Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Army											Date: May 2017	
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army* I BA 7: *Operational Systems Development*						**R-1 Program Element (Number/Name)** PE 0203740A *I Maneuver Control System*						
COST ($ in Millions)	**Prior Years**	**FY 2016**	**FY 2017**	**FY 2018 Base**	**FY 2018 OCO**	**FY 2018 Total**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**Cost To Complete**	**Total Cost**
Total Program Element	-	14.864	4.031	6.639	-	6.639	4.047	0.171	0.174	0.000	Continuing	Continuing
484: *Maneuver Control System*	-	14.864	4.031	6.639	-	6.639	4.047	0.171	0.174	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

Tactical Mission Command is a suite of products and services that provide commanders and their staff executive decision making capability in a collaborative environment. The suite of products currently in development consist of Command Web (CW), Tactical Services Infrastructure (TSI), and an Army Voice Communication System (WAVE). TMC satisfies requirements and capabilities identified in the MCS 6.4 Capability Production Document. The overarching capability includes a user-defined Common Operating Picture (COP) with integrated Command and Control (C2) and Situational Awareness (SA), map-centric collaboration, Army Mission Command Systems (and others) enabling system interoperability, data management, and enterprise services. TMC contributes to Mission Command (MC) Convergence for commanders and staff to effectively conduct collaborative mission planning and execution across a range of operations and spectrum of conflict. Legacy products supported by this Budget Item include Command Post of the Future (CPOF) and Battle Command Common Services (BCCS).

B. Program Change Summary ($ in Millions)

	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	15.408	4.031	6.435	-	6.435
Current President's Budget	14.864	4.031	6.639	-	6.639
Total Adjustments	-0.544	0.000	0.204	-	0.204
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.544	-			
• Adjustments to Budget Years	0.000	0.000	0.204	-	0.204

Exhibit R-2A, **RDT&E Project Justification:** FY 2018 Army											**Date:** May 2017	
Appropriation/Budget Activity 2040 *I* 7					**R-1 Program Element (Number/Name)** PE 0203740A *I Maneuver Control System*				**Project (Number/Name)** 484 *I Maneuver Control System*			
COST ($ in Millions)	**Prior Years**	**FY 2016**	**FY 2017**	**FY 2018 Base**	**FY 2018 OCO**	**FY 2018 Total**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**Cost To Complete**	**Total Cost**
484: *Maneuver Control System*	-	14.864	4.031	6.639	-	6.639	4.047	0.171	0.174	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Tactical Mission Command (TMC) is a portfolio of products and services that enable commanders and their staff with collaborative environment, planning tools, and Common Operation Picture (COP) management and other maneuver functional tools. The overarching capability includes above platform level user-defined COP with integrated Command and Control (C2) and Situational Awareness (SA), map-centric collaboration, Army Mission Command System and other enabling system interoperability, data management and enterprise services. Products include:

Command Web is a set of modular software widgets served up over the web providing engineering functionality. Improved supportability and ease-of-use in robust network environments.

Tactical Server Infrastructure (TSI) provides the network available services critical to ensuring system and software can transmit the network effectively. Additionally, TSI serves as the hosting platform for many other enabling software systems, as well as multiple Warfighter Functional Area Applications (WFAs) such as Intel, Air Missile Defense Workstations and Fires gateway, providing efficiencies in the Command Post via decreased size, weight and power.

WAVE is the voice of the internet protocol common voice solution for the CPOF portfolio of programs. It provides real-time voice interoperability between radios, intercom and other previously fielded technologies in support of the Commander's update briefing and other Mission Command tasks.

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2016**	**FY 2017**	**FY 2018**
Title: Tactical Applications (TacApps)	9.209	-	-
Description: Implementation of essential warfighting functions that incorporate a common look and feel to application based capabilities leveraging common services and infrastructure which are COE/CPCE compliant. Provides real time rich collaboration across echelons that can run on both client and tablet *FY 2016 Accomplishments:* COE CPCE compliant solution set encompassing the capabilities of CW, CTV, CPOF, & Logistic Widgets with in a seamless suite. Enhance ease of use and admin simplification			
Title: BCCS / TSI software development / integration	-	2.544	-
FY 2017 Plans: Finalize development of TSI v.1 ensuring system is fully capable of supporting TMC portfolio of products			
Title: Command Web Development	0.441	0.549	-

Exhibit R-2A, RDT&E Project Justification: FY 2018 Army		Date: May 2017
Appropriation/Budget Activity 2040 *I* 7	**R-1 Program Element (Number/Name)** PE 0203740A *I Maneuver Control System*	**Project (Number/Name)** 484 *I Maneuver Control System*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Description: Command Web provides modular software widgets served up over the web providing engineering functionality. Improved supportability and ease-of-use in robust network environments (compliant w/COE guidance) *FY 2016 Accomplishments:* developed patches required to meet Net ready Key Performance Parameters (KPPs) *FY 2017 Plans:* Fixes that may be realized during Operational Test			
Title: Program Management Office *Description:* Codification of program operational requirements into discrete technical packages for development, testing, deployment, and support over the systems lifecycle. *FY 2016 Accomplishments:* Codification of program operational requirements into discrete technical packages for development, testing, deployment, and support over the systems lifecycle *FY 2017 Plans:* Codification of program operational requirements into discrete technical packages for development, testing, deployment, and support over the systems lifecycle *FY 2018 Plans:* Codification of program operational requirements into discrete technical packages for development, testing, deployment, and support over the systems lifecycle	2.198	0.320	0.639
Title: Test and Evaluation *Description:* Encompasses formal test (operational assessment/test, joint certification, interoperability, and information assurance) and informal testing such as acceptance testing and risk reduction testing. *FY 2016 Accomplishments:* Formal test (Joint certification, interoperability, and information assurance) and informal testing such as acceptance testing and risk reduction testing. *FY 2017 Plans:* Formal test (Joint certification, interoperability, and information assurance) and informal testing such as acceptance testing and risk reduction testing. CTSF integration testing for CPOF *FY 2018 Plans:*	3.016	0.018	0.512

Exhibit R-2A, **RDT&E Project Justification:** FY 2018 Army		**Date:** May 2017
Appropriation/Budget Activity 2040 / 7	**R-1 Program Element (Number/Name)** PE 0203740A / *Maneuver Control System*	**Project (Number/Name)** 484 / *Maneuver Control System*

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2016**	**FY 2017**	**FY 2018**
Formal test (Joint certification, interoperability, and information assurance) and informal testing such as acceptance testing and risk reduction testing.			
Title: WAVE MIP / Development / Intergration	-	0.600	5.488
Description: Developing and integrating voice over IP solutions into the CPOF portfolio of programs. It provides real-time voice interoperability between radios, *FY 2017 Plans:* Integrate VOIP into TMC products, ensure MIP coalition software in compatible with current TMC products *FY 2018 Plans:* Finalize integration of WAVE (VOIP) with TMC portfolio of products.			
Accomplishments/Planned Programs Subtotals	14.864	4.031	6.639

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
• Funding: *BA9320 Maneuver Control System (MCS)*	125.443	151.318	132.572	-	132.572	69.909	58.180	60.996	59.776	Continuing	Continuing
• SPARES: *BS9710 MCS Spares Procurement*	0.626	0.593	4.869	-	4.869	-	-	-	-	Continuing	Continuing

Remarks

D. Acquisition Strategy

In accordance with the Training and Doctrine Command (TRADOC) requirements document approved in 2008, Maneuver Control System Capabilities Production Document, software capability will be developed in 3-year increments in support of Common Operating Environment (COE) Guidance designed to deploy specified Mission Command Essential Capabilities to operating force commanders and their integrated battle staffs. This strategy accounts for subsequent Army directives and continued migration to the Army COE; designed to optimize opportunities for improved interoperability. The products developed under this funding line are an integral part of the Army Mission Command System of Systems.

E. Performance Metrics

N/A

PE 0203740A: *Maneuver Control System*
Army
    UNCLASSIFIED
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