

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE								
2040: <i>Research, Development, Test & Evaluation, Army</i>			PE 0604609A: <i>Smoke, Obscurant and Target Defeating Sys - Eng Dev</i>								
BA 5: <i>Development & Demonstration (SDD)</i>											
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	5.428	0.973	5.335	0.000	5.335	13.981	3.030	0.947	0.000	0	35.029
198: <i>Target Defeating System</i>	5.428	0.000	2.425	0.000	2.425	10.606	1.918	0.000	0.000	Continuing	Continuing
200: <i>SMOKE/OBSCURANT SYSTEM</i>	0.000	0.973	2.910	0.000	2.910	3.375	1.112	0.947	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

Project 0604609A supports the conducting of System Development and Demonstration (SDD) for the development and improvement of an array of obscurant systems to improve survivability of the combined armed forces, complement combined weapon systems, and enhance force effectiveness and combat power. This program element supports development of the Projected/Generated Obscuration Capability (PGOC), including the Screening Obscuration Module (SOM) initiatives. This 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 smoke systems. The smoke obscuration technologies supported by this program element enhance smoke systems as force multipliers.

B. Program Change Summary (\$ in Millions)

	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011 Base</u>	<u>FY 2011 OCO</u>	<u>FY 2011 Total</u>
Previous President's Budget	5.584	0.978	5.363	0.000	5.363
Current President's Budget	5.428	0.973	5.335	0.000	5.335
Total Adjustments	-0.156	-0.005	-0.028	0.000	-0.028
• Congressional General Reductions		-0.005			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	-0.156	0.000			
• Adjustments to Budget Years	0.000	0.000	-0.028	0.000	-0.028

UNCLASSIFIED

R-1 Line Item #81

Page 1 of 22

702 of 1922

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0604609A: <i>Smoke, Obscurant and Target Defeating Sys - Eng Dev</i>				PROJECT 198: <i>Target Defeating System</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
198: <i>Target Defeating System</i>	5.428	0.000	2.425	0.000	2.425	10.606	1.918	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											
A. Mission Description and Budget Item Justification											
<p>Project supports the development and improvement of an array of obscurant systems to improve survivability of the combined armed forces, complement combined weapon systems, and enhance force effectiveness and combat power. This program element supports development of the Projected/Generated Obscuration Capability (PGOC), including the Screening Obscuration Module (SOM) initiatives. This 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. US 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 smoke systems.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1 Prepare MDD and Milestone A documentation. <i>FY 2009 Accomplishments:</i> FY 2009 <i>FY 2010 Plans:</i> FY 2010 <i>FY 2011 Base Plans:</i> FY 2011 Base							0.288	0.000	0.000	0.000	0.000

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604609A: <i>Smoke, Obscurant and Target Defeating Sys - Eng Dev</i>	PROJECT 198: <i>Target Defeating System</i>				
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<i>FY 2011 OCO Plans:</i> FY 2011 OCO						
Program #2 Modeling, simulation, and toxicology effort. <i>FY 2009 Accomplishments:</i> FY 2009 <i>FY 2010 Plans:</i> FY 2010 <i>FY 2011 Base Plans:</i> FY 2011 Base <i>FY 2011 OCO Plans:</i> FY 2011 OCO		0.278	0.000	0.625	0.000	0.625
Program #3 PGOC development. <i>FY 2009 Accomplishments:</i> FY 2009 <i>FY 2010 Plans:</i> FY 2010		0.646	0.000	1.800	0.000	1.800

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army							DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>			R-1 ITEM NOMENCLATURE PE 0604609A: <i>Smoke, Obscurant and Target Defeating Sys - Eng Dev</i>			PROJECT 198: <i>Target Defeating System</i>					
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
<i>FY 2010 Plans:</i> FY 2010											
<i>FY 2011 Base Plans:</i> FY 2011 Base											
<i>FY 2011 OCO Plans:</i> FY 2011 OCO											
Accomplishments/Planned Programs Subtotals						5.428	0.000	2.425	0.000	2.425	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• Ord. #1: <i>RDT&E, BA4, PE 0603627A, Project E79 Smoke, Obscurant and Target Defeating Sys - Adv Dev</i>	3.721	4.894	2.425	0.000	2.425	4.436	0.000	0.000	0.000	0	15.476
• Ord. #2: <i>RDT&E, BA5, PE 0604609A, Project 200 Smoke, Obscurant and Target Defeating Sys - Eng Dev</i>	0.000	0.973	2.910	0.000	2.910	3.375	1.112	0.947	0.000	0	9.317
D. Acquisition Strategy Development of PGO and SOM systems will include design, construction, modeling and testing of prototypes.											
E. Performance Metrics Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.											

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army										DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0604609A: <i>Smoke, Obscurant and Target Defeating Sys - Eng Dev</i>				PROJECT 198: <i>Target Defeating System</i>					

Product Development (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Concept Development (SOM)	C/CPFF	L3 Melbourne, FLGDRS, Westminster, MD	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Concept Development (PGOC)	C/CPFF	TBD Location could not be determined.	0.000	0.000		1.200		0.000		1.200	Continuing	Continuing	0
Subtotal			0.000	0.000		1.200		0.000		1.200			0.000

Remarks

Support (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
M&S Development/ Toxicology Effort	C	ECBC APG, MD	0.000	0.000		0.625		0.000		0.625	Continuing	Continuing	0
Engineering Studies	C	ECBC APG, MD	0.000	0.000		0.200		0.000		0.200	Continuing	Continuing	0
Requirements Support	C	Chemical School FLW, MO	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Subtotal			0.000	0.000		0.825		0.000		0.825			0.000

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604609A: <i>Smoke, Obscurant and Target Defeating Sys - Eng Dev</i>	PROJECT 198: <i>Target Defeating System</i>
---	---	---

Support (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			

Remarks

Test and Evaluation (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Conduct Hardware Testing	C	DTC/ATEC Location could not be determined.	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Subtotal			0.000	0.000		0.000		0.000		0.000			0.000

Remarks

Management Services (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Project Management Personnel	C	JPM NBC CA APG, MD	0.000	0.000		0.400		0.000		0.400	Continuing	Continuing	0
Subtotal			0.000	0.000		0.400		0.000		0.400			0.000

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604609A: <i>Smoke, Obscurant and Target Defeating Sys - Eng Dev</i>	PROJECT 198: <i>Target Defeating System</i>
---	---	---

Management Services (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			

Remarks

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.000		2.425		0.000		2.425			0.000

Remarks

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army	DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604609A: <i>Smoke, Obscurant and Target Defeating Sys - Eng Dev</i>
PROJECT 198: <i>Target Defeating System</i>	

	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Material Development Decision Review				#																								
Milestone A						#																						
Contract Award							#																					
Modeling & Simulation Effort								#	#	#	#	#	#	#	#	#	#											
Design & Fabrication								#	#	#	#																	
Technology Feasibility Test #1												#																
Redesign													#	#	#													
Fabrication														#	#	#												
Technology Feasibility Test #2																#	#											
Milestone B																		#										
Contract Award - 2																			#									
Design and Fabrication																			#	#	#	#	#	#				
Engineering Design Test																									#			
Redesign - 2																								#	#	#		
Fabrication - 2																									#	#		
SOM Schedule									#	#	#	#	#	#	#	#	#	#	#	#	#	#	#					
Technology Feasibility Test									#	#																		
Milestone B - 2											#																	
Contract Award - 3												#																
Design and Fabrication - 2												#	#	#	#	#	#											

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604609A: <i>Smoke, Obscurant and Target Defeating Sys - Eng Dev</i>	PROJECT 198: <i>Target Defeating System</i>

	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Engineering Design Test - 2																	#											
Redesign - 3																	#	#	#									
Fabrication - 3																			#	#								
Developmental Testing																			#	#								
Operational Assessment																					#							
Milestone C																							#					

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604609A: <i>Smoke, Obscurant and Target Defeating Sys - Eng Dev</i>	PROJECT 198: <i>Target Defeating System</i>

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
Material Development Decision Review	1	2010	1	2010
Milestone A	3	2010	3	2010
Contract Award	4	2010	4	2010
Modeling & Simulation Effort	4	2010	2	2013
Design & Fabrication	4	2010	3	2011
Technology Feasibility Test #1	4	2011	4	2011
Redesign	1	2012	3	2012
Fabrication	3	2012	1	2013
Technology Feasibility Test #2	1	2013	2	2013
Milestone B	3	2013	3	2013
Contract Award - 2	4	2013	4	2013
Design and Fabrication	4	2013	1	2015
Engineering Design Test	1	2015	1	2015
Redesign - 2	1	2015	3	2015
Fabrication - 2	3	2015	4	2015
SOM Schedule	1	2011	3	2014
Technology Feasibility Test	1	2011	2	2011
Milestone B - 2	3	2011	3	2011

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604609A: <i>Smoke, Obscurant and Target Defeating Sys - Eng Dev</i>	PROJECT 198: <i>Target Defeating System</i>

Event	Start		End	
	Quarter	Year	Quarter	Year
Contract Award - 3	4	2011	4	2011
Design and Fabrication - 2	4	2011	1	2013
Engineering Design Test - 2	1	2013	1	2013
Redesign - 3	1	2013	3	2013
Fabrication - 3	3	2013	4	2013
Developmental Testing	4	2013	1	2014
Operational Assessment	2	2014	2	2014
Milestone C	3	2014	3	2014

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0604609A: <i>Smoke, Obscurant and Target Defeating Sys - Eng Dev</i>				PROJECT 200: <i>SMOKE/OBSCURANT SYSTEM</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
200: <i>SMOKE/OBSCURANT SYSTEM</i>	0.000	0.973	2.910	0.000	2.910	3.375	1.112	0.947	0.000	Continuing	Continuing
Quantity of RDT&E Articles											
A. Mission Description and Budget Item Justification											
<p>Project supports the development and improvement of an array of obscurant systems to improve survivability of the combined armed forces, complement combined weapon systems, and enhance force effectiveness and combat power. This program element supports development of the Projected/Generated Obscuration Capability (PGOC), including the Screening Obscuration Module (SOM) initiatives. This 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. US 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 smoke systems.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1 Prepare and conduct MDDR and Milestone A (PGOC). <i>FY 2009 Accomplishments:</i> FY 2009 <i>FY 2010 Plans:</i> FY 2010 <i>FY 2011 Base Plans:</i> FY 2011 Base							0.000	0.973	0.000	0.000	0.000

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604609A: <i>Smoke, Obscurant and Target</i> <i>Defeating Sys - Eng Dev</i>	PROJECT 200: <i>SMOKE/OBSCURANT SYSTEM</i>				
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<i>FY 2011 OCO Plans:</i> FY 2011 OCO						
Program #2 PGOC development. <i>FY 2009 Accomplishments:</i> FY 2009 <i>FY 2010 Plans:</i> FY 2010 <i>FY 2011 Base Plans:</i> FY 2011 Base <i>FY 2011 OCO Plans:</i> FY 2011 OCO		0.000	0.000	2.910	0.000	2.910
Program #3 Test and evaluation of PGOC and SOM systems. <i>FY 2009 Accomplishments:</i> FY 2009 <i>FY 2010 Plans:</i> FY 2010		0.000	0.000	0.000	0.000	0.000

UNCLASSIFIED

R-1 Line Item #81

Page 14 of 22

715 of 1922

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army							DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>			R-1 ITEM NOMENCLATURE PE 0604609A: <i>Smoke, Obscurant and Target Defeating Sys - Eng Dev</i>			PROJECT 200: <i>SMOKE/OBSCURANT SYSTEM</i>					
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<i>FY 2011 Base Plans:</i> FY 2011 Base											
<i>FY 2011 OCO Plans:</i> FY 2011 OCO											
Program #4 Continue development and refinement of SOM alternatives.							0.000	0.000	0.000	0.000	0.000
<i>FY 2009 Accomplishments:</i> FY 2009											
<i>FY 2010 Plans:</i> FY 2010											
<i>FY 2011 Base Plans:</i> FY 2011 Base											
<i>FY 2011 OCO Plans:</i> FY 2011 OCO											
Accomplishments/Planned Programs Subtotals							0.000	0.973	2.910	0.000	2.910
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• Ord. #1: <i>RDT&E, BA4, PE 0603627A, Project E79 Smoke,</i>	3.721	4.894	2.425	0.000	2.425	4.436	0.000	0.000	0.000	0	15.476

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army										DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>			R-1 ITEM NOMENCLATURE PE 0604609A: <i>Smoke, Obscurant and Target Defeating Sys - Eng Dev</i>				PROJECT 200: <i>SMOKE/OBSCURANT SYSTEM</i>				
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
<i>Obscurant and Target Defeating Sys - Adv Dev</i>											
• <i>Ord. #2: RDT&E, BA5, PE 0604609A, Project 198 Smoke, Obscurant and Target Defeating Sys - Eng Dev</i>	5.428	0.000	2.425	0.000	2.425	10.606	1.918	0.000	0.000	0	20.377
D. Acquisition Strategy											
Development of PGOC and SOM systems will include design, construction, modeling and testing of prototypes.											
E. Performance Metrics											
Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.											

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army										DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0604609A: <i>Smoke, Obscurant and Target Defeating Sys - Eng Dev</i>				PROJECT 200: <i>SMOKE/OBSCURANT SYSTEM</i>					

Product Development (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Concept Development (SOM)	C/CPFF	TBD Location could not be determined.	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Concept Development (SOM) - 2	C/CPFF	TBD Location could not be determined.	0.000	0.000		2.010		0.000		2.010	Continuing	Continuing	0
Subtotal			0.000	0.000		2.010		0.000		2.010			0.000

Remarks

Support (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
M&S Development/ Environmental Toxicology Studies	C	Various Location could not be determined.	0.000	0.000		0.100		0.000		0.100	Continuing	Continuing	0
Requirements Support	C	Chemical School FLW, MO	0.000	0.225		0.000		0.000		0.000	Continuing	Continuing	0
Engineering Studies	C	ECBC APG, MD	0.000	0.300		0.400		0.000		0.400	Continuing	Continuing	0
Subtotal			0.000	0.525		0.500		0.000		0.500			0.000

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army											DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0604609A: <i>Smoke, Obscurant and Target Defeating Sys - Eng Dev</i>				PROJECT 200: <i>SMOKE/OBSCURANT SYSTEM</i>					
Support (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Remarks													
Management Services (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Management Personnel	C	JPM NBC CA APG, MD	0.000	0.448		0.400		0.000		0.400	Continuing	Continuing	0
Subtotal			0.000	0.448		0.400		0.000		0.400			0.000
Remarks													
			Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	0.973		2.910		0.000		2.910			0.000
Remarks													

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604609A: <i>Smoke, Obscurant and Target Defeating Sys - Eng Dev</i>	PROJECT 200: <i>SMOKE/OBSCURANT SYSTEM</i>

	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Material Development Decision Review				#																								
Milestone A							#																					
Contract Award								#																				
Modeling & Simulation Effort									#	#	#	#	#	#	#	#	#	#										
Design & Fabrication									#	#	#	#																
Technology Feasibility Test #1												#																
Redesign													#	#	#													
Fabrication															#	#	#											
Technology Feasibility Test #2																	#	#										
Milestone B																				#								
Contract Award - 2																				#								
Design and Fabrication																			#	#	#	#	#	#	#			
Engineering Design Test																									#			
Redesign - 2																									#	#	#	
Fabrication - 2																											#	#
SOM Schedule									#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#				
Technology Feasibility Test									#	#																		
Milestone B - 2												#																
Contract Award - 3												#																
Design and Fabrication - 2													#	#	#	#	#	#										

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604609A: <i>Smoke, Obscurant and Target Defeating Sys - Eng Dev</i>	PROJECT 200: <i>SMOKE/OBSCURANT SYSTEM</i>

	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Engineering Design Test - 2																	#											
Redesign - 3																	#	#	#									
Fabrication - 3																			#	#								
Developmental Testing																			#	#								
Operational Assessment																					#							
Milestone C																							#					

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604609A: <i>Smoke, Obscurant and Target</i> <i>Defeating Sys - Eng Dev</i>	PROJECT 200: <i>SMOKE/OBSCURANT SYSTEM</i>

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
Material Development Decision Review	1	2010	1	2010
Milestone A	3	2010	3	2010
Contract Award	4	2010	4	2010
Modeling & Simulation Effort	4	2010	2	2013
Design & Fabrication	4	2010	3	2011
Technology Feasibility Test #1	4	2011	4	2011
Redesign	1	2012	3	2012
Fabrication	3	2012	1	2013
Technology Feasibility Test #2	1	2013	2	2013
Milestone B	3	2013	3	2013
Contract Award - 2	4	2013	4	2013
Design and Fabrication	4	2013	1	2015
Engineering Design Test	1	2015	1	2015
Redesign - 2	1	2015	3	2015
Fabrication - 2	3	2015	4	2015
SOM Schedule	1	2011	3	2014
Technology Feasibility Test	1	2011	2	2011
Milestone B - 2	3	2011	3	2011

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604609A: <i>Smoke, Obscurant and Target Defeating Sys - Eng Dev</i>	PROJECT 200: <i>SMOKE/OBSCURANT SYSTEM</i>
---	---	--

Event	Start		End	
	Quarter	Year	Quarter	Year
Contract Award - 3	4	2011	4	2011
Design and Fabrication - 2	4	2011	1	2013
Engineering Design Test - 2	1	2013	1	2013
Redesign - 3	1	2013	3	2013
Fabrication - 3	3	2013	4	2013
Developmental Testing	4	2013	1	2014
Operational Assessment	2	2014	2	2014
Milestone C	3	2014	3	2014

UNCLASSIFIED