

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Army	DATE: February 2011
-----------------------------------------------------------------------	----------------------------

APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
2040: <i>Research, Development, Test & Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>				PE 0203740A: <i>Maneuver Control System</i>							
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	36.131	25.540	65.002	-	65.002	56.161	14.006	4.809	15.284	Continuing	Continuing
484: <i>MANEUVER CONTROL SYSTEM (MCS)</i>	36.131	25.540	65.002	-	65.002	56.161	14.006	4.809	15.284	Continuing	Continuing

Note

Change Summary Explanation: Funding - FY12: Change in funding provides for the Battle Command Collapse development and integration efforts to allow for a single Battle Command solution with an open architecture that produces a collaborative Battle Command environment for C2, maneuver and protection capabilities.

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 (COP) management and other maneuver functional tools. TBC satisfies requirements and capabilities identified in the Maneuver Control System (MCS) Good Enough Operational Requirements Document (ORD) and MCS 6.4 Capability Production Document (CPD) which includes Army migration to Department of Defense (DoD) net-centric environment. The overarching capability includes a user-defined 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, 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. In addition, this project funds the development of a collaborative Battle Command (BC) environment for ABCS to operate more efficiently and effectively. The BC environment will serve as a common foundation for functionality development and support by collapsing onto a common architecture and infrastructure. Battle Command Collapse development and integration will significantly enhance the ability of commanders and staff to effectively conduct collaborative mission planning and execution across a range of operations and spectrum of conflict. MCS as a stand-alone product was designated as end-of-life as of Jan 11 by a memo signed by Project Manager Battle Command. All relevant capabilities provided by MCS are now delivered as part of the other TBC products (BCCS & CPOF).

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Army				DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0203740A: Maneuver Control System				
B. Program Change Summary (\$ in Millions)		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget		21.283	25.540	13.314	-	13.314
Current President's Budget		36.131	25.540	65.002	-	65.002
Total Adjustments		14.848	-	51.688	-	51.688
• Congressional General Reductions			-			
• Congressional Directed Reductions			-			
• Congressional Rescissions		-	-			
• Congressional Adds			-			
• Congressional Directed Transfers			-			
• Reprogrammings		-	-			
• SBIR/STTR Transfer		-	-			
• Adjustments to Budget Years		14.848	-	51.688	-	51.688

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army									DATE: February 2011		
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)			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
484: MANEUVER CONTROL SYSTEM (MCS)	36.131	25.540	65.002	-	65.002	56.161	14.006	4.809	15.284	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 (COP) management and other maneuver functional tools. TBC satisfies requirements and capabilities identified in the Maneuver Control System (MCS) Good Enough Operational Requirements Document (ORD) and MCS 6.4 Capability Production Document (CPD) which includes Army migration to Department of Defense (DoD) net-centric environment. The overarching capability includes a user-defined 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, 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. In addition, this project funds the development of a collaborative Battle Command (BC) environment for ABCS to operate more efficiently and effectively. The BC environment will serve as a common foundation for functionality development and support by collapsing onto a common architecture and infrastructure. Battle Command Collapse development and integration will significantly enhance the ability of commanders and staff to effectively conduct collaborative mission planning and execution across a range of operations and spectrum of conflict. MCS as a stand-alone product was designated as end-of-life as of Jan 11 by a memo signed by Project Manager Battle Command. All relevant capabilities provided by MCS are now delivered as part of the other TBC products (BCCS & CPOF).

FY12 funding will provide for the continuing development of the products and services that will satisfy the TBC capability requirements, while completing the migration to a service oriented architecture supporting the Mission Command Essential Capability Set 13-14. Funding also provides for the continued development of BCCS enabling infrastructure for Tactical Battle Command. FY12 funding also provides for continuing development of the Third Party Developer Kit (3PDK) to support other Battle Command (and non-Battle Command) programs, agencies and capabilities. In addition, FY12 funding provides for BC Collapse development and integration efforts to allow for a single BC solution with open architecture that produces a collaborative BC environment for Maneuver, Fires and Air supported by Intel and Logistics.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: MCS software development to enhance Interoperability, Usability, and Functionality	0.642	-	-	-	-
Articles:	0				
Description: MCS software development to enhance Interoperability, Usability, and Functionality					

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army			DATE: February 2011			
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 Programs (\$ in Millions, Article Quantities in Each)		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
FY 2010 Accomplishments: MCS software development to enhance Interoperability, Usability, and Functionality						
Title: Joint Convergence Engineering and Development	Articles:	3.901 0	-	3.899	-	3.899
Description: Joint Convergence Engineering and Development						
FY 2010 Accomplishments: Joint Convergence Engineering and Development						
FY 2012 Base Plans: Joint Convergence Engineering and Development						
Title: CPOF Development	Articles:	15.372 0	22.391 0	14.699	-	14.699
Description: CPOF Development						
FY 2010 Accomplishments: CPOF Development						
FY 2011 Plans: CPOF Development						
FY 2012 Base Plans: CPOF Development						
Title: Battle Command Collapse		-	-	35.566	-	35.566
Description: Battle Command Collapse Development and Integration						
FY 2012 Base Plans: Battle Command Collapse Development and Integration						
Title: Battle Command Common Services Development	Articles:	4.620 0	3.149 0	10.838	-	10.838
Description: Battle Command Common Services Development						

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0203740A: <i>Maneuver Control System</i>	PROJECT 484: <i>MANEUVER CONTROL SYSTEM (MCS)</i>	

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
<i>FY 2010 Accomplishments:</i> Battle Command Common Services Development					
<i>FY 2011 Plans:</i> Battle Command Common Services Development					
<i>FY 2012 Base Plans:</i> Battle Command Common Services Development					
<i>Title:</i> Personalized Assistant that Learns integration efforts <i>Description:</i> Personalized Assistant that Learns (PAL) Phase II integration efforts	<i>Articles:</i> 11.000 0	-	-	-	-
<i>FY 2010 Accomplishments:</i> Personalized Assistant that Learns (PAL) Phase II integration efforts					
<i>Title:</i> Small Business Innovative Research/Small Business Technology Transfer Programs <i>Description:</i> Small Business Innovative Research/Small Business Technology Transfer Programs	<i>Articles:</i> 0.596 0	-	-	-	-
<i>FY 2010 Accomplishments:</i> Small Business Innovative Research/Small Business Technology Transfer Programs					
Accomplishments/Planned Programs Subtotals	36.131	25.540	65.002	-	65.002

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• BA9320: <i>BA9320 Maneuver Control System (MCS)</i>	84.440	156.273	34.031	44.000	78.031		59.095	137.430	206.350	Continuing	Continuing
	1.425	1.591	1.633		1.633		0.772	0.584	0.594	Continuing	Continuing

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0203740A: <i>Maneuver Control System</i>	PROJECT 484: <i>MANEUVER CONTROL SYSTEM (MCS)</i>	

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

<u>Line Item</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u> <u>Base</u>	<u>FY 2012</u> <u>OCO</u>	<u>FY 2012</u> <u>Total</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• BS9710: <i>BS9710 MCS Spares Procurement</i>											

D. Acquisition Strategy

In accordance with the Training and Doctrine Command (TRADOC) requirements document approved in 2008, entitled Mission 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 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 increase operational efficiency, reduce the physical footprint, and logistics support requirements.

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.

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Army										DATE: February 2011			
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)					
Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	Various	PM Battle Command:Aberdeen Proving Grounds, MD	7.761	0.754		1.854		-		1.854	Continuing	Continuing	Continuing
Subtotal			7.761	0.754		1.854		-		1.854			
Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	Various	Lockheed Martin Corp.:Tinton Falls, NJ	190.787	-		-		-		-	Continuing	Continuing	Continuing
Misc Contracts	Various	Various:Various	23.194	0.514		0.923		-		0.923	Continuing	Continuing	Continuing
CPOF Development	Various	DARPA:DARPA	20.737	-		-		-		-	Continuing	Continuing	Continuing
Software Development & Technical Support	Various	CECOM Software Engineering Center:Ft. Monmouth, NJ	46.067	2.519		5.394		-		5.394	Continuing	Continuing	Continuing
CPOF Development	Various	General Dynamics:Scottsdale, AZ	50.751	18.637		14.113		-		14.113	Continuing	Continuing	Continuing
MCS, Joint Convergence, and BCCS System Engineering & Development	Various	Lockheed Martin Corp.:Tinton Falls, NJ	39.828	-		-		-		-	Continuing	Continuing	Continuing
ABCS SoS Contract (Joint Convergence Development)	Various	Lockheed Martin:Tinton Falls, NJ	1.062	1.200		3.899		-		3.899	Continuing	Continuing	Continuing
Technical Support	Various	PM Battle Command:Various	23.632	0.624		1.535		-		1.535	Continuing	Continuing	Continuing
PSE H/W & S/W	Various	Various:Various	2.775	-		-		-		-	Continuing	Continuing	Continuing
MITRE System Engineering	Various	MITRE Corp.:New Jersey	12.533	-		-		-		-	Continuing	Continuing	Continuing
Battle Command Collapse Development & Integration	Various	Various:Various	-	-		35.566		-		35.566	Continuing	Continuing	Continuing
ABCS SE&I	Various		1.830	-		-		-		-	Continuing	Continuing	Continuing

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Army											DATE: February 2011		
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)					

Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
		PEO C3T, NJ:New Jersey											
PAL Integration	SS/CR	SRI:AZ	-	-		-		-		-	Continuing	Continuing	0.000
Subtotal			413.196	23.494		61.430		-		61.430			

Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	Various	PM Battle Command:Fort Monmouth, NJ	6.577	0.547		0.772		-		0.772	Continuing	Continuing	Continuing
Misc Contracts	Various	Various:Various	3.872	0.364		0.586		-		0.586	Continuing	Continuing	Continuing
Subtotal			10.449	0.911		1.358		-		1.358			

Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	Various	Various:APG, MD	5.115	0.195		0.187		-		0.187	Continuing	Continuing	Continuing
Misc Contracts	Various	Various:APG, MD	6.369	0.186		0.173		-		0.173	Continuing	Continuing	Continuing
Test Planning/Conduct	Various	Various:APG, MD	24.894	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			36.378	0.381		0.360		-		0.360			

			Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			467.784	25.540		65.002		-		65.002			

Remarks

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Army			DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>		R-1 ITEM NOMENCLATURE PE 0203740A: <i>Maneuver Control System</i>		PROJECT 484: <i>MANEUVER CONTROL SYSTEM (MCS)</i>	

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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 Development																												
Battle Command Capability Set 17-18 Software Development																												

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Army			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0203740A: <i>Maneuver Control System</i>	PROJECT 484: <i>MANEUVER CONTROL SYSTEM (MCS)</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Battle Command Capability Set 13-14 Software Development	4	2010	3	2012
Battle Command Capability Set 15-16 Software Development	4	2012	3	2014
Battle Command Capability Set 17-18 Software Development	4	2014	3	2016

UNCLASSIFIED