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 0203740A: Maneuver Control 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	36.072	21.283	25.540	0.000	25.540	13.314	13.821	8.194	5.144	Continuing	Continuing
484: MANEUVER CONTROL SYSTEM (MCS)	36.072	21.283	25.540	0.000	25.540	13.314	13.821	8.194	5.144	Continuing	Continuing

A. Mission Description and Budget Item Justification

Tactical Battle Command (TBC) is a suite of products and services that provide commanders and staffs executive decision making capability in a collaborative environment, planning tools, and common operational picture management and other maneuver functional tools. TBC satisfies requirements and capabilities identified in the MCS GE ORD and MCS 6.4 CPD which includes Army migration to DoD net-centric environment. The overarching capability includes a user-defined Common Operational Picture (COP) with integrated Command and Control (C2) and Situational Awareness (SA), map-centric collaboration, Army Battle Command System (ABCS) and other enabling system interoperability, data management, and enterprise services. The suite of products include Command Post of the Future (CPOF), Battle Command Common Services (BCCS) that provides the consolidate server and services infrastructure for systems supporting Army Battle Command from Battalion to Army Component Command, Maneuver Control System (MCS), Battalion and Above Joint Convergence with the Marine Corps, and Tactical Web Portal for Knowledge management. TBC products and services are compliant with the joint technical architecture.FY11 funding will provide for the continuing development of the products and services that will satisfy the Tactical Battle Command capability requirements, while migrating to a service oriented architecture supporting the Battle Command Essential Capability Set 13-14. Funding also provides for the continued development of Battle Command Common Services (BCCS) enabling infrastructure for Tactical Battle Command. FY11 funding will also be utilized for development and integration efforts of the third generation of CPOF (CPOF 3G), to allow for enhanced scalability and disconnected operations. This funding also allows for the integration efforts of the Personalized Assistant that Learns (PAL).

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

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE
PE 0203740A: Maneuver Control System

2040: Research, Development, Test & Evaluation, Army

BA 7: Operational Systems Development

B. Program Change Summary (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	37.028	21.394	14.695	0.000	14.695
Current President's Budget	36.072	21.283	25.540	0.000	25.540
Total Adjustments	-0.956	-0.111	10.845	0.000	10.845
 Congressional General Reductions 		-0.111			
 Congressional Directed Reductions 		0.000			
 Congressional Rescissions 	0.000	0.000			
 Congressional Adds 		0.000			
 Congressional Directed Transfers 		0.000			
 Reprogrammings 	0.000	0.000			
 SBIR/STTR Transfer 	-0.956	0.000			
 Adjustments to Budget Years 	0.000	0.000	10.845	0.000	10.845

Change Summary Explanation

Change Summary Explanation: Funding - FY11: \$10.8 million was increased in order to complete development and integration efforts of CPOF 3G into the Tactical Battle Command baseline. This will extend scalability and collaboration capabilities, and to be effective in operational environments where intermittent network connectivity is available. The increase in funding also allows for the integration of the Personalized Assistant that Learns (PAL).

Exhibit R-2A, RDT&E Project Justi	fication: PB 2	011 Army								DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development					NOMENCLA A: Maneuver	_	m	PROJECT 484: MANEUVER CONTROL SYSTEM (MCS)				
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			
484: MANEUVER CONTROL SYSTEM (MCS)	36.072	21.283	25.540	0.000	25.540	13.314	13.821	8.194	5.144	Continuing	Continuing	
Quantity of RDT&E Articles												

A. Mission Description and Budget Item Justification

Tactical Battle Command (TBC) is a suite of products and services that provide commanders and staffs executive decision making capability in a collaborative environment, planning tools, and common operational picture management and other maneuver functional tools. TBC satisfies requirements and capabilities identified in the MCS GE ORD and MCS 6.4 CPD which includes Army migration to DoD net-centric environment. The overarching capability includes a user-defined Common Operational Picture (COP) with integrated Command and Control (C2) and Situational Awareness (SA), map-centric collaboration, Army Battle Command System (ABCS) and other enabling system interoperability, data management, and enterprise services. The suite of products include Command Post of the Future (CPOF), Battle Command Common Services (BCCS) that provides the consolidate server and services infrastructure for systems supporting Army Battle Command from Battalion to Army Component Command, Maneuver Control System (MCS), Battalion and Above Joint Convergence with the Marine Corps, and Tactical Web Portal for Knowledge management. TBC products and services are compliant with the joint technical architecture.FY11 funding will provide for the continuing development of the products and services that will satisfy the Tactical Battle Command capability requirements, while migrating to a service oriented architecture supporting the Battle Command Essential Capability Set 13-14. Funding also provides for the continued development of Battle Command Common Services (BCCS) enabling infrastructure for Tactical Battle Command. FY11 funding will also be utilized for development and integration efforts of the third generation of CPOF (CPOF 3G), to allow for enhanced scalability and disconnected operations. This funding also allows for the integration efforts of the Personalized Assistant that Learns (PAL).

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	4.228	0.642	0.000	0.000	0.000
MCS software development to enhance Interoperability, Usability, and Functionality					
FY 2009 Accomplishments: FY 2009					

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 0203740A: Maneuver Control System	PROJECT 484: MANEUVER CONTROL SYSTEM (MCS)				
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		7.383	3.159	0.000	0.000	0.000
Joint Convergence Engineering and Development						
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 CPOF Development	1	17.613	12.667	22.391	0.000	22.391

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: Febi	ruary 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0203740A: Maneuver Control Syste	em	PROJECT 484: MANEUVER CONTROL SYSTEM (MCS)				
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 #4		6.848	4.219	3.149	0.000	3.14	
Battle Command Common Services Development							
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans:							

UNCLASSIFIED

0.000

0.596

0.000

0.000

0.000

Program #5

FY 2011 Base

FY 2011 OCO Plans: FY 2011 OCO

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army	DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0203740A: Maneuver Control System	484: <i>MANE</i>	UVER CONTROL SYSTEM (MCS)
BA 7: Operational Systems Development			

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Small Business Innovative Research/Small Business Technology Transfer Programs					
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	36.072	21.283	25.540	0.000	25.540

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

			FY 2011	FY 2011	FY 2011					Cost To	
Line Item	FY 2009	FY 2010	Base	<u>OCO</u>	Total	FY 2012	FY 2013	FY 2014	FY 2015	Complete	Total Cost
• Ord. #1: BA9320 - Maneuver Control	119.146	82.401	96.162	0.000	96.162	71.695	69.451	34.356	16.969	Continuing	Continuing
System (MCS)											
• Ord. #2: <i>BS9710 - MCS Spares</i>	3.502	1.545	1.591	0.000	1.591	1.638	1.675	0.773	0.585	Continuing	Continuing

D. Acquisition Strategy

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.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army	TIVITY R-1 ITEM NOMENCLATURE P					
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0203740A: Maneuver Control System	PROJECT 484: MANEUVER CONTROL SYSTEM (MCS)				
E. Performance Metrics						
Performance metrics used in the preparation of this justification material	l may be found in the FY 2010 Army Performance Bud	get 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 0203740A: Maneuver Control System

484: MANEUVER CONTROL SYSTEM (MCS)

Product Development (\$ in Millions)

BA 7: Operational Systems Development

				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
MCS Software Development	C/CPAF	Lockheed Martin Corp. Tinton Falls, NJ	190.787	0.000		0.000		0.000		0.000	Continuing	Continuing	178.467
Misc Contracts	C/Various	Various Location could not be determined.	20.819	0.725		0.514		0.000		0.514	Continuing	Continuing	0
CPOF Development	С	DARPA Location could not be determined.	20.737	0.000		0.000		0.000		0.000	Continuing	Continuing	0
CPOF Development - 2	С	General Dynamics Location could not be determined.	24.757	7.666		18.637		0.000		18.637	Continuing	Continuing	0
Software Development & Technical Support	С	CECOM Software Engineering Center NJ	37.775	3.579		2.519		0.000		2.519	Continuing	Continuing	0
MCS, Joint Convergence, and BCCS System Engineering & Development	C/CPAF	Lockheed Martin Corp. Tinton Falls, NJ	30.453	3.007		0.000		0.000		0.000	Continuing	Continuing	0
ABCS SoS Contract	C/TBD	TBD Location could not be determined.	0.000	1.062		1.200		0.000		1.200	Continuing	Continuing	0
Technical Support	С	PM Battle Command NJ	21.312	0.631		0.624		0.000		0.624	Continuing	Continuing	0
PSE H/W & S/W	C/Various	Various	2.775	0.000		0.000		0.000		0.000	Continuing	Continuing	0

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 0203740A: Maneuver Control System

484: MANEUVER CONTROL SYSTEM (MCS)

Product Development (\$ in Millions)

BA 7: Operational Systems Development

				FY 2010		FY 2011 Base		FY 2011 OCO		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
		Location could not be determined.											
MITRE System Engineering	С	MITRE Corp. Eatontown, NJ	12.533	0.000		0.000		0.000		0.000	Continuing	Continuing	0
ABCS SE&I	С	PEO C3T NJ	1.830	0.000		0.000		0.000		0.000	Continuing	Continuing	0
		Subtotal	363.778	16.670		23.494		0.000		23.494			178.467

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
Misc Support	С	PM Battle Command NJ	5.394	0.576		0.547		0.000		0.547	Continuing	Continuing	0
Misc Contracts	C/Various	Various Location could not be determined.	3.003	0.409		0.364		0.000		0.364	Continuing	Continuing	0
		Subtotal	8.397	0.985		0.911		0.000		0.911			0.000

Remarks

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 0203740A: Maneuver Control System

484: MANEUVER CONTROL SYSTEM (MCS)

Test and Evaluation (\$ in Millions)

BA 7: Operational Systems Development

				FY :	2010		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
OGA	С	Various Location could not be determined.	4.802	0.206		0.195		0.000		0.195	Continuing	Continuing	0
Misc Contracts	C/Various	Various Location could not be determined.	5.673	0.196		0.186		0.000		0.186	Continuing	Continuing	0
Test Planning/Conduct	С	Various Location could not be determined.	22.297	2.139		0.000		0.000		0.000	Continuing	Continuing	0
		Subtotal	32.772	2.541		0.381		0.000		0.381			0.000

Remarks

Management Services (\$ in Millions)

Transgement Ser vices	(4 1/11111	,											
						FY	2011	FY	2011	FY 2011			
				FY 2	2010	Ba	ase	00	CO	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 Office Mgmt	С	PM Battle Command NJ	5.482	1.087		0.754		0.000		0.754	Continuing	Continuing	0
		Subtotal	5.482	1.087		0.754		0.000		0.754			0.000

Remarks

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 0203740A: Maneuver Control System	484: <i>MANE</i> 0	IVER CONTROL SYSTEM (MCS)
BA 7: Operational Systems Development			

		Total Prior Years Cost	FY 2	2010	FY 2	2011 ase	FY 2		Cost To Complete	Total Cost	Target Value of Contract
P	Project Cost Totals	410.429	21.283		25.540		0.000	25.540			178.467

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

R-1 ITEM NOMENCLATURE PROJECT 484: MANEUVER CONTROL SYSTEM (MCS)

BA 7: Operational Systems Development

Development

PE 0203740A: Maneuver Control System

		FY	200	9	J	F Y :	201	0	I	TY 2	201	1	F	Y 2	2012	2	1	FY 2	201.	3	F	Y 2	2014	1	F	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
Battle Command Capability Set 13-14 Software Development						#	#	#	#	#	#	#	#	#														
Battle Command Capability Set 15-16 Software														#	#	#	#	#	#	#	#	#						

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0203740A: Maneuver Control System	484: <i>MANE</i> 0	UVER CONTROL SYSTEM (MCS)
BA 7: Operational Systems Development			

Schedule Details

	Sta	art	End			
Event	Quarter	Year	Quarter	Year		
Battle Command Capability Set 13-14 Software Development	2	2010	2	2012		
Battle Command Capability Set 15-16 Software Development	2	2012	2	2014		