

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Army	Date: February 2015
---	----------------------------

Appropriation/Budget Activity	R-1 Program Element (Number/Name)											
2040: <i>Research, Development, Test & Evaluation, Army / BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	PE 0603653A / <i>Advanced Tank Armament System (ATAS)</i>											
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
Total Program Element	-	54.259	-	-	-	-	-	-	-	-	-	54.259
C51: <i>STRYKER MODERNIZATION</i>	-	54.259	-	-	-	-	-	-	-	-	-	54.259

A. Mission Description and Budget Item Justification

This Program Element (PE) supports the development of the Stryker Family of vehicles (FOV) in two projects:

The Interim Armored Vehicle Family Project (C03) supports the use of the common platform/common chassis design reducing requirements for repair parts and logistics support in the area of operations.

Engineering Change Proposal 1 (ECP 1) (C51), will enable the Stryker FOV to host the future network without further degrading vehicle performance. The upgrade will increase available electrical power while ensuring adequate mechanical power, weight margin, and cooling. Combined with an in-vehicle network, this will ensure the FOV can host the future network while retaining its protection and mobility.

B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	49.963	-	-	-	-
Current President's Budget	54.259	-	-	-	-
Total Adjustments	4.296	-	-	-	-
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	5.956	-			
• SBIR/STTR Transfer	-1.660	-			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army									Date: February 2015			
Appropriation/Budget Activity 2040 / 4					R-1 Program Element (Number/Name) PE 0603653A / Advanced Tank Armament System (ATAS)				Project (Number/Name) C51 / STRYKER MODERNIZATION			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
C51: STRYKER MODERNIZATION	-	54.259	-	-	-	-	-	-	-	-	-	54.259
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note												
Beginning in FY15, PE Number 0203735A/Project EE2 funds the Stryker Engineering Change Proposal (ECP) 1 program, which was previously funded by PE Number 0603653A/Project C03 (FY13) and Project C51 (through FY14).												
A. Mission Description and Budget Item Justification												
The Stryker ECP 1 effort will enable the Stryker Double-V Hull (DVH) fleet to buy back the Space, Weight, and Power-Cooling (SWaP-C) that has been lost as a result of vehicle changes required to counter the evolving threats that were present in theater of operations. This ECP 1 will also allow the DVH fleet to host the future network without further degrading vehicle performance. The upgrade will increase available electrical power while ensuring adequate mechanical power, weight margin, and cooling. Combined with a digital backbone, this will ensure that the DVH fleet can host the future network while retaining its protection and mobility.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2014	FY 2015	FY 2016	
Title: Stryker ECP 1 Development (Engineering / Prototypes)									51.358	-	-	
Description: Funding is provided for the following efforts												
FY 2014 Accomplishments: Continued development engineering for the Stryker ECP 1 upgrades. Began prototype procurement for the engine, suspension, alternator and in-vehicle network of the DVH variants.												
Title: Stryker ECP 1 Testing									0.648	-	-	
Description: Funding is provided for the following effort												
FY 2014 Accomplishments: Began the development test planning and execution for the ECP 1 upgrade technologies, including tests for safety and human factors, automotive, communications, command and control (C3) live fire and operational testing.												
Title: Government Engineering and Program Management									2.253	-	-	
Description: Funding is provided for the following effort												
FY 2014 Accomplishments:												

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army										Date: February 2015		
Appropriation/Budget Activity 2040 / 4				R-1 Program Element (Number/Name) PE 0603653A / <i>Advanced Tank Armament System (ATAS)</i>				Project (Number/Name) C51 / <i>STRYKER MODERNIZATION</i>				
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2014	FY 2015	FY 2016
Continued Government Systems Engineering and Program Management which included labor, travel, training, supplies and equipment.												
Accomplishments/Planned Programs Subtotals										54.259	-	-
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost	
• G85100: <i>Stryker Vehicle (G85100)</i>	419.100	435.110	181.245	-	181.245	72.260	-	-	-	198.820	1,306.535	
• GM0100: <i>Stryker MOD (GM0100)</i>	20.522	39.683	74.085	-	74.085	42.150	76.399	506.376	535.815	1,836.776	3,131.806	
• G85200: <i>Stryker Upgrade (G85200)</i>	-	-	305.743	-	305.743	418.163	434.585	112.388	77.780	-	1,348.659	
• 273735EE2: <i>Stryker Improvement (273735/EE2)</i>	-	119.163	105.789	-	105.789	34.766	23.459	24.847	25.319	-	333.343	
Remarks												
AAE approval for a 3rd DVH SBCT Brigade of 337 Exchange Vehicles was given on July 26, 2013 (funded in G85100). Funding for the 4th DVH ECP 1 Brigade will begin in FY16 and will be funded in Stryker Upgrade (G85200). Stryker MOD (GM0100) is for Stryker Fleet modifications to include ECP 1 retrofits to the Stryker fleet starting in FY19. Beginning in FY15, PE Number 0203735A/Project EE2 will continue to fund the Stryker Engineering Change Proposal (ECP) 1 program.												
D. Acquisition Strategy												
The Stryker ECP 1 effort will buy back the vehicle space, weight, and power margin lost due to the addition of numerous kits in response to eleven years of war (20-combat rotations & 37+ million total miles), in order to allow integration of the future network (as directed by VCSA in August 2011) without further degrading the performance of the platform. In May 2012, Stryker ECP 1 program (Phase I) was approved, permitting preliminary design and integration efforts on both the Flat Bottom (FB) and Double-V Hull (DVH) variants. In March 2013, Phase II approved upgrading the mechanical power, electrical power generation, chassis upgrades and the in-vehicle network for the DVH vehicles. Based on additional testing conducted in the summer of 2013, the decision was made to focus ECP efforts on the DVH and defer efforts on flat bottom Strykers. ECP 1 Phase II contract awarded November 25, 2013, which continues development engineering, prototype build test and evaluation. The Production decision (Phase III) will determine the production requirements of the technologies selected in Phase II.												
E. Performance Metrics												
N/A												

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army												Date: February 2015			
Appropriation/Budget Activity 2040 / 4						R-1 Program Element (Number/Name) PE 0603653A / <i>Advanced Tank Armament System (ATAS)</i>						Project (Number/Name) C51 / <i>STRYKER MODERNIZATION</i>			
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Management Office (PMO)	Various	TACOM : MI	5.539	2.253	Mar 2014	-		-		-		-	-	7.792	-
Subtotal			5.539	2.253		-		-		-		-	-	7.792	-
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Stryker ECP 1 Development	SS/CPIF	GDLS : MI	266.130	51.358	Nov 2013	-		-		-		-	-	317.488	-
Subtotal			266.130	51.358		-		-		-		-	-	317.488	-
Remarks Funding for the Engineering Change Proposal (ECP) 1 beginning in FY15 was moved to Program Element 0203735A/Project EE2.															
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Stryker ECP 1 Testing	Various	Various Test Centers : Various	0.906	0.648	Apr 2014	-		-		-		-	-	1.554	-
Contract Support to Test	TBD	GDLS, MI : Various	3.919	-		-		-		-		-	-	3.919	-
Subtotal			4.825	0.648		-		-		-		-	-	5.473	-
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			276.494	54.259		-		-		-		-	-	330.753	-
Remarks															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army																Date: February 2015																					
Appropriation/Budget Activity 2040 / 4										R-1 Program Element (Number/Name) PE 0603653A / Advanced Tank Armament System (ATAS)										Project (Number/Name) C51 / STRYKER MODERNIZATION																	
Event Name										FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
										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
Stryker Engineering Change Proposal (ECP) 1 Phase II										Design/Prototype/Logistics Products				Phase II Contract Award																							
(1) ECP 1 Phase II Contract Award																																					

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army			Date: February 2015
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603653A / <i>Advanced Tank Armament System (ATAS)</i>	Project (Number/Name) C51 / <i>STRYKER MODERNIZATION</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Stryker Engineering Change Proposal (ECP) 1 Phase II	2	2013	4	2014
ECP 1 Phase II Contract Award	1	2014	1	2014