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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 5: System Development & Demonstration (SDD)					PE 0604760A / Distributive Interactive Simulations (DIS) - Eng Dev							
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	-	12.193	10.022	9.138	-	9.138	11.232	11.412	11.318	16.226	Continuing	Continuing
C74: Devel Simulation Tech	-	0.488	1.087	0.951	-	0.951	1.464	1.433	1.693	2.435	Continuing	Continuing
C77: Army Geospatial Data Master Plan	-	0.596	0.597	0.540	-	0.540	0.661	0.652	0.786	0.800	-	4.632
C78: One Semi-Automated Forces	-	11.109	8.338	7.647	-	7.647	9.107	9.327	8.839	12.991	Continuing	Continuing

Note

Funding realigned for higher Army priorities. The FY 2016 funding request was reduced by \$1.075 million to account for the availability of prior year execution balances.

A. Mission Description and Budget Item Justification

The program element "Distributive Interactive Simulations - Engineering Development" applies to the Army's Advanced Simulation Program, which enables operational readiness and the development of concepts and systems for the Future Force through the application of new simulation technology and techniques. The development and application of simulation technology will provide the means to link electronically a range of various simulation tools in a manner that is transparent to the user. The amalgam of simulations and tools is linked together to enable execution of an event; to verify the scenarios, tactics/techniques and procedures; to train testers on new hardware/software; and to conduct trial test runs before costly live field tests. The tools developed are available for reuse by developers and users of simulations throughout the Army.

Project C74 provides the resources necessary to perform the formally chartered mission of the Army's Simulation-to-C4I* Interoperability Overarching Integrated Product Team (SIMCI OIPT). (*C4I = Command, Control, Communications, Computers and Intelligence.) Project C77, Army Geospatial Data Master Plan, focuses on activities that start with data acquisition from multiple sources and culminate in (1) accurate, robust and timely geospatial data and data management and (2) integration and conversion tools that support multiple battle command, training and mission-rehearsal applications. Project C78 develops the One Semi-Automated Forces (OneSAF) program, which will combine and improve the functionality and behaviors of several current semi-automated forces to provide a single SAF for Army use in simulations.

FY 2016 funding for Project C74 continues management of the SIMCI OIPT's Army-wide collaborative, interoperability enhancement activities, including architecture alignment, data model alignment, common standards, components, and products. Project C77 continues development efforts associated with the Ground-Warfighter Geospatial Data Model(GGDM) and Geospatial Data Standards. Project C78 continues development of software as required to provide OneSAF Pre-Planned Product Improvements (P3Is) as prioritized and approved by the Training and Doctrine Command.

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Appropriation/Budget Activity		R-1 Program Element (Number/Name)			
2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)		PE 0604760A / Distributive Interactive Simulations (DIS) - Eng Dev			
B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	12.569	10.027	10.381	-	10.381
Current President's Budget	12.193	10.022	9.138	-	9.138
Total Adjustments	-0.376	-0.005	-1.243	-	-1.243
• Congressional General Reductions	-	-0.005			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.376	-			
• Adjustments to Budget Years	-	-	-1.243	-	-1.243

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army										Date: February 2015		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604760A / Distributive Interactive Simulations (DIS) - Eng Dev				Project (Number/Name) C74 / Devel Simulation Tech			
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
C74: Devel Simulation Tech	-	0.488	1.087	0.951	-	0.951	1.464	1.433	1.693	2.435	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
Project C74 funds the HQDA-chartered mission of the Simulation-to-Mission Command Interoperability (SIMCI) Overarching Integrated Product Team (OIPT) in support of Army Training and Readiness. The SIMCI OIPT mission is to provide policy recommendations to Army senior leadership to improve organizations by allowing Soldiers to fight in the same manner in which they train. This is accomplished by interoperability between Mission Command (MC) systems and the Modeling and Simulation (M&S) systems the Army uses to stimulate MC systems for training Soldiers and their Leaders. SIMCI also invests in targeted solutions to critical problem areas that exist between MC and Simulations. The SIMCI OIPT, led by Program Executive Office (PEO) Simulation, Training, and Instrumentation (STRI) and PEO Command Control Communications-Tactical (C3T), uses focused collaborative processes among its 30+ Army organizations to identify key/critical interoperability shortfalls and the required materiel solutions. The SIMCI OIPT provides the following: (1) Advisor to Army Leadership--improve MC and M&S interoperability programs, policies, directives, resourcing, and procedures; (2) Technical Investment--sponsor/support initiatives that seek common solutions to critical interoperability issues surrounding MC and M&S systems; (3) Outreach--conduct & participate in interoperability outreach activities. SIMCI investments consist primarily of cost-sharing initiatives, leveraging initial system solutions of acquisition programs to enhance the interoperability of multiple systems in the Joint Operational Environment. SIMCI investments accelerate implementation within MC and M&S systems, of common data models and information exchanges that are used by other Services and coalition nations, thus enhancing the inherent ability of Army systems to interoperate seamlessly in a Joint, Interagency, Intergovernmental, and Multinational (JIIM) environment. FY 2016 funding continues management of the SIMCI OIPT's Army-wide collaborative, interoperability enhancement activities, including architecture alignment, data model alignment, common standards, components, and products. It is focused first on reducing costs and improving capabilities in the areas of automating Operational Plans, Orders, and Reports in support of Army, Joint, and Coalition operations. Objectives are: identify and articulate to HQDA senior leadership specific standards that require Army-wide implementation; co-develop data standards, architecture standards, implementation specifications and Joint/Coalition products; continue transition of SIMCI knowledge and proof-of-principle products to Army and Joint acquisition programs.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2014	FY 2015	FY 2016	
Title: Program Management for the SIMCI Overarching Integrated Product Team (OIPT) Projects.									0.488	1.087	0.951	
Description: Program Management of the SIMCI OIPT's Army-wide collaborative, interoperability enhancement activities, including architecture alignment, data model alignment, common standards, components, and products.												
FY 2014 Accomplishments:												

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army		Date: February 2015	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604760A / <i>Distributive Interactive Simulations (DIS) - Eng Dev</i>	Project (Number/Name) C74 / <i>Devel Simulation Tech</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015
Continued management of the SIMCI OIPT'S Army-wide collaborative, interoperability enhancement activities, including architecture alignment, data model alignment, common standards, components, and products. It is focused first on reducing costs and improving capabilities in the areas of automating Operational Plans, Orders, and Reports in support of Army, Joint, and Coalition operations. Objectives are: identify and articulate to HQDA senior leadership specific standards that require Army-wide implementation; co-develop data standards, architecture standards, implementation specifications and Joint/Coalition products; continue transition of SIMCI knowledge and proof-of-principle products to Army and Joint acquisition programs. FY 2015 Plans: Continues management of the SIMCI OIPT'S Army-wide collaborative, interoperability enhancement activities, including architecture alignment, data model alignment, common standards, components, and products. It is focused first on reducing costs and improving capabilities in the of automating Operational Plans, Orders, and Reports in support of Army, Joint, and Coalition operations. Objectives are: identify and articulate to HQDA senior leadership specific standards that require Army-wide implementation; co-develop data standards, architecture standards, implementation specifications and Joint/Coalition products; continue transition of SIMCI knowledge and proof-of-principle products to Army and Joint acquisition programs. FY 2016 Plans: Will continue management and support of the SIMCI OIPT'S Army-wide collaborative, interoperability enhancement activities, including architecture alignment, data model alignment, common standards, components, and products. It is focused first on reducing costs and improving capabilities in the areas of automating Operational Plans, Orders, and Reports in support of Army, Joint, and Coalition operations. Objectives are: identify and articulate to HQDA senior leadership specific standards that require Army-wide implementation; co-develop data standards, architecture standards, implementation specifications and Joint/Coalition products; continue transition of SIMCI knowledge and proof-of-principle products to Army and Joint acquisition programs.			
Accomplishments/Planned Programs Subtotals		0.488	1.087
C. Other Program Funding Summary (\$ in Millions) N/A			
Remarks			
D. Acquisition Strategy SIMCI OIPT resources are allocated to multiple organizations in both the Mission Command (MC) and Modeling and Simulation (M&S) Communities. The funds are contracted to execute approved functions and to projects that advance the efforts of SIMCI and components-based architecture alignment. Products developed transition to the lead or sponsor's program which then maintains the product for the cost savings of itself and other programs in both Communities.			

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army		Date: February 2015
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604760A / <i>Distributive Interactive Simulations (DIS) - Eng Dev</i>	Project (Number/Name) C74 / <i>Devel Simulation Tech</i>
E. Performance Metrics N/A		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army												Date: February 2015			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604760A / Distributive Interactive Simulations (DIS) - Eng Dev				Project (Number/Name) C74 / Devel Simulation Tech					
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
Program Management	Various	PEO STRI : Orlando, FL	9.604	0.069	Oct 2013	0.150	Oct 2014	0.150	Oct 2015	-		0.150	Continuing	Continuing	Continuing
SBIR/STTR	TBD	PEO STRI : Orlando, FL	0.086	-		-		-		-		-	-	0.086	-
Subtotal			9.690	0.069		0.150		0.150		-		0.150	-	-	-
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
Transition of simulation initialization capability	Various	TBD : TBD	3.134	-		-		-		-		-	Continuing	Continuing	Continuing
Geospatial Initiative	Various	TBD : TBD	1.388	-		-		-		-		-	Continuing	Continuing	Continuing
Data Model applications and reference implementations	Various	TBD : TBD	2.363	-		-		-		-		-	Continuing	Continuing	Continuing
Implementation of Initialization Products	Various	TBD : TBD	2.255	-		-		-		-		-	Continuing	Continuing	Continuing
Initialization Study Implementation	Various	TBD : TBD	1.038	-		-		-		-		-	Continuing	Continuing	Continuing
Mission Comand systems data mediation/web services	Various	TBD : TBD	2.910	-		-		-		-		-	Continuing	Continuing	Continuing
Expanding MTOE System Architecture (SA) Data	Various	TBD : TBD	1.821	-		-		-		-		-	Continuing	Continuing	Continuing
C2 Adapter Web Services and Tools	Various	TBD : TBD	2.660	-		-		-		-		-	Continuing	Continuing	Continuing
Subtotal			17.569	-		-		-		-		-	-	-	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army												Date: February 2015			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604760A / <i>Distributive Interactive Simulations (DIS) - Eng Dev</i>				Project (Number/Name) C74 / <i>Devel Simulation Tech</i>					
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
SIMCI Program/OIPT Support	Various	Various : Various	1.851	0.394	Oct 2013	0.912	Dec 2014	0.776	Dec 2015	-		0.776	Continuing	Continuing	Continuing
Army Initialization Program and Technical Work Groups (TWG)	Various	Various : Various	0.581	0.025	Dec 2013	0.025	Dec 2014	0.025	Dec 2015	-		0.025	Continuing	Continuing	Continuing
Subtotal			2.432	0.419		0.937		0.801		-		0.801	-	-	-
			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			29.691	0.488		1.087		0.951		-		0.951	-	-	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army

Date: February 2015

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2040 / 5

R-1 Program Element (Number/Name)	Program Element Description	Program Element Status	Program Element Comments

PE 0604760A / Distributive Interactive

Simulations (DIS) - Eng Dev

Project (Number/Name)	Start Date	End Date	Duration (Days)	Actual Cost	Budgeted Cost	Variance	Cost Index	Performance Index	Cost Variance	Cost Performance	Cost Variance	Cost Performance
1	1/1/2020	1/31/2020	31	10000	10000	0	1.00	1.00	0	1.00	0	1.00
2	2/1/2020	2/28/2020	28	20000	20000	0	1.00	1.00	0	1.00	0	1.00
3	3/1/2020	3/31/2020	31	30000	30000	0	1.00	1.00	0	1.00	0	1.00
4	4/1/2020	4/30/2020	30	40000	40000	0	1.00	1.00	0	1.00	0	1.00
5	5/1/2020	5/31/2020	31	50000	50000	0	1.00	1.00	0	1.00	0	1.00
6	6/1/2020	6/30/2020	30	60000	60000	0	1.00	1.00	0	1.00	0	1.00
7	7/1/2020	7/31/2020	31	70000	70000	0	1.00	1.00	0	1.00	0	1.00
8	8/1/2020	8/31/2020	31	80000	80000	0	1.00	1.00	0	1.00	0	1.00
9	9/1/2020	9/30/2020	30	90000	90000	0	1.00	1.00	0	1.00	0	1.00
10	10/1/2020	10/31/2020	31	100000	100000	0	1.00	1.00	0	1.00	0	1.00
11	11/1/2020	11/30/2020	30	110000	110000	0	1.00	1.00	0	1.00	0	1.00
12	12/1/2020	12/31/2020	31	120000	120000	0	1.00	1.00	0	1.00	0	1.00
13	1/1/2021	1/31/2021	31	130000	130000	0	1.00	1.00	0	1.00	0	1.00
14	2/1/2021	2/28/2021	28	140000	140000	0	1.00	1.00	0	1.00	0	1.00
15	3/1/2021	3/31/2021	31	150000	150000	0	1.00	1.00	0	1.00	0	1.00
16	4/1/2021	4/30/2021	30	160000	160000	0	1.00	1.00	0	1.00	0	1.00
17	5/1/2021	5/31/2021	31	170000	170000	0	1.00	1.00	0	1.00	0	1.00
18	6/1/2021	6/30/2021	30	180000	180000	0	1.00	1.00	0	1.00	0	1.00
19	7/1/2021	7/31/2021	31	190000	190000	0	1.00	1.00	0	1.00	0	1.00
20	8/1/2021	8/31/2021	31	200000	200000	0	1.00	1.00	0	1.00	0	1.00
21	9/1/2021	9/30/2021	30	210000	210000	0	1.00	1.00	0	1.00	0	1.00
22	10/1/2021	10/31/2021	31	220000	220000	0	1.00	1.00	0	1.00	0	1.00
23	11/1/2021	11/30/2021	30	230000	230000	0	1.00	1.00	0	1.00	0	1.00
24	12/1/2021	12/31/2021	31	240000	240000	0	1.00	1.00	0	1.00	0	1.00
25	1/1/2022	1/31/2022	31	250000	250000	0	1.00	1.00	0	1.00	0	1.00
26	2/1/2022	2/28/2022	28	260000	260000	0	1.00	1.00	0	1.00	0	1.00
27	3/1/2022	3/31/2022	31	270000	270000	0	1.00	1.00	0	1.00	0	1.00
28	4/1/2022	4/30/2022	30	280000	280000	0	1.00	1.00	0	1.00	0	1.00
29	5/1/2022	5/31/2022	31	290000	290000	0	1.00	1.00	0	1.00	0	1.00

C74 / Devel Simulation Tech

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army			Date: February 2015
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604760A / <i>Distributive Interactive Simulations (DIS) - Eng Dev</i>	Project (Number/Name) C74 / <i>Devel Simulation Tech</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Geospatial Initiative	1	2011	4	2014
Implementation of Initialization Products	1	2010	4	2020
Transition of simulation initialization capability	1	2010	4	2020
Initialization Study Implementation	1	2010	4	2020
Data Model applications and reference implementations	1	2010	4	2020
C2 Adapter Web Services and Tools	1	2010	4	2020
Quarterly SIMCI OIPT Meeting	1	2010	4	2020
Annual Project Call	1	2010	4	2020

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army										Date: February 2015		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604760A / Distributive Interactive Simulations (DIS) - Eng Dev				Project (Number/Name) C77 / Army Geospatial Data Master Plan			
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
C77: Army Geospatial Data Master Plan	-	0.596	0.597	0.540	-	0.540	0.661	0.652	0.786	0.800	-	4.632
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Project C77 addresses the implementation and acceleration of objectives of the Army Geospatial Data Integrated Master Plan (AGDIMP), approved by the Chief of Staff, Army in April 2005. The AGDIMP provides the framework for generating, analyzing and distributing geospatial data for battle management operations, training, and mission rehearsal. The AGDIMP also provides the procedures for identifying and refining Army geospatial resource requirements. Geospatial data provide soldiers with the framework and background for displaying the location of friendly and enemy forces and the location of other critical features on the battlefield. Geospatial data -- used in Army command and control systems, course of action analysis, mission rehearsal tools, simulators and simulations -- provide insights on how the physical environment will impact combat operations. This minimizes exposure of soldiers to hostile environments. The AGDIMP describes the operations for a complete, integrated network-centric enterprise for managing and updating geospatial data required for the Army's Future Force. Although this plan encompasses most of the issues of an enterprise solution for geospatial needs and concerns, it does not contain the full level of detail or complexity required to be considered complete. The AGDIMP includes all activities starting with data acquisition from multiple sources (including raw sensor feeds from national sensors to soldier/platform level) and concluding with accurate, robust, and timely geospatial (terrain-related) data management, integration, and conversion tools that support multiple battle command, training, and mission-rehearsal applications. The AGDIMP does not include the algorithms and functions used by the applications themselves to produce finished battle command or intelligence products. The AGDIMP will become part of a much larger effort to integrate geospatial activities across all Services while documenting the complex framework for a "net ready" geospatial information and service architecture, an environment in which the Army's current and future forces must operate to achieve information dominance within the total battle space. This larger effort is currently being developed in conjunction with the Joint Forces Command and the other Services, including Special Operations Command.

FY 2016 funding continues development efforts associated with the Ground-Warfighter Geospatial Data Model(GGDM) and Geospatial Data Standards.

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

	FY 2014	FY 2015	FY 2016
Title: Ground-Warfighter Geospatial Data Model (GGDM) formerly Army Geospatial Data Model (AGDM)	0.288	0.289	0.250
Description: The GGDM incorporates common data elements that conform to standards mandated by the Department of Defense Information Technology Standards Registry (DISR) for the National System for Geospatial Intelligence (NSG). Incorporating common geospatial data standards into the GGDM makes the Programs of Record (POR) consistent with new DISR-mandated geospatial intelligence standards for the NSG.			
FY 2014 Accomplishments:			

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army			Date: February 2015			
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0604760A / Distributive Interactive Simulations (DIS) - Eng Dev		Project (Number/Name) C77 / Army Geospatial Data Master Plan		
B. Accomplishments/Planned Programs (\$ in Millions)				FY 2014	FY 2015	FY 2016
Developed GGDM 2.2 reference implementation in commercial and open source database schema required by Army Programs. Developed tools to translate legacy geospatial data into GGDM 2.2 schema. FY 2015 Plans: Performs data modeling actions necessary to develop the next version of the GGDM (ver 2.3) including aligning content from Aviation, Human Geography and adding and aligning new content from NGA's 9 domain data stores. FY 2016 Plans: Will develop/enhance GGDM tools then perform data translation of legacy geospatial data to the current version of the GGDM. Will perform interoperability experiments with US Army, NGA, USMC and American-British-Canadian-Australian (ABCA) Allies.						
Title: Geospatial Data Standards Description: Army Geospatial Standards including data standards and standards for services to manage process and disseminate and utilize geospatial data. FY 2014 Accomplishments: Developed and ensured consistent integration of geospatial enterprise data standards, including standard practices for production and management of geospatial data, into Army Mission Command, Simulation and Training programs, systems and organizations. FY 2015 Plans: Develops and ensures consistent integration of geospatial enterprise data standards, including standard practices for production and management of geospatial data, into Army Mission Command, Simulation and Training programs, systems and organizations. FY 2016 Plans: Will develop and maintain Geospatial Standards compliance matrix, Std-V1, in alignment with updated NSG standards and next cycle updates of DISR standards and coordinate results with Army CIO/G6 and ASA(ALT) Programs. Will develop enhancements to the Open Geospatial Consortium (OGC) Geopackage Standard to potentially include elevation data and routing data results in Version 2.0 of this standard.				0.308	0.308	0.290
Accomplishments/Planned Programs Subtotals				0.596	0.597	0.540
C. Other Program Funding Summary (\$ in Millions)						
N/A						
Remarks						

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<u>D. Acquisition Strategy</u> Resources are allocated to several critical geospatial projects in support of the Army Geospatial Data Integrated Master Plan (AGDIMP) and the Army Geospatial Enterprise (AGE.)		
<u>E. Performance Metrics</u> N/A		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army												Date: February 2015			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604760A / <i>Distributive Interactive Simulations (DIS) - Eng Dev</i>						Project (Number/Name) C77 / <i>Army Geospatial Data Master Plan</i>			

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 Geospatial Model and Data Standards	Various	TBD : TBD	3.582	0.596		0.597		0.540		-		0.540	-	5.315	3.614
Subtotal			3.582	0.596		0.597		0.540		-		0.540	-	5.315	3.614

	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	3.582	0.596		0.597		0.540	-	0.540	3.614

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army																Date: February 2015												
Appropriation/Budget Activity 2040 / 5								R-1 Program Element (Number/Name) PE 0604760A / Distributive Interactive Simulations (DIS) - Eng Dev								Project (Number/Name) C77 / Army Geospatial Data Master Plan												
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
Ground Warfighter Geospatial Data Model																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army		Date: February 2015
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604760A / Distributive Interactive Simulations (DIS) - Eng Dev	Project (Number/Name) C77 / Army Geospatial Data Master Plan

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Ground Warfighter Geospatial Data Model	1	2010	4	2020

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army										Date: February 2015		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604760A / Distributive Interactive Simulations (DIS) - Eng Dev				Project (Number/Name) C78 / One Semi-Automated Forces			
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
C78: One Semi-Automated Forces	-	11.109	8.338	7.647	-	7.647	9.107	9.327	8.839	12.991	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

One Semi-Automated Forces (OneSAF) develops and delivers a software application that represents activities of units and forces in simulation in support of Army Training and Readiness. The application is used by Army agencies to support the concept evaluation, experimentation, materiel acquisition and training throughout the communities. The focus of this project is systems/software engineering and design for development and evolution of the architecture and software tools for a universal system of Army computer-generated forces -- OneSAF. OneSAF is a high fidelity brigade-and-below SAF that represents a full range of operations, systems and control processes in support of stand-alone and embedded training and Research, Development and Acquisition (RDA) simulation applications. OneSAF is fully interoperable with the Army's emerging virtual, live, and division-and-above constructive simulations and provides next-generation simulation products. OneSAF replaces a variety of legacy simulations used within the Army to support analytic and training simulation activities.

FY 2016 funding allows for continued development of the software product line by addressing OneSAF Pre-Planned Product Improvements (P3Is) as prioritized and approved by the OneSAF Project Office - Training and Doctrine Command (TRADOC). This funding also provides for the management of the infrastructure, equipment, laboratories, and processes needed to develop the required product baseline.

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

	FY 2014	FY 2015	FY 2016
Title: Engineering and Manufacturing Development (EMD) phase contract activities for the One Semi-Automated Forces program.	8.275	4.908	4.997
Description: Continue EMD phase contract activities for the OneSAF program.			
FY 2014 Accomplishments: Continued the development of software capabilities to provide OneSAF Pre-Planned Product Improvements (P3Is) as prioritized and approved by the Training and Doctrine Command (TRADOC) OneSAF Project Office. Continued enhancement of functionality of architectural services, components, the synthetic environment and infrastructure capable of supporting model development. Performed software development, test and release of Version 7.0.			
FY 2015 Plans: Continues the development of software capabilities based on OneSAF P3Is as prioritized and approved by the TRADOC OneSAF Project Office. Continues the software development of functionality that enhances architectural services, components, synthetic environment and infrastructure of the OneSAF product Line and provides for software integration, test and release of Version 8.0 and 8.0 International.			
FY 2016 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army		Date: February 2015		
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604760A / Distributive Interactive Simulations (DIS) - Eng Dev	Project (Number/Name) C78 / One Semi-Automated Forces		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015	FY 2016
Will continue the development of software capabilities based on OneSAF P3Is as prioritized and approved by the TRADOC OneSAF Project Office. Will continue the software development of functionality that enhances architectural services, components, synthetic environment and infrastructure of the OneSAF Product Line and will provide for software integration, test and release of required software refreshes and Version 9.0.				
Title: Government System Test and Evaluation for the One Semi-Automated Forces (OneSAF) program. Description: Government System Test and Evaluation for the OneSAF program. FY 2014 Accomplishments: Performed software development, test, integration, release and verification for Version 7.0. Continued to provide support to the user community in conducting experiments and validation events as needed for integration into the Joint Land Component Constructive Training Capability (JLCCTC) federation and Live, Virtual and Constructive (LVC) applications. FY 2015 Plans: Provides for the conducting of software, test, integration and release for Version 8.0 and 8.0 international. Provides support to the user community in conducting experiments and validation events as needed for integration into the Home Station Training federation, Network Integration events, and LVC applications. FY 2016 Plans: Will provide for the conducting of software, test, integration and release for Version 9.0. Will provide support to the user community in conducting experiments and validation events as needed for integration into the Home Station Training federation, Network Integration events, and LVC applications.		1.200	1.100	0.850
Title: Government Program Management for the One Semi-Automated Forces (OneSAF) program. Description: Government Program Management for the One Semi-Automated Forces (OneSAF) program. FY 2014 Accomplishments: Government Program Management for the OneSAF program. FY 2015 Plans: Government Program Management for the OneSAF program. FY 2016 Plans: Government Program Management for the OneSAF program.		1.634	2.330	1.800
Accomplishments/Planned Programs Subtotals		11.109	8.338	7.647

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army									Date: February 2015		
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0604760A / Distributive Interactive Simulations (DIS) - Eng Dev				Project (Number/Name) C78 / One Semi-Automated Forces			
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
• OMA: OMA, 121014000	5.041	3.518	4.825	-	4.825	4.937	5.102	6.945	7.007	Continuing	Continuing
Remarks											
OMA funds provide for maintenance of existing OneSAF product line to include life cycle software support and OneSAF TRADOC Project Office (TPO).											
D. Acquisition Strategy											
Continue the yearly release of the OneSAF Software (SW) versions containing performance enhancements resulting from the development and integration of both approved Product Improvements and integration of Co-Developer handovers. PM OneSAF continues to manage two Delivery Orders for the Development, Integration, Interoperability, and Support (I2S) of capabilities products, data, and documentation that fully serves the current and evolving needs of the user community.											
The enhancements will be executed within the development line as modifications to the released baseline via Engineering Change Proposals (ECPs); Change Requests (CRs); Pre-Planned Product Improvements (P3I); and correction of deficiencies identified as Problem Test Reports (PTRs) and Deficiency Reports (DRs) by the user community.											
The Development Delivery Order is primarily focused on capability enhancements within the OneSAF Product Line. The key objectives here are to develop the capabilities needed to execute the OneSAF production line and deliver OneSAF SW product line, data, and documentation to meet the needs of the growing user community. These software products will include capabilities supporting the requirements of the OneSAF program; other US Army PEOs and PMs, TRADOC Battle Labs, Research and Development Centers (RDECs) and agencies; other Service and Joint agencies; Foreign Countries; non Department of Defense government organizations and agencies; academic institutions and other Co-Developers.											
The I2S Delivery Order is primarily focused on the Configuration Management and Control of the released OneSAF Product Line and executes the overarching OneSAF integration, interoperability and support efforts required for delivery of OneSAF SW, data and documentation products to the User Community. It also provides the Conceptual Modeling, Architectural and Engineering support to the OneSAF Co-Developers as required to support their OneSAF SW product deliveries; the training products and support required by the OneSAF user community; and integration of capabilities.											
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E. Performance Metrics											
N/A											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army												Date: February 2015			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604760A / <i>Distributive Interactive Simulations (DIS) - Eng Dev</i>						Project (Number/Name) C78 / <i>One Semi-Automated Forces</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
Program Management	Various	PEO STRI, Orlando, FL : Various	19.356	1.634	Oct 2013	2.330		1.800		-		1.800	Continuing	Continuing	Continuing
Subtotal			19.356	1.634		2.330		1.800		-		1.800	-	-	-
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
Architecture Dev & System Integration	C/CPFF	Science Applications International Corp : Orlando, FL	51.466	-		-		-		-		-	-	51.466	51.466
Model and Tools Development	C/CPFF	Science Applications International Corp : Orlando, FL	27.625	-		-		-		-		-	-	27.625	27.625
Environmental Runtime Component	C/CPFF	Science Applications : Orlando, FL	7.981	-		-		-		-		-	-	7.981	7.981
OneSAF Component Development	C/CPFF	Various : Various	9.648	-		-		-		-		-	-	9.648	9.648
Integrated Environment Dev	C/CPFF	Advanced Systems Technology, Inc : Orlando FL	11.702	-		-		-		-		-	-	11.702	11.702
OneSAF Bridge Contract	C/CPFF	Science Applications International Corp : Orlando, FL	3.797	-		-		-		-		-	-	3.797	3.797
Integration, Interoperability, and Support (I2S)	C/CPFF	Cole Engineering Services, Inc. : Orlando, FL	1.554	1.518	Nov 2013	1.368	Dec 2014	1.850	Nov 2015	-		1.850	Continuing	Continuing	Continuing
Software Development	C/CPFF	Science Applications International Corp : Orlando, FL	11.979	4.549	Dec 2013	1.230	Dec 2014	1.227	Dec 2015	-		1.227	Continuing	Continuing	Continuing
Subtotal			125.752	6.067		2.598		3.077		-		3.077	-	-	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army												Date: February 2015			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604760A / <i>Distributive Interactive Simulations (DIS) - Eng Dev</i>						Project (Number/Name) C78 / <i>One Semi-Automated Forces</i>			
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
System Analysis	Various	Various : Various	6.247	0.150	Dec 2013	0.200	Oct 2014	-		-		-	Continuing	Continuing	Continuing
Domain Analysis	Various	Various : Various	5.495	0.165	Dec 2013	0.100	Oct 2014	0.150	Dec 2015	-		0.150	Continuing	Continuing	Continuing
Integrated Development Environment	Various	Various : Various	3.723	1.528	Oct 2013	1.660	Oct 2014	1.570	Oct 2015	-		1.570	Continuing	Continuing	Continuing
Architecture Engr & Tech Spt	SS/FP	MITRE FFRDC : Ft. Monmouth, NJ	4.384	0.365	Oct 2013	0.350	Oct 2014	0.200	Oct 2015	-		0.200	Continuing	Continuing	Continuing
Subtotal			19.849	2.208		2.310		1.920		-		1.920	-	-	-
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
OneSAF integration, evaluation and test	Various	Various : Various	9.379	0.950	Dec 2013	0.900	Dec 2014	0.750	Dec 2015	-		0.750	Continuing	Continuing	Continuing
OneSAF Verification, Validation & Accreditation	Various	Various : Various	6.547	0.250	Dec 2013	0.200	Dec 2014	0.100	Dec 2015	-		0.100	Continuing	Continuing	Continuing
Subtotal			15.926	1.200		1.100		0.850		-		0.850	-	-	-
			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			180.883	11.109		8.338		7.647		-		7.647	-	-	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army																Date: February 2015																					
Appropriation/Budget Activity 2040 / 5										R-1 Program Element (Number/Name) PE 0604760A / Distributive Interactive Simulations (DIS) - Eng Dev								Project (Number/Name) C78 / One Semi-Automated Forces																			
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
P3I Requirements Development										P3I																											
(1) OneSAF Version Release 7.0										v7.0																											
(2) OneSAF Version Release 8.0														v8.0																							
(3) OneSAF Version Release 9.0																		9																			
(4) OneSAF Version Release 10.0																						10															
(5) OneSAF Version Release 11.0																										11											
(6) OneSAF Version Release 12.0																														12							
OneSAF Support										Life Cycle Software Support																											

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army			Date: February 2015
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604760A / <i>Distributive Interactive Simulations (DIS) - Eng Dev</i>	Project (Number/Name) C78 / <i>One Semi-Automated Forces</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
P3I Requirements Development	1	2006	4	2021
OneSAF Version Release 7.0	2	2014	2	2014
OneSAF Version Release 8.0	1	2015	1	2015
OneSAF Version Release 9.0	1	2016	1	2016
OneSAF Version Release 10.0	1	2017	1	2017
OneSAF Version Release 11.0	2	2018	2	2018
OneSAF Version Release 12.0	2	2019	2	2019
OneSAF Support	1	2006	4	2021