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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Army	Date: February 2015
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Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
2040: Research, Development, Test & Evaluation, Army / BA 7: Operational Systems Development					PE 0203758A / Digitization							
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	-	5.978	5.993	4.361	-	4.361	7.034	6.520	5.697	5.485	Continuing	Continuing
374: HOR Battlefield Digitizn	-	5.978	5.993	4.361	-	4.361	7.034	6.520	5.697	5.485	Continuing	Continuing

A. Mission Description and Budget Item Justification

Horizontal Battlefield Digitization is a strategy that allows warfighters, from the individual soldier and platform to echelons above corps, to share critical situation awareness (SA) and command and control (C2) information. It conducts analysis and evaluation of new information technologies, concepts, and applications of integrated management activities. Digital information technologies to acquire, exchange, and employ data throughout the operational environment, are used to provide an operational picture for leaders. This timely sharing of information significantly improves the ability to quickly make decisions, synchronize forces and fires, and increase the operational tempo. The major efforts included in the program element are: 1) Integration and synchronization of the Army's interoperability efforts; between joint and multi-national forces, combat material, and training efforts. 2) Systems engineering and integration of hardware and software from a System of Systems (SOS) perspective. 3) Develop Army Equipping Enterprise System (AE2S) integration of the Force Development Investment Information System (FDIIS), Army Flow Model (AFM), and Force Development Knowledge Center (FDKC) programs into a single integrated system.

Digitization efforts are in support of the Army Equipping Strategy, National Defense Authorization Act 804, and OSD reports to Congress.

The FY 2016 funding request was reduced by \$1.755 million to account for the availability of prior year execution balances.

B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	6.183	10.912	15.035	-	15.035
Current President's Budget	5.978	5.993	4.361	-	4.361
Total Adjustments	-0.205	-4.919	-10.674	-	-10.674
• Congressional General Reductions	-	-0.003			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.205	-			
• Adjustments to Budget Years	-	-4.916	-10.674	-	-10.674

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Appropriation/Budget Activity 2040 / 7					R-1 Program Element (Number/Name) PE 0203758A / Digitization				Project (Number/Name) 374 / HOR Battlefld Digitizn			
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
374: HOR Battlefld Digitizn	-	5.978	5.993	4.361	-	4.361	7.034	6.520	5.697	5.485	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Horizontal Battlefield Digitization is a strategy that allows warfighters, from the individual soldier and platform to echelons above corps, to share critical situation awareness (SA) and command and control (C2) information. It conducts analysis and evaluation of new information technologies, concepts, and applications of integrated management activities. Digital information technologies to acquire, exchange, and employ data throughout the operational environment, are used to provide an operational picture for leaders. This timely sharing of information significantly improves the ability to quickly make decisions, synchronize forces and fires, and increase the operational tempo. The major efforts included in the program element are: 1) Integration and synchronization of the Army's interoperability efforts; between joint and multi-national forces, combat material, and training efforts. 2) Systems engineering and integration of hardware and software from a System of Systems (SOS) perspective. 3) Develop Army Equipping Enterprise System (AE2S) integration of the Force Development Investment Information System (FDIIS), Army Flow Model (AFM), and Force Development Knowledge Center (FDKC) programs into a single integrated system.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2014	FY 2015	FY 2016
Title: Interoperability Assessment Description: Funds are to be used for the following efforts FY 2014 Accomplishments: Conducted technical interoperability assessments, performed interoperability/integration analyses, analyze networked weapon system and Situational Awareness (SA), Command and Control (C2) systems compatibility and assessed technical and operational test plans, activities, and results. FY 2015 Plans: Conduct technical interoperability assessments, perform interoperability/integration analyses, analyze networked weapon system and Situational Awareness (SA), Command and Control (C2) systems compatibility and assess technical and operational test plans, activities, and results. FY 2016 Plans: Will conduct technical interoperability assessments, perform interoperability/integration analyses, analyze networked weapon system and Situational Awareness (SA), Command and Control (C2) systems compatibility and assess technical and operational test plans, activities, and results.	0.886	1.073	0.537
Title: SA/C2 Description: Funds are to be used for the following efforts	1.091	0.961	0.482

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Appropriation/Budget Activity 2040 / 7		R-1 Program Element (Number/Name) PE 0203758A / <i>Digitization</i>		Project (Number/Name) 374 / <i>HOR Battlefld Digitizn</i>	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2014	FY 2015	FY 2016
<i>FY 2014 Accomplishments:</i> Integrated and synchronized interoperability across Situational Awareness (SA)/Command & Control (C2) programs in support of acquisition synchronization, testing, training, and fielding System of Systems capabilities to the Army Force. Continue application across current and future force.					
<i>FY 2015 Plans:</i> Integrate and synchronize interoperability across Situational Awareness (SA)/Command & Control (C2) programs in support of acquisition synchronization, testing, training, and fielding System of Systems capabilities to the Army Force. Continue application across current and future force.					
<i>FY 2016 Plans:</i> Will integrate and synchronize interoperability across Situational Awareness (SA)/Command & Control (C2) programs in support of acquisition synchronization, testing, training, and fielding System of Systems capabilities to the Army Force. Continue application across current and future force.					
<i>Title:</i> Digitization Technical Integration <i>Description:</i> Support digitization technical integration with Active and Reserve Components both CONUS and OCONUS.			1.071	1.103	0.592
<i>FY 2014 Accomplishments:</i> Supported digitization technical integration with Active and Reserve Components both CONUS and OCONUS.					
<i>FY 2015 Plans:</i> Support digitization technical integration with Active and Reserve Components both CONUS and OCONUS.					
<i>FY 2016 Plans:</i> Will support digitization technical integration with Active and Reserve Components both CONUS and OCONUS.					
<i>Title:</i> AE2S Software <i>Description:</i> Procures AE2S software integration and enhancements for the single program language, single platform system that incorporates FDIIS, CEaVa, COP and AFM.			0.806	0.938	0.966
<i>FY 2014 Accomplishments:</i> Army Equipping Enterprise System (AE2S) software integration and enhancements for the single program language, single platform system that incorporates the EE PEGs Force Development Integration & Information System (FDIIS), Force Development Knowledge Center (FDKC), Common Operational Picture (COP) and Army Force Management (AFM).					
<i>FY 2015 Plans:</i>					

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015	FY 2016
Army Equipping Enterprise System (AE2S) software integration and enhancements for the single program language, single platform system that incorporates the EE PEGs Force Development Integration & Information System (FDIIS), Force Development Knowledge Center (FDKC), Common Operational Picture (COP) and Army Force Management (AFM).				
FY 2016 Plans: Army Equipping Enterprise System (AE2S) software integration and enhancements for the single program language, single platform system that incorporates the EE PEGs Force Development Integration & Information System (FDIIS), Force Development Knowledge Center (FDKC), Common Operational Picture (COP) and Army Force Management (AFM).				
Title: Joint & Coalition Interoperability		0.944	0.826	0.661
Description: Support Joint and Coalition interoperability programs to improve integration and interoperability in accordance with Army Software Blocking Policy, Joint Planning Guidance, Coalition Specifications, Joint Capabilities Integration and Development System (JCIDS) requirements.				
FY 2014 Accomplishments: Supported Joint and Coalition interoperability programs to improve integration and interoperability in accordance with Army Software Blocking Policy, Joint Planning Guidance, Coalition Specifications, Joint Capabilities Integration and Development System (JCIDS) requirements.				
FY 2015 Plans: Support Joint and Coalition interoperability programs to improve integration and interoperability in accordance with Army Software Blocking Policy, Joint Planning Guidance, Coalition Specifications, Joint Capabilities Integration and Development System (JCIDS) requirements.				
FY 2016 Plans: Will support Joint and Coalition interoperability programs to improve integration and interoperability in accordance with Army Software Blocking Policy, Joint Planning Guidance, Coalition Specifications, Joint Capabilities Integration and Development System (JCIDS) requirements.The FY16 funding request was reduced \$186K to account for the availability of prior year execution balances.				
Title: Academic Research		0.506	0.522	0.538
Description: Apply university academic and research resources to the integration of Army complex modeling, simulation, and training in support of modernized forces.				
FY 2014 Accomplishments:				

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015	FY 2016
Applied university academic and research resources to the integration of Army complex modeling, simulation, and training in support of modernized forces. FY 2015 Plans: Apply university academic and research resources to the integration of Army complex modeling, simulation, and training in support of modernized forces. FY 2016 Plans: Will apply university academic and research resources to the integration of Army complex modeling, simulation, and training in support of modernized forces.				
Title: Cross-platform development Description: Manage cross-platform software and hardware development, testing, training, and fielding to ensure the coordinated interoperability for each Army Force unit rotation. FY 2014 Accomplishments: Managed cross-platform software and hardware development, testing, training, and fielding to ensure the coordinated interoperability for each Army Force unit rotation. FY 2015 Plans: Manage cross-platform software and hardware development, testing, training, and fielding to ensure the coordinated interoperability for each Army Force unit rotation. FY 2016 Plans: Will manage cross-platform software and hardware development, testing, training, and fielding to ensure the coordinated interoperability for each Army Force unit rotation.		0.674	0.570	0.585
Accomplishments/Planned Programs Subtotals		5.978	5.993	4.361
C. Other Program Funding Summary (\$ in Millions)				
N/A				
Remarks				
Not Applicable for this item				
D. Acquisition Strategy				
To validate/demonstrate concepts and requirements, near term efforts are focused on developing a seamless battlefield software architecture and digitized hardware systems to include: evaluation of the horizontal battlefield digitization resources for systems, acquisition, integration, and testing of digital capability across multiple command and control, communications, sensors, and weapons platforms. The result will be an integrated, synchronized capability designed to meet the near-term				

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PE 0203758A: *Digitization*
Army

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army												Date: February 2015			
Appropriation/Budget Activity 2040 / 7						R-1 Program Element (Number/Name) PE 0203758A / Digitization				Project (Number/Name) 374 / HOR Battlefld Digitizn					
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
Digitization Technical Integration	Various	Various : Various	3.018	1.071		1.103		0.592		-		0.592	-	5.784	-
Joint & Coalition Interoperability	Various	Various : Various	2.660	0.944		0.826		0.661		-		0.661	-	5.091	-
Subtotal			5.678	2.015		1.929		1.253		-		1.253	-	10.875	-
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
Army Equipping Enterprise SYstem (AE2S) Software	C/CPFF	TBD : TBD	2.271	0.806		0.938		0.966		-		0.966	Continuing	Continuing	Continuing
Cross-Platform Development	Various	TBD : TBD	1.899	0.674		0.570		0.585		-		0.585	-	3.728	-
Subtotal			4.170	1.480		1.508		1.551		-		1.551	-	-	-
Support (\$ 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
Interoperability Assessment	Various	Various : Various	2.497	0.886		1.073		0.537		-		0.537	-	4.993	-
Situational Awareness (SA) / Command & Control (C2)	Various	Various : Various	3.074	1.091		0.961		0.482		-		0.482	-	5.608	-
Academic Research	Various	Various : Various	1.426	0.506		0.522		0.538		-		0.538	-	2.992	-
Subtotal			6.997	2.483		2.556		1.557		-		1.557	-	13.593	-
			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			16.845	5.978		5.993		4.361		-		4.361	-	-	-

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	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract	
Remarks										

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army																Date: February 2015																
Appropriation/Budget Activity 2040 / 7								R-1 Program Element (Number/Name) PE 0203758A / Digitization								Project (Number/Name) 374 / HOR Battlefld Digitizn																
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				
Interoperability Assessment																																

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army		Date: February 2015
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Interoperability Assessment	1	2015	4	2020