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

February 2006

**BUDGET ACTIVITY** 

PE NUMBER AND TITLE

## 5 - System Development and Demonstration

0604609A - Smoke, Obscurant and Target Defeating Sys-Eng Dev

	COST (In Thousands)		FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
	Total Program Element (PE) Cost	3637	0	5297	6704	5649	481	480	0	41317
198	Target Defeating System	0	0	5297	6704	5649	481	480	0	19267
200	SMOKE/OBSCURANT SYSTEM	3637	0	0	0	0	0	0	0	22050

A. Mission Description and Budget Item Justification: Project 0604609A supports the conduct of System Development and Demonstration (SDD) of logistically supportable, high performance smoke and obscurants, munitions, and devices to improve the survivability of the combined armed force and complement combined weapons systems. The program element supports critical management studies and analyses that are conducted on a continuing basis to ensure that engineering and manufacturing development efforts are targeted against the emerging threat. Program element supports the conduct of SDD in smoke and obscurant agents, munitions, and devices to improve the survivability of the combined armed forces, complement combined weapon systems, and enhance force effectiveness and combat power.

U.S. Forces must be able to effectively neutralize and degrade energy weapon systems and electro-optical systems/smart weapons that operate in the full range of the electromagnetic spectrum. Improvements are sought across the entire multi-spectral range from visual through infrared (IR) and millimeter wavelengths (MMW) radar for incorporation into self-protection large area and projected smoke systems. The smoke obscuration technologies supported by this program element enhance smoke systems as force multipliers.

ARMY RDT&E BUDGET ITEN  BUDGET ACTIVITY  5 - System Development and Demonstration	PE NUMBER AND TITLE  0604609A - Smoke, Obscurant and Target Defeating Sys-Eng Dev											
	FY 2005	FY 2006	FY 2007		8							
B. Program Change Summary												
Previous President's Budget (FY 2006)	3639	0	5216									
Current BES/President's Budget (FY 2007)	3637	0	5297									
Total Adjustments	-2	0	81									
Congressional Program Reductions												
Congressional Rescissions	-2											
Congressional Increases												
Reprogrammings												
SBIR/STTR Transfer												
Adjustments to Budget Years												

## February 2006 **ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit) BUDGET ACTIVITY** PE NUMBER AND TITLE **PROJECT** 5 - System Development and Demonstration 0604609A - Smoke, Obscurant and Target Defeating Sys-Eng Dev 198 FY 2005 FY 2007 FY 2008 FY 2009 FY 2010 FY 2006 FY 2011 Cost to Total Cost COST (In Thousands) Estimate Estimate Estimate Estimate Estimate Estimate Estimate Complete 198 Target Defeating System 0 0 5297 6704 5649 481 480 19267

**A. Mission Description and Budget Item Justification:** Project 0604609A supports the conduct of System Development and Demonstration (SDD) of smoke and obscurants to provide current and next generation obscurant systems operating at extended distances to disrupt, disable and defeat the threat reconnaissance, surveillance, targeting and acquisition capabilities. Funding supports the development of systems to appropriately deliver distant obscurant to the battlefield. This will provide options to commanders that are effective and efficient throughout the battlespace.

Accomplishments/Planned Program	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
FY07: Prepare, conduct and complete Milestone B.	0	0	2133
FY07: Award SDD contract.	0	0	3164
Total	0	0	5297

B. Other Program Funding Summary	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
RDTE, A, Budget Activity 2, PE 0602622A, Project 552	3175	2519	2573	2690	2749	2793	2832	0	19331
Other Procurement Army, OPA 3, MX1000, Family of Tactical Obscuration Devices	0	0	0	24232	38449	25620	12337	CONT	CONT

<u>C. Acquisition Strategy</u> Engineering development will begin in FY07 with a full and open competition contract for engineering design, construction and testing of prototype systems.

ARMY RDT&	&E COST	Γ ANALYSIS	(R3)							February	2006	VV6					
BUDGET ACTIVITY  5 - System Development a	and Demons	tration	PE NUMBE <b>0604609</b> .			Defeati	ng Sys-E	ng Dev	PROJEC <b>198</b>	СТ							
I. Product Development	Contract Method & Type	ethod & Location PYs Cost Cost Award Cost Award Co		FY 2007 Cost	FY 2007 Award Date		Total Cost	Targe Value o Contrac									
Hardware Development	TBD	TBD	0	0		0		3164	3Q	0	0	(					
Subto	tal:		0	0		0		3164		0	0	(					
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date		Total Cost	Targe Value o Contrac					
Engineering support of hardware development.	OGA	RDECOM, ECBC, Edgewood, MD	0	0	Date	0	Date	1133	1Q	0	0	Contrac					
Subto	tal:		0	0		0		1133		0	0	(					
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Targe Value o Contrac					
Subto	tal:		0														
IV. Management Services	Contract	Performing Activity &	Total	FY 2005	FY 2005	FY 2006	FY 2006	FY 2007	FY 2007	Cost To	Total	Targe					
	Method & Type	Location	PYs Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Complete	Cost	Value o Contrac					
Conducted Management Studies.	Inhouse	JPM, NBCCA, APG,Edgewood, MD	328	0		0		0		0	328						
Prepare and conduct Milestone B.	Inhouse	JPM, NBCCA, APG, Edgewood, MD	0	0		0		1000	1Q	0	1000	(					
	Subtotal:					0		1000		0	1328	(					

ARMY RDT&E COST ANALY		February 2006					
BUDGET ACTIVITY 5 - System Development and Demonstration	PE NUMBER A <b>0604609A</b> -	ND TITLE <b>Smoke, Obso</b>	get Defeating Sys	ting Sys-Eng Dev 19			
Project Total Cost:	328	0	0	5297	0	1328	

Schedule Profile (R4 Exhibit)											February 2006														
BUDGET ACTIVITY  5 - System Development and Demonstration		PE NUMBER AND TITLE 0604609A - Smoke, Obscurant and Target Defeat											feati	PROJECT 198											
<b>Event Name</b>		FY 05	FY 06		Y 06		FY 07			-	FY 08			-	FY 09		Y 09		FY		4		FY		
Design and Fabricate Systems for EDT	1	2   3	4	1 2	2 3	3 4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3
Conduct EDT																									
Redisgn and Fabricate Systems for POT																									
Conduct LOG Demo																									
Conduct PQT																									
(1) Milestone C																		1							

Schedule Detail (R4a Exhibit)	February 2006												
BUDGET ACTIVITY 5 - System Development and Demonstration	PE NUMBER AND TITLE  0604609A - Smoke, Obscurant and Target Defeating Sys-Eng Dev  PROJECT  198												
Schedule Detail		<u>FY 2005</u>	<u>FY 2006</u>	FY 2007	<u>FY 2008</u>	FY 2009	FY 2010	FY 2011					
Design & Fabricate Systems for EDT				1-4Q									
Conduct EDT					1-2Q								
Redesign & Fabricate Systems for PQT					2-4Q								
Conduct LOG Demo					4Q								

4Q

1-3Q

4Q

Conduct PQT
Milestone C