies. The purpose of the program is to stimulate the development of new technologies to improve U.S. military and economic capabilities. The SBIR/STTR Program is mandated by public laws (PL) 97-219, PL 99-443, PL 102-564, PL 106-554, PL 107-50, and PL 111-10 and is codified in 15 USC 638. The Department of Defense (DoD) SBIR/STTR Program competitively funds scientific and technical innovation to specifically address the needs of participating DoD components.

(U) DoD components participating in the SBIR Program include the: Army , Navy, Air Force, Defense Advanced Research Projects Agency (DARPA), Missile Defense Agency (MDA), Defense Threat Reduction Agency (DTRA), U.S. Special Operations Command (SOCOM), Joint Science & Technology Office for Chemical & Biological Defense, National Geospatial-Intelligence Agency (NGA), the Defense Logistics Agency (DLA), the Defense MicroElectronics Activity (DMEA) and the Office of Secretary of Defense (OSD) through the Director, Defense Research & Engineering (DDR&E). DoD components participating in the STTR Program include the: Army, Navy, Air Force, DARPA, MDA, and OSD.

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<b><u>B. Program Change Summary</u></b>	FY 2008	FY 2009	FY 2010	
Previous President's Budget (FY 2008/2009)	3.135	2.165	2.193	
Current BES/President's Budget (FY 2010)	2.981	5.733	2.163	
Total Adjustments	-0.154	3.568	-0.030	
Congressional Program Reductions				
Congressional Rescissions		-0.032		
Congressional Increases		3.600		
Reprogrammings	-0.061			
SBIR/STTR Transfer	-0.087			
Other	-0.006		-0.030	

Congressional increases include three projects (under project number P518) to fund small business development of innovative technologies for military requirements. Projects include:

1) Directed Energy Systems for UAV Payloads - \$800,000

Development of non-lethal directed energy weapons (DEW) technology based on radio frequency directed energy. This technology specifically targets the disruption or destruction of electronic systems such as communications, computers, sensors, and remote triggering devices which may be employed in improvised explosive devices. FY09 funds will support the incorporation of new technologies and techniques into the existing design to enhance DEW capabilities.

2) Ferroelectric Component Technology - \$1,200,000

Development of a 95/5 PZT shock discharged element for the Intense electroMagnetic Pulse weapon (IMP), an RF grenade designed to disrupt or destroy electric circuits and components. FY09 funds will support the fabrication of ferroelectric generators using a pilot production process.

3) Random Obfuscating Compiler Anti-Tamper Software - \$1,600,000

Project supports the development of a product for secure distribution and execution of critical DoD software applications and data in a hostile environment. FY09 funding will be used to develop state-of-the-art software protection technology to support real-time processing and operations, and will be integrated with additional hardware anti-tamper solutions.

**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:

Program Element supports the Department's administration of the Small Business Innovation Research (SBIR) Program (under the Small Business Innovation Research Reauthorization Act of 2000, Public Law 106-554, amended section 9 of the Small Business Act) and the Small Business Technology Transfer (STTR) Program (under the Small Business Technology Transfer Reauthorization Act of 2001, Public Law 107-050, amended section 9 of the Small Business Act). Both laws, representing an approximate annual value of over one billion dollars, are codified under 15 U.S.C. 638. Performance is in support of the administration of the program and compliance with statutory requirements including: unilaterally developed projects; release of solicitations; unilateral evaluation of proposals; collection and maintenance of information from awardees; payment of awardees; administration of funding agreements; development and execution of a commercialization plan; reporting to the Small Business Administration; and maintenance of data and intellectual property rights.

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

May 2009

APPROPRIATION/ BUDGET ACTIVITY <b>RDTE, Defense Wide BA# 6</b>	PE NUMBER AND TITLE <b>0605790D8Z - Small Business Innovative Research (SBIR)Challenge Admin</b>				PROJECT <b>P518</b>			
COST (\$ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate					
P518 SBIR Administration	2.981	5.733	2.163					

**A. Mission Description and Budget Item Justification:**

(U) The SBIR/STTR Program is executed in three phases. The purpose of Phase I is to determine, insofar as possible, the scientific technical and commercial merit, and feasibility of ideas submitted under the SBIR/STTR Program. Phase II awards are made to firms that have been awarded a Phase I contract on the basis of the results of their Phase I effort and the scientific, technical, and commercial merit of the Phase II proposal. Phase II is the principal research or research and development effort and is expected to produce a well-defined deliverable prototype. Phase III SBIR/STTR efforts derive from, extend or conclude Phase I or Phase II efforts, and are not funded with SBIR/STTR funds. Under Phase III, companies participating in the SBIR/STTR Program are expected to obtain funding from the private sector and/or non-SBIR/STTR government sources to develop the prototype into a viable product or non-R&D service for sale in military and/or private sector markets.

**B. Accomplishments/Planned Program:**

<b><u>Accomplishments/Planned Program Title:</u></b>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
Small Business Innovation Research Administration	2.981	5.733	2.163

(U) Since PL 102-564 prohibits the use of any of the SBIR budget to fund administrative costs of the program, program element (PE) 0605790D8Z is the only source of funds for the coordination, administration and execution of the Department's SBIR/STTR Program. In addition to funding costs for program administration, coordination and execution, PE 0605790D8Z funds essential elements of the SBIR/STTR Program that are required by law including: (a) the development and maintenance of information systems and software required for the measurement, evaluation, and effective management of the Department's SBIR/STTR R&D Program; (b) outreach to small technology companies, potential investors in such companies, SDBs WOSBs HBCU/MIs and others, to encourage and facilitate their participation in the SBIR/STTR Programs (e.g. conferences, trade shows, etc.); (c) preparation of the SBIR/STTR R&D solicitations and related publications; (d) support efforts such as administration of the various SBIR/STTR process action teams; (e) development and promulgation of guidance and reference materials to DoD contracting officers, technical monitors, and other personnel involved in administering the SBIR/STTR Programs; and (f) responding to requests for information relative to DoDs SBIR/STTR Program that receives about 16,000 proposals yearly and issues over 3,000 contracts.

**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.