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

Date: March 2014

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

2040: Research, Development, Test & Evaluation, Army I BA 4: Advanced

PE 0603653A I ADVANCED TANK ARMAMENT SYSTEM (ATAS)

Component Development & Prototypes (ACD&P)

COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO [#]	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	-	11.116	49.963	-	-	-	-	-	-	-	-	61.079
C03: Interim Armored Vehicle (IAV) Family	-	5.116	-	-	-	-	-	-	-	-	-	5.116
C51: STRYKER MODERNIZATION	-	6.000	49.963	-	-	-	-	-	-	-	-	55.963

[#] The FY 2015 OCO Request will be submitted at a later date.

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 Amored 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 (ECP) (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 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	14.347	49.989	58.600	-	58.600
Current President's Budget	11.116	49.963	-	-	-
Total Adjustments	-3.231	-0.026	-58.600	-	-58.600
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.433	-			
Other Adjustments 1	-2.798	-0.026	-58.600	-	-58.600

Exhibit R-2A, RDT&E Project Ju	ustification	: PB 2015 A	Army							Date: Marc	ch 2014	
Appropriation/Budget Activity 2040 / 4					PE 060365	am Elemen 53A <i>I ADVA</i> VT SYSTEN	NCED TAN	Project (Number/Name) C03 I Interim Armored Vehicle (IAV) Family				
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO *	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
C03: Interim Armored Vehicle (IAV) Family	-	5.116	-	-	-	-	-	-	-	-	-	5.116
Quantity of RDT&E Articles	-	-	_	-	_	_	-	-	-	-		

^{*} The FY 2015 OCO Request will be submitted at a later date.

Note

Beginning in FY15, PE Number 0203735A/Project EE2 funds the Stryker ECP program, which was originally funded by PE Number 0603653A/Project C03 (FY13) and Project C51 (through FY14).

A. Mission Description and Budget Item Justification

The Interim Armored Vehicle (IAV) Family Project (C03) supports the development of the Stryker Family of Vehicles (FOV) consisting of 10 variants in the flat bottom configuration. The mission of the Stryker vehicle is to disrupt or destroy enemy military forces, control land areas including populations and resources and be prepared to conduct combat operations to protect US national interests(SRC 47100F400). The Stryker Brigade Combat Team (SBCT) while optimized for Small Scale Contingencies is capable of executing Unified Land operations across the Full Threat Spectrum with organic combined arms to company level and supporting Global Reaction Force contingencies in Force & Early Entry Operation.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: Development Engineering	5.116	_	_
Articles:	-	-	-
Description: Funding is provided for the following effort			
FY 2013 Accomplishments: Continuing development engineering for the Stryker ECP Phase II.			
Accomplishments/Planned Programs Subtotals	5.116	_	_

C. Other Program Funding Summary (\$ in Millions)

			FY 2015	FY 2015	FY 2015					Cost To	
<u>Line Item</u>	FY 2013	FY 2014	Base	000	<u>Total</u>	FY 2016	FY 2017	FY 2018	FY 2019	Complete	Total Cost
• G85100: Stryker Vehicle (G85100)	242.439	419.100	385.110	-	385.110	455.484	396.631	99.038	-	484.028	2,481.830
• GM0100: Stryker MOD (GM0100)	60.801	20.522	39.683	-	39.683	66.159	170.823	503.552	603.906	1,709.838	3,175.284
GE0180: Spares and Repair	22.176	-	-	-	-	-	-	-	-	-	22.176
Parts (WTCV) (GE0180)											

PE 0603653A: ADVANCED TANK ARMAMENT SYSTEM (ATAS)

UNCLASSIFIED
Page 2 of 11

R-1 Line #59

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity R-1 Program	Element (Number/Name) Project (N	umber/Name)
2040 / 4 PE 0603653A	I ADVANCED TANK C03 I Inter	rim Armored Vehicle (IAV) Family
ARMAMENTS	SYSTEM (ATAS)	

C. Other Program Funding Summary (\$ in Millions)

			FY 2015	FY 2015	FY 2015					Cost To	
Line Item	FY 2013	FY 2014	Base	<u>oco</u>	<u>Total</u>	FY 2016	FY 2017	FY 2018	FY 2019	Complete	Total Cost

Remarks

AAE approval for a 3rd DVH SBCT Brigade of 337 Exchange Vehicles was given on July 26, 2013. Stryker Mod (GM0100) is for modifications for ECP retrofits to the Stryker fleet. Starting in FY 17 the modification line will fund both fleet modifications and ECP Retrofits.

D. Acquisition Strategy

The development of the Stryker Modernization capability will be acquired through a phased approach. Phase 1 requires the Original Equipment Manufacturer (OEM) to conduct a source selection to obtain a vendor that represents the best values for the capabilities described within the work directive based on user requirements. Phase 2 will encompass engineering design, prototype delivery and test support for the modernization effort. Beginning in FY15, PE Number 0203735A/Project EE2 funds the Stryker ECP program, which was originally funded by PE Number 0603653A/Project C03 (FY13) and Project C51 (through FY14).

E. Performance Metrics

N/A

Exhibit R-3, RDT&E F	Project C	ost Analysis: PB 2	015 Army	/								Date:	March 20	14	
Appropriation/Budge 2040 / 4	t Activity	1										Project (Number/Name) C03 I Interim Armored Vehicle (IAV) F			Family
Management Service	s (\$ in M	lillions)		FY 2	2013	FY 2014			2015 ase	FY 2015 OCO		FY 2015 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	Total Cost	Target Value of Contrac
Project Management Office (PMO) - Base (C03)	Various	TACOM, : MI	56.100	-		-		-		-		-	-	56.100	-
		Subtotal	56.100	-		-		-		-		-	-	56.100	-
Product Developmen	Product Development (\$ in Millions)				2013	FY:	2014	FY 2015 Base		FY 2015 OCO		FY 2015 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	Total Cost	Target Value of Contract
Stryker Development/ Engineering	Various	GDLS : MI	438.166	5.116	Nov 2013	-		-		-		-	-	443.282	-
TUA Development/ Engineering	Various	GDLS : MI	1.629	-		-		-		-		-	-	1.629	-
		Subtotal	439.795	5.116		-		-		-		-	-	444.911	-
Test and Evaluation	(\$ in Milli	ons)		FY 2	2013	FY:	2014		2015 ase		2015 CO	FY 2015 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 Contrac
Stryker Development Testing	Various	Various Test Centers : Multiple	201.899	-		-		-		-		-	-	201.899	-
NBCRV Operational Test and Evaluation	Various	Various Test Centers : Various	5.738	-		-		-		-		-	-	5.738	-
Contractor Support to Test	Various	GDLS : MI	29.828	-		-		-		-		-	-	29.828	-
SRAT Testing	Various	Various Test Centers : Various	8.302	-		-		-		-		-	-	8.302	-
		Subtotal	245.767	-		-		-		-		-	-	245.767	-
			Prior Years	FY 2	2013	FY:	2014		2015 ase		2015 CO	FY 2015 Total	Cost To	Total Cost	Target Value of Contrac
		Project Cost Totals	741.662	5.116		-		-		_		_		746.778	_

Exhibit R-3, RDT&E Project Cost Analys	is: PB 2015 Army					Date:	March 20	14		
Appropriation/Budget Activity 2040 / 4			R-1 Program El PE 0603653A / ARMAMENT SY	lement (Number/Nam ADVANCED TANK /STEM (ATAS)	Proje C03 /	Project (Number/Name) C03 I Interim Armored Vehicle (IAV) Famil				
	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contrac	
Remarks .										

PE 0603653A: *ADVANCED TANK ARMAMENT SYSTEM (ATAS)* Army

Exhibit R-2A, RDT&E Project Ju	ustification	: PB 2015 A	Army				,			Date: Marc	ch 2014		
Appropriation/Budget Activity 2040 / 4					PE 060365	am Elemen 53A <i>I ADVA</i> VT SYSTEN	NCED TAN	•	Project (Number/Name) C51 / STRYKER MODERNIZATION				
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO [#]	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost	
C51: STRYKER MODERNIZATION	-	6.000	49.963	-	-	-	-	-	-	-	-	55.963	
Quantity of RDT&E Articles	_	-	-	-	-	-	-	-	-	-			

^{*} The FY 2015 OCO Request will be submitted at a later date.

Note

Beginning in FY15, PE Number 0203735A/Project EE2 funds the Stryker ECP program, which was originally funded by PE Number 0603653A/Project C03 (FY13) and Project C51 (through FY14).

A. Mission Description and Budget Item Justification

Stryker Modernization (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. Beginning in FY15 funding for this effort was moved to Program Element 0273735/Project EE2.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: Stryker ECP Development (Engineering / Prototypes)	5.100	46.020	-
Articles:	-	-	-
Description: Funding is provided for the following efforts			
FY 2013 Accomplishments:			
Continue develpment engineering for the Stryker ECP upgrades.			
FY 2014 Plans:			
Continue development engineering for the Stryker ECP upgrades. Begin prototype procurement for the engine, suspension, alternator and in-vehicle network of the DVH variants.			
Title: Stryker ECP Testing	-	0.833	-
Articles:	-	-	-
Description: Funding is provided for the following effort			
FY 2014 Plans:			
	,	·	

UNCLASSIFIED
Page 6 of 11

Exhibit R-2A, RDT&E Project Justif	ication: PB	2015 Army	,	,					Date: N	larch 2014		
Appropriation/Budget Activity 2040 / 4				PE 06	03653A <i> I AE</i>	nent (Numb DVANCED TA TEM (ATAS)			Project (Number/Name) C51 / STRYKER MODERNIZATION			
B. Accomplishments/Planned Prog	rams (\$ in I	Millions, Art	icle Quantit	ies in Each)	1				FY 2013	FY 2014	FY 2015	
Begin the development test planning factors, automotive, communications						ests for safet	y and humar	1				
Title: Contractor Support to Test									-	0.319	-	
							Α	rticles:	-	-	-	
Description: Funding is provided for	the following	g effort										
FY 2014 Plans:												
Begin the contractor support of the te mainenance/repair and overall test su						•	reparation, v	ehicle				
Title: Government Engineering and F	Program Mar	nagement							0.900	2.791	-	
							Α	rticles:	-	-	-	
Description: Funding is provided for	the following	g effort										
FY 2013 Accomplishments: Continue Government Systems Engire equipment.	neering and	Program Ma	nagement w	hich include	s labor, trav	el, training, s	upplies and					
FY 2014 Plans: Continue Government Systems Enginequipment.	neering and	Program Ma	nagement w	hich include	s labor, trav	el, training, s	upplies and					
				Accon	nplishments	s/Planned P	rograms Su	btotals	6.000	49.963	-	
C. Other Program Funding Summa	rv (\$ in Milli	ons)										
<u> </u>	· y (w 111 1 1 111111	<u>00j</u>	FY 2015	FY 2015	FY 2015					Cost To		
<u>Line Item</u>	FY 2013	FY 2014	Base	000	Total	FY 2016	FY 2017	FY 20°	_	9 Complete		
• G85100: Stryker Vehicle (G85100)	242.439	419.100	385.110	-	385.110	455.484	396.631	99.03	-		2,481.830	
 GM0100: Stryker MOD (GM0100) GE0180: Spares (Initial) Stryker 	60.801 22.176	20.522	39.683	-	39.683	66.159 -	170.823	503.5	52 603.90 -	b 1,709.838 -	3,175.284 22.176	
CESTOS. Oparos (Illidai) Stryker	22.110										22.170	

Remarks

AAE approval for a 3rd DVH SBCT Brigade of 337 Exchange Vehicles was given on July 26, 2013. Stryker MOD (GM0100) is for modifications for ECP retrofits to the Stryker fleet. Starting in FY17 the modification line will fund both fleet modifications and ECP retrofits.

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: March 2014	
' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	,	- 3 (umber/Name) YKER MODERNIZATION

D. Acquisition Strategy

The Stryker ECP 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 & 30+ 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, Phase I (Design) of the Stryker ECP program was approved, permitting preliminary design and integration efforts on both the Flat Bottom (FB) and Double-V Hull (DVH) variants (completed). In March 2013, Phase II approved upgrading the mechanical power, electrical power generation, chassis upgrades and the in-vehicle network for the DVH vehicles. ECP Phase II contract awarded in Novermber 2013, which continues development engineering, prototype build test and evaluation. The Phase III (Production) decision point will determine the production requirements of the technologies selected in Phase II. Beginning in FY15, PE Number 0203735A/Project EE2 funds the Stryker ECP program, which was originally funded by PE Number 0603653A/Project C03 (FY13) and Project C51 (through FY14).

E. Performance Metrics

N/A

Exhibit R-3, RDT&E I	Project C	ost Analysis: PB 2	:015 Army	/								Date:	March 20	14	
Appropriation/Budge 2040 / 4	et Activity	1				PE 060	ogram Ele 3653A / A MENT SYS	DVANCI	ED TANK	ame)	_	(Numbei TRYKER	r/ Name) MODERN	IZATION	1
Management Service	es (\$ in M	illions)		FY 2	2013	FY 2	2014		2015 ase	FY 2	2015 CO	FY 2015 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 Contrac
Project Management Office (PMO)	Various	TACOM : MI	4.610	0.900	Oct 2013	2.791	Mar 2014	-		-		-	-	8.301	-
		Subtotal	4.610	0.900		2.791		-		-		-	-	8.301	-
Product Developme	nt (\$ in Mi	llions)		FY 2	2013	FY 2014		FY 2015 Base		FY 2	2015 CO	FY 2015 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 Contrac
Stryker ECP Development	SS/CPIF	GDLS : MI	256.870	5.100	Nov 2013	46.020	Apr 2014	-		-		-	-	307.990	-
		Subtotal	256.870	5.100		46.020		_		-		_	-	307.990	

Funding for the Engineering Change Proposal (ECP) beginning in FY15 was moved to Program Element 0203735A/Project EE2

Test and Evaluation	(\$ in Milli	ons)		FY 2	2013	FY 2	2014		2015 ise		2015 CO	FY 2015 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	Total Cost	Target Value of Contract
Stryker ECP Testing	Various	Various Test Centers : Various	0.905	-		0.833	Apr 2014	-		-		-	-	1.738	-
Contractor Support to Test	SS/CPFF	GDLS, MI : Various	0.000	-		0.319	Apr 2014	-		-		-	-	0.319	-
		Subtotal	0.905	-		1.152		-		-		-	-	2.057	-

									Target
	Prior			FY 2015	FY 2015	FY 2015	Cost To	Total	Value of
	Years	FY 2013	FY 2014	Base	oco	Total	Complete	Cost	Contract
Project Cost Totals	262.385	6.000	49.963	-	-	_	-	318.348	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2015	Army	,																				Dat	e: N	/larch	າ 20	14		
Appropriation/Budget Activity 2040 / 4										ADVANCED TANK							Project (Number/Name) C51 / STRYKER MODERNIZATION											
		FY 2013		FY 2013 FY 201			2014	14 FY 2015					FY 2016				FY	2017			FY 2018			FY 20		2019		
	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
Army System Acquisition Review Counsel (ASARC) Phase II							·				·			•				·										
Stryker Engineering Change Proposal (ECP) Phase II																												
ECP Preliminary Design Review																												
ECP Phase II Contract Award																												

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army		Date: March 2014	
11 1	,	- , (umber/Name) YKER MODERNIZATION

Schedule Details

	St	art	End			
Events	Quarter	Year	Quarter	Year		
Army System Acquisition Review Counsel (ASARC) Phase II	2	2013	2	2013		
Stryker Engineering Change Proposal (ECP) Phase II	2	2013	4	2014		
ECP Preliminary Design Review	4	2013	4	2013		
ECP Phase II Contract Award	1	2014	1	2014		