Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army

**DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army

PE 0203726A: Adv Field Artillery Tactical Data System

BA 7: Operational Systems Development

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	16.200	29.174	24.622	0.000	24.622	16.497	16.735	16.921	17.081	Continuing	Continuing
322: Adv Fa Tac Data Sys/Eff Cntrl Sys (AFATDS/ECS)	16.200	17.330	12.835	0.000	12.835	10.680	10.942	11.138	11.314	Continuing	Continuing
F19: JADOCS	0.000	11.844	11.787	0.000	11.787	5.817	5.793	5.783	5.767	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

The Advanced Field Artillery Tactical Data System (AFATDS) performs Command and Control, increases Situational Awareness and automates fire support coordination for the Army, Navy, Air Force and Marine Corps. AFATDS automates the planning, coordinating and controlling of all fire support assets in the Joint battlespace (field artillery, mortars, close air support, naval gunfire, attack helicopters, and offensive electronic warfare) from Echelons Above Corps to Battery or Platoon in support of all levels of conflict. As a result of Operation Iraqi Freedom (OIF)/Operation Enduring Freedom (OEF), AFATDS has implemented precision fires capabilities in new/improved munitions such as Multiple Launch Rocket System (MLRS) Unitary Vertical Attack, Excalibur, Smart and 155 Bonus. Additional implemented capabilities include automatic conduct of Unit Fratricide Avoidance Checks and Collateral Damage Avoidance. AFATDS will field New Non Line of Sight - Launch System (NLOS-LS) Precision Attack Munition (PAM) and improved Command and Control (C2) for the United States Marine Corps (USMC) Firing platform and its new munitions. This project is a replacement system for the Initial Fire Support Automated System (IFSAS), Battery Computer System (BCS) and Fire Direction System (FDS). AFATDS will interoperate with the other Army Battle Command Systems, current and future Army, Navy and Air Force Command and Control weapon systems, and the German, French, British, and Italian fire support systems. The system is composed of common hardware/software employed in varying configurations at different operational facilities (or nodes) and unique system software interconnected by tactical communications in the form of a software-driven, automated network. The system uses non-developmental, rugged common hardware/software, including the Unix Laptop Computer (ULC), Compact Computer Unit (CCU), Notebook Computer Unit (NCU) as well as vehicle installation kits (IKs). The current system support comes from the successful fielding of AFATDS Version A96 through 6.3.2, 6.4.0.1, 6.4.0.2, 6.5 and 6.5.0.1. (out of cycle Windows based operating system). Version 6.5.0.1 is being fielded now. The total force will be fielded a Windows based platform by fiscal year 2013. Joint Automated Deep Operations Coordination System (JADOCS) is a Joint, Interagency, and Multinational (JIM) Targeting, Mission Management, and Common Operational Picture (COP) Windows based software suite which functions as a complementary system to the Advanced Field Artillery Tactical Data System (AFATDS). JADOCS provides integration and synergy between multiple Command & Control (C2) systems of the uniformed services, and Joint and combined elements involved in the targeting process and performs coordination and calculates collateral damage. JADOCS Mission Managers support this coordination amongst Warfighter functional areas to rapidly execute critical missions. JADOCS is a component of the Integrated Fires Family of Systems (FOS) and complementary to the Army Battle Command Systems (ABCS) System of Systems (SoS).

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army		<b>DATE:</b> February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	
2040: Research, Development, Test & Evaluation, Army	PE 0203726A: Adv Field Artillery Tactical Data System	
BA 7: Operational Systems Development		

# **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	16.605	23.727	21.269	0.000	21.269
Current President's Budget	16.200	29.174	24.622	0.000	24.622
Total Adjustments	-0.405	5.447	3.353	0.000	3.353
<ul> <li>Congressional General Reductions</li> </ul>		-0.153			
<ul> <li>Congressional Directed Reductions</li> </ul>		0.000			
<ul> <li>Congressional Rescissions</li> </ul>	0.000	0.000			
<ul> <li>Congressional Adds</li> </ul>		5.600			
<ul> <li>Congressional Directed Transfers</li> </ul>		0.000			
<ul> <li>Reprogrammings</li> </ul>	0.023	0.000			
<ul> <li>SBIR/STTR Transfer</li> </ul>	-0.428	0.000			
<ul> <li>Adjustments to Budget Years</li> </ul>	0.000	0.000	3.353	0.000	3.353

Exhibit R-2A, RDT&E Project Justif	ication: PB 2	011 Army						<b>DATE:</b> February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0203726A: Adv Field Artillery Tactical Data System				PROJECT 322: Adv Fa Tac Data Sys/Eff Cntrl Sys (AFATDS/ECS)			
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
322: Adv Fa Tac Data Sys/Eff Cntrl Sys (AFATDS/ECS)	16.200	17.330	12.835	0.000	12.835	10.680	10.942	11.138	11.314	Continuing	Continuing
Quantity of RDT&E Articles											

#### A. Mission Description and Budget Item Justification

The Advanced Field Artillery Tactical Data System (AFATDS) performs Command and Control, increases Situational Awareness and automates fire support coordination for the Army, Navy, Air Force and Marine Corps. AFATDS automates the planning, coordinating and controlling of all fire support assets in the Joint battlespace (field artillery, mortars, close air support, naval gunfire, attack helicopters, and offensive electronic warfare) from Echelons Above Corps to Battery or Platoon in support of all levels of conflict. As a result of Operation Iraqi Freedom (OIF)/Operation Enduring Freedom (OEF), AFATDS has implemented precision fires capabilities in new/improved munitions such as Multiple Launch Rocket System (MLRS) Unitary Vertical Attack, Excalibur, Smart and 155 Bonus. Additional implemented capabilities include automatic conduct of Unit Fratricide Avoidance Checks and Collateral Damage Avoidance. AFATDS will field New Non Line of Sight - Launch System (NLOS-LS) Precision Attack Munition (PAM) and improved Command and Control (C2) for the United States Marine Corps (USMC) Firing platform and its new munitions. This project is a replacement system for the Initial Fire Support Automated System (IFSAS), Battery Computer (BCS) and Fire Direction System (FDS). AFATDS will interoperate with the other Army Battle Command Systems, current and future Army, Navy and Air Force Command and Control weapon systems, and the German, French, British, and Italian fire support systems. The system is composed of common hardware/software employed in varying configurations at different operational facilities (or nodes) and unique system software interconnected by tactical communications in the form of a software-driven, automated network. The system uses non-developmental, rugged common hardware/software, including the Unix Laptop Computer (ULC), Compact Computer Unit (CCU), Notebook Computer Unit (NCU) as well as vehicle installation kits (IKs). The current system support comes from the successful fielding of AFATDS Version A96 th

## **B.** Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	0.947	1.025	1.087	0.000	1.087
Provide program support for AFATDS (V6.6 (BC 10-Marshall)), (V6.7 (BC 11-MacArthur)), (V6.8 (BC 11 - Eisenhower))					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			<b>DATE:</b> Febr	ruary 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0203726A: Adv Field Artillery Tac System	tical Data	PROJECT 322: Adv Fa Tac Data Sys/Eff Cntrl Sys (AF. ECS)			(AFATDS/
B. Accomplishments/Planned Program (\$ in Millions)			•			
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #2  Complete AFATDS (V 6.6). Continue development of (V6.7) and	nd (V6.8). Initiate (V6.9) development efforts.	12.653	7.618	8.748	0.000	8.748
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #3		0.000	5.600	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0203726A: Adv Field Artillery Tac System	ctical Data	PROJECT 322: Adv Fa ECS)	Tac Data Sys	/Eff Cntrl Sys	(AFATDS/
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Voice Recognition/Technology Insertion						
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #4		2.600	2.800	3.000	0.000	3.000
Conduct and support test activities						
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						

# UNCLASSIFIED

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army		<b>DATE:</b> February 2010	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0203726A: Adv Field Artillery Tactical Data	322: Adv Fa	Tac Data Sys/Eff Cntrl Sys (AFATDS/
BA 7: Operational Systems Development	System	ECS)	

#### B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #5	0.000	0.287	0.000	0.000	0.000
Small Business Innovative Research/Small Business Technology transfer program					
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					
Accomplishments/Planned Programs Subtotals	16.200	17.330	12.835	0.000	12.835

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

			<b>FY 2011</b>	<b>FY 2011</b>	<b>FY 2011</b>					Cost To	
<u>Line Item</u>	<b>FY 2009</b>	<b>FY 2010</b>	<b>Base</b>	<u>OCO</u>	<u>Total</u>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>Complete</b>	Total Cost
• Ord. #1: <i>OPA</i> ( <i>B28600</i> )	33.578	1.536	4.240	0.000	4.240	0.337	0.000	0.245	0.000	Continuing	Continuing
• Ord. #2: <i>OPA</i> ( <i>B28620</i> )	8.492	28.951	35.608	0.000	35.608	34.614	35.342	18.601	10.683	Continuing	Continuing
• Ord. #3: <i>Spares</i>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

## D. Acquisition Strategy

AFATDS has been fielded since 1996, with the original AFATDS Version 96 Materiel Release. It has been updated with subsequent releases reflecting the Spiral development strategy of the program. AFATDS Version 6.3.2 was released in January 2004, and AFATDS Version 6.4.0.1 (out of cycle) was released in May 2007 and AFATDS Version 6.4.0.2 (out of cycle) released in Sep 2007. Full Materiel Release of AFATDS V6.5 (Software Block 2) was achieved in December 2008. Full Materiel Release of AFATDS 6.5.0.1 (Windows version)was achieved in Aug 2009. Development efforts will continue to enhance Command and Control for precision weapons, Excalibur Height above Ellipsoid (HAE), Active

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army	<b>DATE:</b> February 2010		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0203726A: Adv Field Artillery Tactical Data	322: Adv Fa	Tac Data Sys/Eff Cntrl Sys (AFATDS/
BA 7: Operational Systems Development	System	ECS)	

Weapon Target pairing and Unexploded Ordnance (UXO) area computations. It will also provide backward interoperability to Pass and Subscribe Services (PASS) and AFATDS XML Engine (AXE) for Software Block 2 (SWB2) to enable connection to SWB1/1+ versions. AFATDS Capability Development Document (CDD) is under development and currently going through worldwide Army staffing. Joint Requirements Oversight Council (JROC) approval is expected in Fiscal Year 2010. AFATDS also continues to develop to Battle Command Capability set requirements. In accordance with the TRADOC requirements document approved in 2008, entitled Battle Command Essential Capability, software capability will be developed in 2-year increments as capability sets designed to Collaborate, Collapse and Converge Battle Command products. The product development funded under this R-Form is an integral part of the Army Battle Command System (ABCS), a system of systems, under a strategy designed to optimize opportunity for improved interoperability among the systems, to capture the benefits of competition where possible and to ensure the rapid integration of new capability into warfighter systems. This strategy is designed to reduce the physical footprint, logistics support requirements and increase operational efficiency.

#### 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.	

# Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development System PATE: February 2010 R-1 ITEM NOMENCLATURE PE 0203726A: Adv Field Artillery Tactical Data System PROJECT 322: Adv Fa Tac Data Sys/Eff Cntrl Sys (AFATDS/ ECS)

# **Product Development (\$ in Millions)**

				FY	2010	FY :	2011 ase	FY 2	2011 CO	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
Software Development	C/CPAF	Raytheon Systems Corp Ft. Wayne, IN	257.067	13.148		8.673		0.000		8.673	Continuing	Continuing	0
		Subtotal	257.067	13.148		8.673		0.000		8.673			0.000

#### Remarks

## **Support (\$ in Millions)**

Support (ψ III MIIIIOIIS	')												
				FY 2	2010	FY 2 Ba	2011 ase	FY 2	2011 CO	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
Information Assurance	С	CSC Eatontown, NJ	0.060	0.070		0.075		0.000		0.075	Continuing	Continuing	0
		Subtotal	0.060	0.070		0.075		0.000		0.075			0.000

# Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development System PE 0203726A: Adv Field Artillery Tactical Data System System DATE: February 2010 PROJECT 322: Adv Fa Tac Data Sys/Eff Cntrl Sys (AFATDS/ECS)

## **Test and Evaluation (\$ in Millions)**

				FY	2010		2011 ase		2011 CO	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
Test Support	С	Titan Ft. Sill, OK and various contractors	10.754	1.800		2.000		0.000		2.000	Continuing	Continuing	0
Limited User Test/ Government Confidence Demo	С	Army Test & Evaluation Command (ATEC)/ Fire Support Test Directorate (FSTD) Location could not be determined.	9.052	1.000		1.000		0.000		1.000	Continuing	Continuing	0
		Subtotal	19.806	2.800		3.000		0.000		3.000			0.000

#### Remarks

## **Management Services (\$ in Millions)**

				FY	2010		2011 nse	FY 2	2011 CO	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
Program Management	С	PM Battle Command (BC) Ft. Monmouth, NJ	12.335	1.025		1.087		0.000		1.087	Continuing	Continuing	0
SBIR/STTR	С	Taxes Location could not be determined.	0.000	0.287		0.000		0.000		0.000	Continuing	Continuing	0

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army		<b>DATE:</b> February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
2040: Research, Development, Test & Evaluation, Army	PE 0203726A: Adv Field Artillery Tactical Data	322: Adv Fa Tac Data Sys/Eff Cntrl Sys (AFATDS/
BA 7: Operational Systems Development	System	ECS)

# **Management Services (\$ in Millions)**

				FY	2010		2011 ase		2011 CO	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
		Subtotal	12.335	1.312		1.087		0.000		1.087			0.000

## Remarks

				1						
										Target
	Total Prior			FY		2011	FY 2011	Cost To		Value of
	Years Cost	FY 2	2010	Ba	ase O	CO	Total	Complete	Total Cost	Contract
Project Cost Totals	289.268	17.330		12.835	0.000		12.835			0.000

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army			<b>DATE:</b> February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0203726A: Adv Field Artillery Tactical Data	322: Adv Fa	Tac Data Sys/Eff Cntrl Sys (AFATDS/
BA 7: Operational Systems Development	System	ECS)	

		FY	2009		F	Y 2	010	)	I	Y 2	201	1	1	FY :	201	2	1	FY 2	201	3	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
Fielding V6.5 (BC 09.0)	#	#	#																									
Materiel Release V6.6 (BC 10 - Marshall)				#	#																							
Fielding V6.6 (BC 10 - Marshall)				#	#	#	#																					
Materiel Release V6.7 (BC 11 - MacArthur)								#																				
Fielding V6.7 (BC 11 - MacArthur)								#	#	#	#																	
Development V6.8 (BC 13 - Eisenhower)				# #	‡	#	#	#	#	#																		
Materiel Release V6.8 (BC 13 - Eisenhower)																#												
Fielding V6.8 (BC 13 - Eisenhower)																#	#	#	#									
Development V6.9 (BC 15 - Arnold)												#	#	#	#	#	#	#	#	#								
Materiel Release V6.9 (BC 15 - Arnold)																								#				

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army			<b>DATE:</b> February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0203726A: Adv Field Artillery Tactical Data	322: Adv Fa	Tac Data Sys/Eff Cntrl Sys (AFATDS/
BA 7: Operational Systems Development	System	ECS)	

# Schedule Details

	St	art	En	d
Event	Quarter	Year	Quarter	Year
Fielding V6.5 (BC 09.0)	1	2009	3	2009
Materiel Release V6.6 (BC 10 - Marshall)	1	2010	1	2010
Fielding V6.6 (BC 10 - Marshall)	1	2010	3	2010
Materiel Release V6.7 (BC 11 - MacArthur)	4	2010	4	2010
Fielding V6.7 (BC 11 - MacArthur)	4	2010	3	2011
Development V6.8 (BC 13 - Eisenhower)	4	2009	2	2011
Materiel Release V6.8 (BC 13 - Eisenhower)	4	2012	4	2012
Fielding V6.8 (BC 13 - Eisenhower)	4	2012	3	2013
Development V6.9 (BC 15 - Arnold)	1	2012	1	2014
Materiel Release V6.9 (BC 15 - Arnold)	4	2014	4	2014

DATE: Fobruary 2010

Exhibit K-2A, KD I &E I Toject Justin	ication. FD 2	JII Allily							DATE. Peul	uary 2010	
APPROPRIATION/BUDGET ACTI	VITY			R-1 ITEM N	NOMENCLA	TURE		PROJECT			
2040: Research, Development, Test & E	Evaluation, Ar	my		PE 0203726	A: Adv Field A	Artillery Tacti	ical Data	F19: <i>JADOC</i>	CS		
BA 7: Operational Systems Developmen	nt			System							
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
F19: JADOCS	0.000	11.844	11.787	0.000	11.787	5.817	5.793	5.783	5.767	Continuing	Continuing
Quantity of RDT&E Articles											

## A. Mission Description and Budget Item Justification

Exhibit R-2A RDT&F Project Justification: PR 2011 Army

Joint Automated Deep Operations Coordination System (JADOCS) is a Joint, Interagency, and Multinational (JIM) Targeting, Mission Management, and Common Operational Picture (COP) Windows based software suite which functions as a complementary system to the Advanced Field Artillery Tactical Data System (AFATDS). JADOCS provides integration and synergy between multiple Command & Control (C2) systems of the uniformed services, and joint and combined elements involved in the targeting process and performs coordination and calculates collateral damage. JADOCS Mission Managers support this coordination amongst Warfighter functional areas to rapidly execute critical missions. JADOCS enables coordination and de-confliction of conventional and asymmetric war-fighting missions. JADOCS uses a map-oriented Graphical User Interface (GUI) and overlays as a framework for information display. JADOCS is fielded to Air Force, Navy and Marine Corps units and the Army staff sections involved in the targeting process at Army Service Component Command, Corps, Division and Brigade Combat Team levels. JADOCS provides the Combatant Commands with the capability to plan and direct theater counter-fire and precision strike operations through the real time synchronization of US and Coalition assets. The application provides the Warfighter with a combination of tools, services and Mission Managers for rapid "systems" integration, visualization, coordination and deconfliction of critical mission information. It not only enhances C4ISR systems in the areas of strike planning but also in situational awareness, joint and combined interoperability and force transition in war. JADOCS is a component of the Integrated Fires Family of Systems (FOS) and complementary to the Army Battle Command Systems (ABCS) System of Systems (SoS).

#### B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	0.000	0.571	0.630	0.000	0.630
Provide program support for JADOCS software blocks (BC 10), (BC 11-MacArthur) and (BC 13 - Eisenhower)					
FY 2009 Accomplishments: FY 2009					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				<b>DATE:</b> Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0203726A: Adv Field Artillery To System	actical Data	PROJECT F19: JADOC	TS .		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #2		0.000	8.750	8.750	0.000	8.75
Provide development for JADOCS software blocks (BC 10), (I	BC 11-MacArthur) and (BC 13 - Eisenhower)					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #3		0.000	2.191	2.407	0.000	2.40
Conduct and Support Test Activities						

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				<b>DATE:</b> Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0203726A: Adv Field Artillery Tacti System	cal Data	PROJECT F19: JADO	CS		
B. Accomplishments/Planned Program (\$ in Millions)			1			
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #4 SIBR/STTR		0.000	0.332	0.000	0.000	0.000
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
	Accomplishments/Planned Programs Subtotals	0.000	11.844	11.787	0.000	11.787

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army		<b>DATE:</b> February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
2040: Research, Development, Test & Evaluation, Army	PE 0203726A: Adv Field Artillery Tactical Data	F19: JADOCS
BA 7: Operational Systems Development	System	

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

	•	<del></del>	FY 2011	FY 2011	FY 2011					Cost To	
<u>Line Item</u>	<b>FY 2009</b>	<b>FY 2010</b>	<b>Base</b>	<u>oco</u>	<u>Total</u>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>Complete</b>	<b>Total Cost</b>
• Ord. #1: Office Secretary of Defense	5.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	5.295
(OSD)/Defense Acquisition Executive											
(DAE)											
• Ord. #2: Joint Forces Command	1.829	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	1.829
(JFCOM) 0201298N											
• Ord. #3: Office Secretary of Defence	1.947	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	1.947
(OSD)/Procurement											
• Ord. #4: Overseas Contingency	4.425	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	4.425
Operations (OCO)/OMA											

#### **D.** Acquisition Strategy

In FY 2003, the Automated Deep Operations Coordination System (ADOCS) was renamed the Joint Automated Deep Operations Coordination System (JADOCS) and was transitioned to Product Manager, Fire Support Command and Control (FSC2). Currently, operational control resides with Product Director, Fire Support Command & Control (FSC2) under Army Project Manager, Battle Command.JADOCS has operated as a graduated Advanced Concept Technology Demonstration (ACTD) program since 2005. In 2008, the Vice Chief of Staff Army approved JADOCS for Acquisition program status under the Capabilities Development for Rapid Transition (CDRT) program. Commencing in FY 10 and continuing through FY 15, the Army will provide funding for its requirements under JADOCS.JADOCS is presently heavily embedded in the architecture at USCENTCOM, USPACOM, USFK and USEUCOM, including their subordinate commands. JADOCS is distributed to over 200 servers, 2600 workstations and 4000 users worldwide. Additionally, JADOCS is established within the coalition community. The Republic of Korea, the United Kingdom and NATO have Foreign Military Sales (FMS) cases. In accordance with the Training and Doctrine Command (TRADOC) requirements document approved in 2008, entitled Battle Command Essential Capability, software capability will be developed in 2-year increments as capability sets designed to Collaborate, Collapse and Converge Battle Command products. The product development funded under this R-Form is an integral part of the Army Battle Command System (ABCS), a system of systems, under a strategy designed to optimize opportunity for improved interoperability among the systems, to capture the benefits of competition where possible and to ensure the rapid integration of new capability into Warfighter systems. This strategy is designed to reduce the physical footprint, logistics support requirements and increase operational efficiency.

#### 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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

**DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

2040: Research, Development, Test & Evaluation, Army

PE 0203726A: Adv Field Artillery Tactical Data

F19: JADOCS

BA 7: Operational Systems Development

System

# **Product Development (\$ in Millions)**

				FY	2010	FY :	2011 ase	FY 2	2011 CO	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
Software Development & Test	C/CPFF	TBD Location could not be determined.	0.000	8.750		8.750		0.000		8.750	Continuing	Continuing	0
		Subtotal	0.000	8.750		8.750		0.000		8.750			0.000

#### Remarks

# **Support (\$ in Millions)**

				FY	2010	FY :	2011 ase	FY 2	2011 CO	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
Program Management - Government	С	Topographic Engineering Center (TEC) Ft. Belvoir, VA	0.000	0.150		0.175		0.000		0.175	Continuing	Continuing	0
		Subtotal	0.000	0.150		0.175		0.000		0.175			0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

**DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0203726A: Adv Field Artillery Tactical Data

System

PROJECT

F19: JADOCS

## **Test and Evaluation (\$ in Millions)**

				FY	2010	FY Ba	2011 ase	FY 2	2011 CO	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
Test Support	С	Army/Navy/Air Force - Various Locations Location could not be determined.	0.000	2.191		2.407		0.000		2.407	Continuing	Continuing	0
		Subtotal	0.000	2.191		2.407		0.000		2.407			0.000

#### Remarks

## **Management Services (\$ in Millions)**

				FY	2010		2011 ase	FY:	2011 CO	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
Business/Technical Services	С	Chenega Federal Systems Alaska	0.000	0.421		0.455		0.000		0.455	Continuing	Continuing	0
SIBR/STTR	С	Nothing entered for Activity and Location. Location could not be determined.	0.000	0.332		0.000		0.000		0.000	Continuing	Continuing	0
	,	Subtotal	0.000	0.753		0.455		0.000		0.455			0.000

## **UNCLASSIFIED**

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army			<b>DATE:</b> February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0203726A: Adv Field Artillery Tactical Data	F19: <i>JADOC</i>	CS
BA 7: Operational Systems Development	System		

	Total Prior Years Cost	FY 2	2010	FY 2 Ba		2011 CO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Total	0.000	11.844		11.787	0.000		11.787			0.000

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0203726A: Adv Field Artillery Tactical Data

System

PROJECT

F19: JADOCS

	]	FY	2009	9	I	Y	201	0	]	Y 2	201	1	I	Y	201	2	F	FY 2	201.	3	I	Y	201	4	I	Y 2	201	5
	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
Materiel Release - Marshall				#																								
Fielding - Marshall				#	#																							
Software Development (BC 11) Capability Set 11-12 (McArthur)	#	#	#	#	#	#	#																					
Materiel Release - McArthur								#																				
Fielding - McArthur								#	#	#																		
Software Development (BC 13) Capability Set 13-14 (Eisenhower)							#	#	#	#	#	#																
Materiel Release - Eisenhower																#												
Fielding - Eisenhower																	#	#	#									
Software Development (BC 15) Capability Set 15-16 (Arnold)												#	#	#	#	#	#	#	#	#								
Materiel Release - Arnold																								#				
Fielding - Arnold																									#	#	#	

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army

APPROPRIATION/BUDGET ACTIVITY
2040: Research, Development, Test & Evaluation, Army
BA 7: Operational Systems Development

System

PE 0203726A: Adv Field Artillery Tactical Data
System

PROJECT
F19: JADOCS

# Schedule Details

	Start		End	
Event	Quarter	Year	Quarter	Year
Materiel Release - Marshall	4	2009	4	2009
Fielding - Marshall	4	2009	1	2010
Software Development (BC 11) Capability Set 11-12 (McArthur)	1	2009	3	2010
Materiel Release - McArthur	4	2010	4	2010
Fielding - McArthur	4	2010	2	2011
Software Development (BC 13) Capability Set 13-14 (Eisenhower)	3	2010	4	2011
Materiel Release - Eisenhower	4	2012	4	2012
Fielding - Eisenhower	1	2013	3	2013
Software Development (BC 15) Capability Set 15-16 (Arnold)	4	2011	4	2013
Materiel Release - Arnold	4	2014	4	2014
Fielding - Arnold	1	2015	3	2015