Department of Defense
Fiscal Year (FY) 2021 Budget Estimates

February 2020

Defense Information Systems Agency

Defense-Wide Justification Book Volume 5 of 5

Research, Development, Test & Evaluation, Defense-Wide

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Department of Defense
FY 2021President's Budget
Exhibit R-1 FY 2021 President's Budget
Total Obligational Authority
(Dollars in Thousands)

21 Jan 2020

Appropriation	FY 2019 (Base + OCO)	FY 2020 Base Enacted	FY 2020 Emergency	FY 2020 OCO Enacted	FY 2020 Total Enacted (Base+Emerg+ OCO)
Research, Development, Test & Eval, DW	326,302	497,936			497,936
Total Research, Development, Test & Evaluation	326,302	497,936			497,936

R-121PB: FY 2021 President's Budget (Published Version), as of January 21, 2020 at 08:48:38

Department of Defense
FY 2021President's Budget
Exhibit R-1 FY 2021 President's Budget
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(Dollars in Thousands)

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Appropriation	FY 2021 Base	FY 2021 OCO for Base Requirements	FY 2021 OCO for Direct War and Enduring Costs	FY 2021 Total OCO	FY 2021 Total (Base + OCO)
Research, Development, Test & Eval, DW	396,750				396,750
Total Research, Development, Test & Evaluation	396,750				396,750

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Summary Recap of Budget Activities	FY 2019 (Base + OCO)	FY 2020 Base Enacted	FY 2020 Emergency	FY 2020 OCO Enacted	FY 2020 Total Enacted (Base+Emerg+ OCO)
System Development & Demonstration	1,936	1,578			1,578
Management Support	26,247	61,757			61,757
Operational Systems Development	298,119	434,601			434,601
Software And Digital Technology Pilot Programs					
Total Research, Development, Test & Evaluation	326,302	497,936			497,936
Summary Recap of FYDP Programs					
General Purpose Forces	61,208	64,122			64,122
Intelligence and Communications	258,187	239,987			239,987
Research and Development		183,834			183,834
Central Supply and Maintenance	1,317	1,361			1,361
Administration and Associated Activities	4,884	3,090			3,090
Space	706	5,542			5,542
Total Research, Development, Test & Evaluation	326,302	497,936			497,936

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System Development & Demonstration					
Management Support	96,823				96,823
Operational Systems Development	213,177				213,177
Software And Digital Technology Pilot Programs	86,750				86,750
Total Research, Development, Test & Evaluation	396,750				396,750
Summary Recap of FYDP Programs					
General Purpose Forces	59,813				59,813
Intelligence and Communications	196,848				196,848
Research and Development	132,058				132,058
Central Supply and Maintenance	1,654				1,654
Administration and Associated Activities	3,138				3,138
Space	3,239				3,239
Total Research, Development, Test & Evaluation	396,750				396,750

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Total Obligational Authority
(Dollars in Thousands)

21 Jan 2020

Appropriation: 0400D Research, Development, Test & Eval, DW

Line No	Program Element Number	Item	Act	FY 2019 (Base + OCO)	FY 2020 Base Enacted	FY 2020 Emergency	FY 2020 OCO Enacted	FY 2020 Total Enacted (Base+Emerg+ OCO)	Sec
142	0303141K	Global Combat Support System	05	1,936	1,578			1,578	U
		System Development & Demonstration		1,936	1,578			1,578	
182	0208045K	C4I Interoperability	06						U
188	0305172K	Combined Advanced Applications	06	21,363	58,667			58,667	U
190	0305208K	Distributed Common Ground/Surface Systems	06						U
197	0903235K	Joint Service Provider (JSP)	06	4,884	3,090			3,090	U
		Management Support		26,247	61,757			61,757	
200	0604532K	Joint Artificial Intelligence	07		183,834			183,834	U
208	0208045K	C4I Interoperability	07	61,208	64,122			64,122	U
212	0302019K	Defense Info Infrastructure Engineering and Integration	07	13,540	10,798			10,798	U
213	0303126K	Long-Haul Communications - DCS	07	12,572	11,166			11,166	U
214	0303131K	Minimum Essential Emergency Communications Network (MEECN)	07	17,579	17,383			17,383	U
218	0303140K	Information Systems Security Program	07	42,262	40,398			40,398	U
219	0303150K	Global Command and Control System	07	44,974	17,218			17,218	U
220	0303153K	Defense Spectrum Organization	07	5,748	19,528			19,528	U
221	0303167K	Pre-Auction Spectrum Relocation Fund	07	1,258					U
222	0303170K	Net-Centric Enterprise Services (NCES)	07	1,750					U

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142	0303141K	Global Combat Support System	05						U
		System Development & Demonstration							
182	0208045K	C4I Interoperability	06	59,813				59,813	U
188	0305172K	Combined Advanced Applications	06	30,824				30,824	U
190	0305208K	Distributed Common Ground/Surface Systems	06	3,048				3,048	U
197	0903235K	Joint Service Provider (JSP)	06	3,138				3,138	U
		Management Support		96,823				96,823	
200	0604532K	Joint Artificial Intelligence	07	132,058				132,058	U
208	0208045K	C4I Interoperability	07						U
212	0302019K	Defense Info Infrastructure Engineering and Integration	07	16,324				16,324	U
213	0303126K	Long-Haul Communications - DCS	07	11,884				11,884	U
214	0303131K	Minimum Essential Emergency Communications Network (MEECN)	07	5,560				5,560	U
218	0303140K	Information Systems Security Program	07	8,922				8,922	U
219	0303150K	Global Command and Control System	07	3,695				3,695	U
220	0303153K	Defense Spectrum Organization	07	20,113				20,113	U
221	0303167K	Pre-Auction Spectrum Relocation Fund	07						U
222	0303170K	Net-Centric Enterprise Services (NCES)	07						U

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Line No	Program Element Number	Item	Act	FY 2019 (Base + OCO)	FY 2020 Base Enacted	FY 2020 Emergency	FY 2020 OCO Enacted	FY 2020 Total Enacted (Base+Emerg+ OCO)	Sec
223	0303228K	Joint Regional Security Stacks (JRSS)	07	7,657	16,269			16,269	U
224	0303267K	Auctioned Spectrum Relocation Fund	07	24,600					U
225	0303430K	Federal Investigative Services Information Technology	07	59,870	44,001			44,001	U
226	0303467K	SENSR Spectrum Pipeline SRF	07	230					U
241	0305208K	Distributed Common Ground/Surface Systems	07	2,848	2,981			2,981	U
252	0708012K	Logistics Support Activities	07	1,317	1,361			1,361	U
268	1203610K	Teleport Program	07	706	5,542			5,542	U
		Operational Systems Development		298,119	434,601			434,601	
271	0303150K	Global Command and Control System	08						U
		Software And Digital Technology Pilot Progr							
		Total Research, Development, Test & Eval, DW		326,302	497,936			497,936	

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Line No	Program Element Number	Item	Act	FY 2021 Base	FY 2021 OCO for Base Requirements	FY 2021 OCO for Direct War and Enduring Costs	FY 2021 Total OCO	FY 2021 Total (Base + OCO)	Sec
223	0303228K	Joint Regional Security Stacks (JRSS)	07	9,728				9,728	U
224	0303267K	Auctioned Spectrum Relocation Fund	07						U
225	0303430K	Federal Investigative Services Information Technology	07						U
226	0303467K	SENSR Spectrum Pipeline SRF	07						U
241	0305208K	Distributed Common Ground/Surface Systems	07						U
252	0708012K	Logistics Support Activities	07	1,654				1,654	U
268	1203610K	Teleport Program	07	3,239				3,239	U
		Operational Systems Development		213,177				213,177	
271	0303150K	Global Command and Control System	08	86,750				86,750	U
		Software And Digital Technology Pilot Progr		86,750				86,750	
		Total Research, Development, Test & Eval, DW		396,750				396,750	

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142	0303141K	Global Combat Support System	05	1,936	1,578			1,578	U
		System Development & Demonstration		1,936	1,578			1,578	
182	0208045K	C4I Interoperability	06						U
188	0305172K	Combined Advanced Applications	06	21,363	58,667			58,667	U
190	0305208K	Distributed Common Ground/Surface Systems	06						U
197	0903235K	Joint Service Provider (JSP)	06	4,884	3,090			3,090	U
		Management Support		26,247	61,757			61,757	
200	0604532K	Joint Artificial Intelligence	07		183,834			183,834	U
208	0208045K	C4I Interoperability	07	61,208	64,122			64,122	U
212	0302019K	Defense Info Infrastructure Engineering and Integration	07	13,540	10,798			10,798	U
213	0303126K	Long-Haul Communications - DCS	07	12,572	11,166			11,166	U
214	0303131K	Minimum Essential Emergency Communications Network (MEECN)	07	17,579	17,383			17,383	U
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219	0303150K	Global Command and Control System	07	44,974	17,218			17,218	U
220	0303153K	Defense Spectrum Organization	07	5,748	19,528			19,528	U
221	0303167K	Pre-Auction Spectrum Relocation Fund	07	1,258					U
222	0303170K	Net-Centric Enterprise Services (NCES)	07	1,750					U

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142	0303141K	Global Combat Support System	05						U
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	System Development & Demonstration								
182	0208045K	C4I Interoperability	06	59,813				59,813	U
188	0305172K	Combined Advanced Applications	06	30,824				30,824	U
190	0305208K	Distributed Common Ground/Surface Systems	06	3,048				3,048	U
197	0903235K	Joint Service Provider (JSP)	06	3,138				3,138	U
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	Management Support			96,823				96,823	
200	0604532K	Joint Artificial Intelligence	07	132,058				132,058	U
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		Total Defense Information Systems Agency		326,302	497,936			497,936	

Defense Information Systems Agency
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241	0305208K	Distributed Common Ground/Surface Systems	07						U
252	0708012K	Logistics Support Activities	07	1,654				1,654	U
268	1203610K	Teleport Program	07	3,239				3,239	U
		Operational Systems Development		213,177				213,177	
271	0303150K	Global Command and Control System	08	86,750				86,750	U
		Software And Digital Technology Pilot Programs		86,750				86,750	
		Total Defense Information Systems Agency		396,750				396,750	

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Program Element Table of Contents (by Budget Activity then Line Item Number)

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

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Program Element Table of Contents (Alphabetically by Program Element Title)

Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 5: *System Development & Demonstration (SDD)*							**R-1 Program Element (Number/Name)** PE 0303141K *I Global Combat Support System*					
COST ($ in Millions)	**Prior Years**	**FY 2019**	**FY 2020**	**FY 2021 Base**	**FY 2021 OCO**	**FY 2021 Total**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**Cost To Complete**	**Total Cost**
Total Program Element	268.685	1.936	1.578	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
CS01: *Global Combat Support System*	268.685	1.936	1.578	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Program MDAP/MAIS Code: 483												

A. Mission Description and Budget Item Justification

Global Combat Support System - Joint (GCSS-J), is a key enabler for achieving Focused Logistics and is essential during peace, contingency, crisis, and war in support of the joint warfighter across the full range of military operations. GCSS-J, the Logistics System of Record, provides a Joint Logistics Common Operational Picture to ensure the right personnel, equipment, supplies, and support are in the right place at the right time and in the right quantities to mobilize, move, and sustain all elements of operating forces within a theater or operational area.

GCSS-J gathers data from authoritative sources to provide a fused, integrated, near real-time, multidimensional view of combat support and combat service support across joint capability areas. These efforts provide situational awareness of the battlespace and logistics pipeline (e.g., supply, deployment and distribution, engineering, etc.). Using GCSS-J, the joint logistics warfighter no longer needs to log into multiple legacy systems and manually gather data to compile reports. GCSS-J provides real time actionable information in the form of watchboards (e.g., fuels and munitions watchboards) and near real time information in the form of reports and mapping visualizations.

B. Program Change Summary ($ in Millions)

	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	2.512	1.578	1.708	-	1.708
Current President's Budget	1.936	1.578	0.000	-	0.000
Total Adjustments	-0.576	0.000	-1.708	-	-1.708
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.510	-			
• SBIR/STTR Transfer	-0.066	-			
• Realignment	-	-	-1.708	-	-1.708

Change Summary Explanation

The decrease of -$0.066 in FY 2019 reflects a transfer of funding to Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs and -$.510 was reprogrammed to support Other Transaction Authority (TOA) contract.

PE 0303141K: *Global Combat Support System*
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Exhibit R-2, **RDT&E Budget Item Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0303141K *I Global Combat Support System*	

The decrease of -$1.708 in FY 2021 is due to realignment of funds to PE 0303150K for JPES Phase 2 Modernization.

PE 0303141K: *Global Combat Support System*
Defense Information Systems Agency

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency										Date: February 2020	

Appropriation/Budget Activity 0400 I 5	R-1 Program Element (Number/Name) PE 0303141K I *Global Combat Support System*	Project (Number/Name) CS01 I *Global Combat Support System*

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
CS01: *Global Combat Support System*	268.685	1.936	1.578	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Global Combat Support System – Joint (GCSS-J) provides the warfighter with a single, end-to-end capability to manage and monitor personnel and equipment through the mobilization process. GCSS-J, the Logistics' System of Record, provides a Joint Logistics Common Operational Picture (JLogCOP), ensuring the right personnel, equipment, supplies, and support are in the right place, at the right time, and in the right quantities across the full spectrum of military operations.

GCSS-J gathers data from authoritative sources to provide fused, integrated, near real-time multidimensional view of combat support and combat service support across joint capability areas. These efforts provide situational awareness of the battlespace and logistics pipeline (e.g., Supply, Deployment and Distribution, Engineering, etc.). Using GCSS-J, the joint logistics warfighter no longer needs to log into multiple legacy systems and manually gather data to compile reports. GCSS-J provides real-time in the form of reports and mapping visualizations.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Global Combat Support System-Joint *Description:* GCSS-J is a key enabler for achieving Focused Logistics and is essential during peace, contingency, crisis, and war in support of the joint warfighter across the full range of military operations. GCSS-J, the Logistics System of Record, provides a Joint Logistics Common Operational Picture (LogCOP) to ensure the right personnel, equipment, supplies, and support are in the right place at the right time and in the right quantities to mobilize, move, and sustain all elements of operating forces within a theater or operational area. *FY 2020 Plans:* The GCSS-J PMO will continue to meet the Joint Staff (JS) J-4 approved and prioritized functional requirements to support the joint logistics community providing a fused, integrated, near real-time view of combat support and combat service support throughout the battlespace and the logistics pipeline through interoperability and connectivity of information system. *FY 2021 Plans:* N/A *FY 2020 to FY 2021 Increase/Decrease Statement:*	1.936	1.578	0.000

PE 0303141K: *Global Combat Support System*
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Exhibit R-2A, **RDT&E Project Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 5	**R-1 Program Element (Number/Name)** PE 0303141K *I Global Combat Support System*	**Project (Number/Name)** CS01 *I Global Combat Support System*

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021**
The decrease of -$1.578 from FY 2020 to FY 2021 is due to the termination of the program at the end of FY 2020. The funding has been realigned to PE0303150K Global Command and Control for Joint Planning and Execution Services (JPES) Phase 2 Modernization.			
Accomplishments/Planned Programs Subtotals	1.936	1.578	0.000

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
• O&M, DW/PE 0303141K: *O&M, DW*	15.174	14.717	-	-	-	-	-	-	-	14.717	0.000

Remarks

D. Acquisition Strategy

 N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Information Systems Agency			Date: February 2020
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0303141K / *Global Combat Support System*	**Project (Number/Name)** CS01 / *Global Combat Support System*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Product Development 1	C/T&M	Enterworks : Sterling, VA	8.745	-		-		-		-		-	0.000	8.745	8.745
Product Development 2	C/T&M	WFI (DSI) : Manassas, VA	4.125	-		-		-		-		-	0.000	4.125	4.125
Product Development 3	C/CPAF	NGIT : Herndon, VA	127.849	-		-		-		-		-	0.000	127.849	127.849
Product Development 4	C/T&M	SAIC : Falls Church, VA	17.061	-		-		-		-		-	0.000	17.061	17.061
Product Development 5	C/FFP	NGIT, : Reston, VA	27.051	-		-		-		-		-	0.000	27.051	27.051
Product Development 6	SS/FFP	UNISYS, : Falls Church, VA	16.472	-		-		-		-		-	0.000	16.472	16.472
Product Development 7	MIPR	FGM, : Reston, VA	5.482	-		-		-		-		-	0.000	5.482	5.482
Product Development 8	SS/FFP	Merlin, : McLean, VA	1.664	-		-		-		-		-	0.000	1.664	1.664
Product Development 9	MIPR	JDTC, : Ft. Eustis, VA	2.423	-		-		-		-		-	0.000	2.423	2.423
Product Development 10	MIPR	CSC, : Norfolk, VA	0.300	-		-		-		-		-	0.000	0.300	0.300
Product Development 11	C/FFP	Pragmatics : Reston, VA	14.770	1.198	May 2019	0.722	May 2020	-		-		-	0.000	16.690	17.266
Subtotal			225.942	1.198		0.722		-		-		-	0.000	227.862	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test & Evaluation 1	C/CPFF	COMTEK, : Sterling,VA	3.902	-		-		-		-		-	0.000	3.902	3.902
Test & Evaluation 2	MIPR	SSO, : Montgomery	0.500	-		-		-		-		-	0.000	0.500	0.500
Test & Evaluation 3	MIPR	DIA : WDC	3.785	-		-		-		-		-	0.000	3.785	3.785
Test & Evaluation 4	C/CPFF	Pragmatics : Pragmatics	1.684	-		-		-		-		-	0.000	1.684	1.684
Test & Evaluation 5	C/CPFF	AAC, Inc., : Vienna, VA	2.790	-		-		-		-		-	0.000	2.790	2.790

Exhibit R-3, **RDT&E Project Cost Analysis:** PB 2021 Defense Information Systems Agency | **Date:** February 2020

Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0303141K / *Global Combat Support System*	Project (Number/Name) CS01 / *Global Combat Support System*

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test & Evaluation 6	MIPR	JITC, : Ft. Huachuca, AZ	8.232	0.486	Oct 2018	0.616	Oct 2019	-		-		-	0.000	9.334	9.334
Test & Evaluation 7	MIPR	STRATCOM (DAA) : Bolling AFB, DC	1.132	0.157	Oct 2018	0.170	Oct 2019	-		-		-	0.000	1.459	1.459
Test & Evaluation 8	MIPR	DISA (TE LAB Support) : Fort Meade, MD	1.564	0.095	Oct 2018	0.070	Oct 2019	-		-		-	0.000	1.729	1.729
Test & Evaluation 9	MIPR	DISA FSO Security Testing Support : Fort Meade, MD	0.350	-		-		-		-		-	0.000	0.350	0.350
Subtotal			23.939	0.738		0.856		-		-		-	0.000	25.533	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Management Services 1	FFRDC	MITRE, : Vienna, VA	16.934	-		-		-		-		-	0.000	16.934	16.934
Management Services 2	SS/CPFF	UMD, : Eastern Shore, MD	1.021	-		-		-		-		-	0.000	1.021	1.021
Management Services 3	MIPR	IDA, : Alexandria, VA	0.749	-		-		-		-		-	0.000	0.749	0.749
Management Services 4	MIPR	JFCOM, : Norfolk, Va	0.100	-		-		-		-		-	0.000	0.100	0.100
Subtotal			18.804	-		-		-		-		-	0.000	18.804	N/A

	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	268.685	1.936	1.578	-	-	-	0.000	272.199	N/A

Remarks

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Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0303141K / *Global Combat Support System*	**Project (Number/Name)** CS01 / *Global Combat Support System*

	FY 2012				**FY 2013**				**FY 2014**				**FY 2015**				**FY 2016**				**FY 2017**				**FY 2018**			
	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
System Development & Testing - Increment 8																						███	███	███	███	███	███	███
Full Deployment Decision - Increment 8																												

	FY 2019				**FY 2020**				**FY 2021**				**FY 2022**				**FY 2023**				**FY 2024**				**FY 2025**			
	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
System Development & Testing - Increment 8	███	███	███	███	███	███																						
Full Deployment Decision - Increment 8					███	███	███																					

Exhibit R-4A, RDT&E Schedule Details: PB 2021 Defense Information Systems Agency			**Date:** February 2020	
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0303141K / *Global Combat Support System*		**Project (Number/Name)** CS01 / *Global Combat Support System*	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
System Development & Testing - Increment 8	2	2017	4	2020
Full Deployment Decision - Increment 8	4	2019	4	2020

Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 6: *RDT&E Management Support*					**R-1 Program Element (Number/Name)** PE 0208045K *I C4I Interoperability*							

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	0.000	0.000	0.000	59.813	-	59.813	55.938	57.363	57.948	58.643	Continuing	Continuing
T-30: *MRTFB Test and Evaluation*	0.000	0.000	0.000	7.831	-	7.831	7.816	8.032	8.071	8.119	Continuing	Continuing
T-40: *Major Range Test Facility Base Operations*	0.000	0.000	0.000	51.982	-	51.982	48.122	49.331	49.877	50.524	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Defense Information Systems Agency's Joint Interoperability Test Command (JITC) serves as the only joint element of the Department of Defense's (DoD's) Major Range and Test Facility Base (MRTFB) that is operated primarily for Information Technology and National Security Systems (IT/NSS) Test and Evaluation (T&E) support missions. JITC executes the T&E mission in support of Command, Control, Communications, Computers and Intelligence (C4I), and is the DoD's Sole Interoperability Certifier and the only Non-Service Operational Test Agency.

With a focus on T&E for IT, JITC has the unique mission to provide consistent, structured, and effective T&E services that include converged information environment, Cyber, Cloud services, Mobility and NSS. JITC also has the responsibility for ensuring Joint/Coalition interoperability; issuing interoperability certifications; conducting operational evaluations; maintaining a federated IT infrastructure as a MRTFB activity and providing direct interoperability support to the warfighter by ensuring Joint warfighting capabilities are interoperable and support mission needs.

B. Program Change Summary ($ in Millions)

	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	0.000	0.000	0.000	-	0.000
Current President's Budget	0.000	0.000	59.813	-	59.813
Total Adjustments	0.000	0.000	59.813	-	59.813
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustment	-	-	59.813	-	59.813

Change Summary Explanation

The increase of +$59.813 in FY 2021 is due to the transfer of program from Budget Activity (BA) 7 to BA 6 to accurately align the mission of the program.

PE 0208045K: *C4I Interoperability*
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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	

Appropriation/Budget Activity 0400 / 6					R-1 Program Element (Number/Name) PE 0208045K / C4I Interoperability					Project (Number/Name) T-30 / MRTFB Test and Evaluation		

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
T-30: *MRTFB Test and Evaluation*	0.000	0.000	0.000	7.831	-	7.831	7.816	8.032	8.071	8.119	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Defense Information Systems Agency (DISA), through the Joint Interoperability Test Command (JITC), manages the Department's Interoperability Test, Evaluation, and Certification process that is structured to provide meaningful and independent test results in order to increase stakeholder confidence. The objectives, of the Test and Evaluation (T&E) activities, are to validate that DISA's (and the Department's, where appropriate) deliverables have met operational requirements. The T&E activities target evaluation strategies in the design, development, operational, integration and/or sustainment aspects of every program requiring support. DISA's T&E efforts span a variety of test categories supporting DISA's delivery of Department-wide enterprise solutions as well as Service, Agency, and mission partner developmental, operational, Information Assurance, and interoperability testing, validation and certification efforts. These efforts are focused on T&E for Information Technology (IT) that includes the Joint Information Environment (JIE), Cyber, Cloud services, and Mobility.

As the Department of Defense (DoD) Joint Interoperability Certification Authority, JITC annually:
• Issues hundreds of interoperability testing and certification related products.
• Manages the scheduling and executes multiple annual distributed Joint Tactical Data Link hardware in the loop interoperability test events. These events are designed to evaluate, certify and re-certify Service/Agency Tactical Data systems.
• Reviews hundreds of Joint Capabilities Integration and Development System documents, interoperability support plans and Legacy Waiver requests on behalf of the DoD Chief Information Officer (CIO) and the Joint Staff.
• Serves as executive agent to DoD Interoperability Steering Group, in support of the DoD CIO, and uses this forum to coordinate policy, adjudicate issues, and to process Interim Certificates to Operate.
• Ensures interoperability test and certification standard practices and procedures are in accordance with DoD policy, and reviews and issues over 600 Joint interoperability certifications annually for DoD's Information Technology and National Security Systems (IT/NSS).
• Manages the scheduling and prioritization of multiple annual distributed Joint Tactical Data Link simulated test events using real components (hardware in the loop interoperability test events) designed to evaluate, certify and re-certify Service/Agency Tactical systems.

JITC provides interoperability test support to Joint, Coalition and Allied operations in theater by providing Interoperability test support within the area of responsibility and supports exercises intended to evaluate Joint, Coalition and Allied operations in, or planning to deploy to theater by:
• Providing on-demand rapid response contingency support to Regional Combatant Commands (COCOMs) as required, and conducting assessments of interoperability exercises.
• Conducting assessments during one of the largest interoperability exercises (the Endeavors).
• Broadening its support to the Joint Staff and functional COCOMs with a multitude of interoperability assessment services.
• Maintaining a 24x7 Warfighter Command, Control, Communications, Computers and Intelligence (C4I) Interoperability Hotline that connects warfighters to subject matter experts to resolve IT interoperability challenges.

Exhibit R-2A, **RDT&E Project Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 **/** 6	**R-1 Program Element (Number/Name)** PE 0208045K **/** *C4I Interoperability*	**Project (Number/Name)** T-30 **/** *MRTFB Test and Evaluation*

- Establishing the framework for the conduct of annual independent evaluations and the status of interoperability through DoD Interoperability Communications Exercises (DICE).
- Emulating a distributed Joint Task Force network, providing realism and operational significance during the assessments and evaluations of data integrity, interfacing and responsiveness coupled with efficient configuration tactics, techniques, and procedures.
- Including first responder local and federal communications as part of the task force.

As the only non-Service Operational Test Agency (OTA) within DoD, JITC conducts operational testing of IT/NSS under realistic conditions to determine the operational effectiveness, suitability, interoperability, and security; and independently assesses the operational impact of system issues on mission accomplishment. JITC is the OTA for DISA-managed programs, and also upon request serves as the OTA for other Agencies such as the Defense Logistics Agency, Department of Homeland Security, and the National Security Agency.

JITC designs Operational Test and Evaluation (OT&E) events to determine if IT/NSS meet user requirements, offering sustaining support services to users to assist Acquisition Program Managers with meeting their overall milestone objectives.

JITC focuses its efforts towards core T&E improvements, better T&E policy for IT/NSS and designing new test methodologies to better assess Enterprise Service systems, aligning with the Information Technology Service Management model evaluating fulfillment services for suitability.

The T&E project supports the strategy development and investment plans in support of maintaining, improving and operating the DISA Major Range and Test Facility Base (MRTFB). Specific goals for DISA's MRTFB each year are to:
- Integrate evolving technologies that are able to leverage efficiencies such as virtualization, enterprise elements such as Infrastructure as a Service and Platform as a Service, and the foundational Cyber assets mandated by the JIE.
- Expand test infrastructure and operations to allow for rapid, on-demand provisioning, and federation across the DoD and Cyber integration with enterprise environments.
- Design consistent, repeatable test methodologies that ensure efficient T&E on changing or emerging technologies.
- Provide T&E guidance/oversight to nearly 130 DISA programs, creating synergy and efficiencies across the large DISA IT portfolio, gaining insight in new technologies and commercial best practices.

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021**
Title: DoD's Joint Interoperability Certification Authority	-	-	6.911
Description: Plans and executes interoperability certifications for Department of Defense's (DoD)) Information Technology and National Security Systems (IT/NSS) by evaluating joint military operations, conformance to standards, and participating in developmental testing or executing purposefully planned Interoperability Test Events. ***FY 2021 Plans:***			

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0208045K / *C4I Interoperability*	**Project (Number/Name)** T-30 / *MRTFB Test and Evaluation*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Will evolve customer accessibility through enhanced T&E capabilities by employing automation technologies to include cloud services. Continue to reduce risk and identify/analyze trends by employing new technology and methodology to conduct data analysis in the operational environment. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** The increase of +$6.911 from FY 2020 to FY 2021 is due to transfer of program from BA 7 to BA 6 to accurately align the mission of the program. This transfer includes an increase +$0.129 that provides support to development of new methodologies for conducting interoperability assessments.			
Title: Operational Test and Evaluation ***Description:*** Conduct operational testing of IT/NSS under realistic operational conditions to determine the operational effectiveness, suitability, interoperability, and security of a particular system. Independently assesses the operational impact of system issues on mission accomplishment. ***FY 2021 Plans:*** Will enhance OT&E processes, procedures, and tools by increasing automation and utilizing virtualization as needed, to better evaluate performance and to improve operational testing capabilities for evolving requirements. Provide OT&E support to COCOMs, Military Services, and Defense Agencies as requested. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** The increase of +$0.800 from FY 2020 to FY 2021 is due to transfer of program from BA 7 to BA 6 to accurately align the mission of the program.	-	-	0.800
Title: Support to Warfighter ***Description:*** Provides pre/post-production evaluations including: collecting relevant data during a continuous monitoring effort, and providing on-the-spot evaluations of problem areas and viable mission-oriented solutions to warfighting COCOMs during exercises and contingency operations. ***FY 2021 Plans:*** Support will focus primarily on the Asia Pacific region, consistent with the National Defense Strategy. Will sustain a Warfighter Support capability sufficient to respond to critical fielded system issues only. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** The increase of +$0.120 from FY 2020 to FY 2021 is due to transfer of program from BA 7 to BA 6 to accurately align the mission of the program.	-	-	0.120
Accomplishments/Planned Programs Subtotals	-	-	7.831

Exhibit R-2A, **RDT&E Project Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 6	**R-1 Program Element (Number/Name)** PE 0208045K *I C4I Interoperability*	**Project (Number/Name)** T-30 *I MRTFB Test and Evaluation*

C. Other Program Funding Summary ($ in Millions)

 N/A

Remarks

D. Acquisition Strategy

 T&E Mission Support Services (MSS) cost plus and firm fixed price contract provides T&E support by performing a wide range of non-personal services to encompass testing, scientific, engineering, logistic, administrative, and ancillary support of the DISA T&E missions. The T&E MSS contract provides for expansion and contraction of staff years as workload dictates.

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency										Date: February 2020	

Appropriation/Budget Activity 0400 I 6				R-1 Program Element (Number/Name) PE 0208045K I C4I Interoperability				Project (Number/Name) T-40 I Major Range Test Facility Base Operations			

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
T-40: *Major Range Test Facility Base Operations*	0.000	0.000	0.000	51.982	-	51.982	48.122	49.331	49.877	50.524	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

As the only non-Service activity of the Department of Defense (DoD) Major Range and Test Facility Base (MRTFB), Defense Information Systems Agency (DISA) provides the only dedicated Information Technology (IT) environment investing in a single end-to-end infrastructure for testing the Enterprise Edge to the Tactical Edge. As an MRTFB, Joint Interoperability Test Command (JITC) provides tested IT infrastructure products to the DoD, Federal/non-Federal Government, Commercial vendors, and Allied partners.

The DISA MRTFB infrastructure:

• Encompasses two geographic locations (Ft. Huachuca, AZ; Ft. Meade, MD).

• 116K square feet of raised floor space comprised of multiple test environments and test networks supporting over 100 programs on an annual basis.

• Complies with multiple levels of security and is scaled to support approximately 1,000 annual testing events to evaluate the DoD's converged information environment, Cyber, Cloud services, Mobility, and National Security Systems (NSS).

• Encompasses a significant portfolio of reference implementations, test tools, and supporting IT systems to aid both test execution and data collection/analysis.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: MRTFB Improvements and Operations	-	-	51.982
Description: Information Technology and National Security Systems (IT/NSS), Command and Control (C2), Defense reform initiatives, and the Department of Defense's (DoD's) migration towards more agile development and acquisition of IT capabilities by providing Test and Evaluation (T&E) support, including infrastructure, testing capabilities and events, policies and processes to Regional Combatant Commands (COCOMS), Military Services, DoD Agencies, other Federal Government agencies, private industry, Coalition partners and allies. **FY 2021 Plans:** As an MRTFB, JITC will operate the DISA IT Test infrastructure standardized test bed at Fort George G. Meade, MD and Fort Huachuca, AZ. JITC will support the Agency and the Department by expanding the use of cloud technologies to provide seamless			

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Exhibit R-2A, **RDT&E Project Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
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B. Accomplishments/Planned Programs ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021**
distributed testing services and efficient use of testing equipment and resources. JITC maintain technical workforce, support base operations, communications, and operating expenses at each location. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** The increase of +$51.982 from FY 2020 to FY 2021 is due to transfer of program from BA 7 to BA 6 to accurately align the mission of the program. A decrease of -$4.917 is the result of a reduction in FTEs and a delay in cloud implementation and IT infrastructure sustainment and modernization efforts supporting T&E services.			
Accomplishments/Planned Programs Subtotals	-	-	51.982

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

A T&E Mission Support Services (MSS) cost plus and firm fixed price contract provides T&E support by performing a wide range of non-personal services to encompass testing, scientific, engineering, logistic, administrative, and ancillary support of the DISA T&E missions. The T&E MSS contract provides maximum flexibility and allow for expansion and contraction of staff years as workload dictates. An additional contract is a Federal Preferential Sole Source Procurement set-aside which provides consolidated facilities support.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 6: *RDT&E Management Support*					**R-1 Program Element (Number/Name)** PE 0305172K *I Combined Advanced Applications*							

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	29.198	21.363	58.667	30.824	-	30.824	6.472	6.001	5.764	5.884	Continuing	Continuing
CA1: *Combined Advanced Applications*	29.198	21.363	48.667	30.824	-	30.824	6.472	6.001	5.764	5.884	Continuing	Continuing
FM1: *Financial Management Systems*	0.000	0.000	10.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	10.000

A. Mission Description and Budget Item Justification

Combined Advanced Applications is classified and exhibit will be provided under a separate cover.

Financial Management Systems will acquire support for the modernization of the financial account management information system capability. The new procurement will use a single step to full capability approach and execute in accordance with the Component Acquisition Executive (CAE) Guideline for Projects. This Acquisition Strategy provides the business and technical management approach to achieve program objectives within resource constraints. The financial business area is currently supported by multiple legacy systems operating on platforms with associated performance issues such as high cost, technology support issues, unsupportable interoperability, and high risk of failure. In addition, various federal financial management and Department of Defense requirements (e.g., Business Enterprise Architecture (BEA)); the Treasury Department's Invoice Processing Platform).

B. Program Change Summary ($ in Millions)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	21.363	58.667	33.796	-	33.796
Current President's Budget	21.363	58.667	30.824	-	30.824
Total Adjustments	0.000	0.000	-2.972	-	-2.972
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Reprogrammings	-	-	-2.972	-	-2.972

Change Summary Explanation
Program is classified and exhibit will be provided under a separate cover.

PE 0305172K: *Combined Advanced Applications*
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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency										Date: February 2020	

Appropriation/Budget Activity 0400 *I* 6				R-1 Program Element (Number/Name) PE 0305172K *I Combined Advanced Applications*				Project (Number/Name) CA1 *I Combined Advanced Applications*			

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
CA1: *Combined Advanced Applications*	29.198	21.363	48.667	30.824	-	30.824	6.472	6.001	5.764	5.884	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

 Program is classified and exhibit will be provided under a separate cover.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Combined Advanced Applications	21.363	48.667	30.824
Description: Classified.			
FY 2020 Plans: Classified.			
FY 2021 Plans: Classified.			
FY 2020 to FY 2021 Increase/Decrease Statement: Classified.			
Accomplishments/Planned Programs Subtotals	21.363	48.667	30.824

C. Other Program Funding Summary ($ in Millions)

 N/A

Remarks

D. Acquisition Strategy

 Classified

PE 0305172K: *Combined Advanced Applications*
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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency										Date: February 2020	

Appropriation/Budget Activity 0400 I 6	R-1 Program Element (Number/Name) PE 0305172K I Combined Advanced Applications	Project (Number/Name) FM1 I Financial Management Systems

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
FM1: *Financial Management Systems*	0.000	0.000	10.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	10.000
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Financial Management Systems will acquire support for the modernization of the financial account management information system capability. The new procurement will use a single step to full capability approach and execute in accordance with the Component Acquisition Executive (CAE) Guideline for Projects. This Acquisition Strategy provides the business and technical management approach to achieve program objectives within resource constraints. The financial business area is currently supported by multiple legacy systems operating on platforms with associated performance issues such as high cost, technology support issues, unsupportable interoperability, and high risk of failure. In addition, various federal financial management and Department of Defense requirements (e.g., Business Enterprise Architecture (BEA); the Treasury Department's Invoice Processing Platform).

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Financial Management Systems - Test and Development *Description:* Provides development, testing, piloting and pre-deployment for integrated business solution for the modernization of the sensitive financial information platform capability for the DoD users. *FY 2020 Plans:* Develop, pilot, and test integrated capabilities and solutions to support the operational requirements of the defense wide financial communities user base. Supports such efforts as configuration Management, system engineering requirement's, and interoperability (IOP) and certification and system testing. *FY 2020 to FY 2021 Increase/Decrease Statement:* Decrease of -$10.000 from FY 2020 to FY 2021 is the result of a one-time increase in FY 2020 to develop, pilot and test solutions to support the operational requirements of the defense-wide financial communities user base being completed.	-	10.000	-
Accomplishments/Planned Programs Subtotals	-	10.000	-

C. Other Program Funding Summary ($ in Millions)
 N/A
Remarks

D. Acquisition Strategy
 N/A

PE 0305172K: *Combined Advanced Applications*
Defense Information Systems Agency

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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Information Systems Agency										Date: February 2020	

Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 6: *RDT&E Management Support*					R-1 Program Element (Number/Name) PE 0305208K *I Distributed Common Ground/Surface Systems*						

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	0.000	0.000	0.000	3.048	-	3.048	3.110	3.172	3.233	3.301	Continuing	Continuing
NF1: *Distributed Common Ground/Surface Systems*	0.000	0.000	0.000	3.048	-	3.048	3.110	3.172	3.233	3.301	Continuing	Continuing

A. Mission Description and Budget Item Justification

As the sole joint interoperability certification agent, the Joint Interoperability Test Command (JITC) established and maintains a Distributed Development and Test Enterprise (T&E) for the Department of Defense (DoD) Distributed Common Ground/Surface System (DCGS) program, as directed by the Office of the Under Secretary of Defense Intelligence (OUSD(I)). DCGS is an integral and critical component of the overall DoD Intelligence, Surveillance, and Reconnaissance interoperability and data integration strategy which provides world-wide capabilities to receive, process, exploit, and disseminate data from airborne and national reconnaissance sensors/platforms and commercial sources.

B. Program Change Summary ($ in Millions)

	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	0.000	0.000	0.000	-	0.000
Current President's Budget	0.000	0.000	3.048	-	3.048
Total Adjustments	0.000	0.000	3.048	-	3.048
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustment	-	-	3.048	-	3.048

Change Summary Explanation

The increase of +$3.048 in FY 2021 is due to transfer of program from Budget Activity (BA) 7 to BA 6 to accurately align the mission of the program.

PE 0305208K: *Distributed Common Ground/Surface System...*
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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency										Date: February 2020	

Appropriation/Budget Activity 0400 I 6				R-1 Program Element (Number/Name) PE 0305208K I Distributed Common Ground/Surface Systems						Project (Number/Name) NF1 I Distributed Common Ground/Surface Systems	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
NF1: *Distributed Common Ground/Surface Systems*	0.000	0.000	0.000	3.048	-	3.048	3.110	3.172	3.233	3.301	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Joint Interoperability Test Command (JITC) coordinates with the Military Services and Defense Intelligence Agencies to conduct Joint/Distributed Common Ground/ Surface System (DCGS) testing and analysis, including event coordination, configuration, instrumentation and integration functions on the Distributed Development and Test Enterprise (DDTE). Under the DCGS Governance, this effort, referred to as the DCGS Test and Evaluation (T&E) Focus Team (FT), is composed of three parts: the DDTE Focus Group, providing and sustaining a distributed development network; the Strategy Focus Group, looking at current and future net-enabled enterprise T&E methods; and the Execution Focus Group, which leverages the Strategy Focus Group's methodologies in executing DCGS Enterprise assessment events, such as the annual DCGS demonstration, ENTERPRISE CHALLENGE. These efforts improve systems engineering and T&E throughout all phases of the DCGS life-cycle, resulting in improved capabilities to share net-centric data and services between the DCGS Programs of Record (PoRs) and the overarching Defense Intelligence Information Enterprise (DI2E).

Operates and maintains the DDTE, providing DCGS PoRs a virtual, operationally-relevant assessment environment maintaining connectivity between Service facilities, National Agency capabilities, and Coalition partners. DDTE allows robust integration of modeling and simulation T&E capabilities across Joint DCGS events without introducing vulnerabilities to operational Command and Control networks and has enabled improvements in systems engineering, instrumentation and T&E throughout all phases of the DCGS life cycle.

DCGS PoRs and Coalition partners use the DDTE network, which supports the net-centric maturity assessment of the DCGS Enterprise under the DCGS Governance, to integrate architecture, standards, and capabilities for implementation of the DCGS Integration Backbone and support the migration to net-centricity, including DCGS Enterprise services for the Military Departments, DCGS-Special Operations Forces and the DCGS Intelligence Community. National Agency capabilities supporting DCGS include Geospatial Intelligence, Signals Intelligence, Measurement and Signature Intelligence and Human Intelligence, which are integrated and tested in the DDTE domain.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Distributed Common Ground/Surface Systems (DCGS) *FY 2020 Plans:* N/A *FY 2021 Plans:* Will revise and evolve test and evaluation (T&E) data collection techniques and analysis strategies in support of DCGS Enterprise community members acquisition programs' interoperability as they integrate capabilities and services solutions to address the	0.000	0.000	3.048

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency		Date: February 2020
Appropriation/Budget Activity 0400 I 6	**R-1 Program Element (Number/Name)** PE 0305208K I *Distributed Common Ground/Surface Systems*	**Project (Number/Name)** NF1 I *Distributed Common Ground/Surface Systems*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
operational gaps identified in the OUDS(I) sponsored Distributed Common Ground/Surface System Enterprise Capabilities Based Assessment. Continue to plan, develop and execute enterprise-level data collection during multiple yearly test events. Continue to support DDTE, provide enhanced functionality, expand T&E capability, and perform automated evaluations of net-centric capabilities with improved assessment methodologies and practices due to incorporating new technologies such as cloud computing, mobile technology, and "big data". Continue enhancement of instrumentation and automated data collection tools to support testing on multiple network domains and enclaves where the DCGS PoRs, National Agencies and Coalition Partners test and operate. Continue to develop T&E methodology and tools to support testing of enterprise cybersecurity solutions to determine if they comply with standards, support interoperability between the DCGS PoRs, and meet the DCGS Enterprise cybersecurity requirements. Continue to conduct compliance testing of data, metadata, and web services against established standards to enhance the sharing and promote reuse of net centric solutions. Continuing to expand TaaS capabilities that enable DCGS entities and other COIs to test for standards compliance during the development and acquisition processes. All data collected by these assessment efforts are reflected in an annual DCGS Enterprise Assessment Report that delineates how well the DCGS Enterprise shows progress over time in meeting the capabilities and closing the gaps reflected in the 2016 DCGS Enterprise Initial Capabilities Document. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** The increase of +$3.048 from FY 2020 to FY 2021 is due to transfer of program from BA 7 to BA 6 to accurately align the mission of the program. It includes an increase of +$0.067 that provides for minimal tech refresh of T&E infrastructure.			
Accomplishments/Planned Programs Subtotals	0.000	0.000	3.048

C. Other Program Funding Summary ($ in Millions)
 N/A
Remarks

D. Acquisition Strategy
 A T&E Mission Support Services (MSS) cost plus fixed fee contract provides T&E support by performing a wide range of non-personal services to encompass testing, scientific, engineering, logistic, administrative, and ancillary support of the DISA T&E missions. Since FY18, DCGS has transitioned to a cost plus fixed fee and firm fixed price Test, Evaluation and Certification contract (TEC).

PE 0305208K: *Distributed Common Ground/Surface System...*
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Exhibit R-2, **RDT&E Budget Item Justification:** PB 2021 Defense Information Systems Agency											**Date:** February 2020	
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 6: *RDT&E Management Support*						**R-1 Program Element (Number/Name)** PE 0903235K *I Joint Service Provider*						

COST ($ in Millions)	**Prior Years**	**FY 2019**	**FY 2020**	**FY 2021 Base**	**FY 2021 OCO**	**FY 2021 Total**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**Cost To Complete**	**Total Cost**
Total Program Element	4.309	4.884	3.090	3.138	-	3.138	2.992	2.989	3.007	3.070	Continuing	Continuing
JSP: *Joint Service Provider*	4.309	4.884	3.090	3.138	-	3.138	2.992	2.989	3.007	3.070	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Joint Service Provider (JSP) provides Information Technology (IT) infrastructure and office automation systems, components, supporting software, and IT support services for the Office of the Secretary of Defense (OSD), Joint Staff, Headquarters Department of the Army (HQDA), Washington Headquarters Services (WHS), Pentagon Force Protection Agency (PFPA), DoD Consolidated Adjudication Facility (DoD CAF), and other JSP-supported 4th Estate users and communities supported within the Pentagon Reservation and other areas in the National Capitol Region (NCR). RDT&E provides for the test, pilot, and development of new integrated business tools to enhance the JSP business processes and improve the delivery of IT services and capabilities. This activity executes JSP's testing environment to allow insertion of commercial off-the-shelf and government-managed software for all supported JSP services to include network transport, storage, compute, defensive cyber operations, Pentagon Installation Processing Node (IPN), and other components of the NCR's core network infrastructure. These efforts also provide mobile classified computing and communications platforms technology test and development for the immediate Office of the Secretary of Defense, enabling secured computing at residence, temporary and mobile locations around the world.

B. Program Change Summary ($ in Millions)

	FY 2019	**FY 2020**	**FY 2021 Base**	**FY 2021 OCO**	**FY 2021 Total**
Previous President's Budget	5.104	3.090	3.140	-	3.140
Current President's Budget	4.884	3.090	3.138	-	3.138
Total Adjustments	-0.220	0.000	-0.002	-	-0.002
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.034	-			
• SBIR/STTR Transfer	-0.186	-			
• General Reductions	-	-	-0.002	-	-0.002

Change Summary Explanation

Decrease of -$0.186 in FY 2019 is due to the transfer to Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs and -$0.034 decrease in contract support.

Decrease of -$0.002 in FY 2021 is due to reduction in technical contract support.

PE 0903235K: *Joint Service Provider*
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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency										Date: February 2020	

Appropriation/Budget Activity 0400 / 6				R-1 Program Element (Number/Name) PE 0903235K / *Joint Service Provider*				Project (Number/Name) JSP / *Joint Service Provider*			

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
JSP: *Joint Service Provider*	4.309	4.884	3.090	3.138	-	3.138	2.992	2.989	3.007	3.070	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Joint Service Provider (JSP) provides mobile classified computing and communications platforms technology test and development for the immediate Office of the Secretary of Defense, enabling secured computing at residence, temporary and mobile locations around the world.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Pentagon/National Captiol Region (NCR) Core Enterprise Services	4.166	-	-
Description: Provides development, test, and pre-deployment for JSP-supported services to include network transport, network security, computer network defense, intrusion detection, Pentagon Installation Processing Node (IPN), and other components of the Pentagon's core network infrastructure.			
Title: SECDEF Communications	0.103	0.105	0.107
Description: Provides mobile classified computing and communications platforms technology test and development for the immediate Office of the Secretary of Defense, enabling secured computing at residence, temporary and mobile locations around the world. *FY 2020 Plans:* Provide mobile classified computing and communications platforms technology test and development for the immediate Office of the Secretary of Defense, enabling secured computing at residence, temporary and mobile locations around the world. *FY 2021 Plans:* Continue to provide mobile classified computing and communications platforms technology test and development for the immediate Office of the Secretary of Defense, enabling secured computing at residence, temporary and mobile locations around the world. *FY 2020 to FY 2021 Increase/Decrease Statement:* The increase of +$0.002 from FY 2020 to FY 2021 is attributed to an increase to the Federally Funded Research and Development Center (FFRDC) MITRE/Johns Hopkins University Applied Physics Laboratory (JHU APL) contract support.			
Title: Business Solutions - Enterprise Services	0.615	-	-
Description: Provides development, testing, piloting, and pre-deployment support for integrated business tools that will enhance JSP-supported enterprise mission application environment.			

Exhibit R-2A, **RDT&E Project Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0903235K / *Joint Service Provider*	**Project (Number/Name)** JSP / *Joint Service Provider*

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021**
Title: Enterprise Initiative Test & Development	-	2.985	3.031
Description: This activity executes JSP's testing environment to allow insertion of commercial off the shelf and government managed software for all supported JSP services to include network transport, storage, compute, defensive cyber operations, Pentagon Installation Processing Node (IPN), and other components of the NCR's core network infrastructure. This effort allows informed investment in cyber defense, resilience, and the continued integration of cyber capabilities into the full spectrum of military operational needs required by the JSP supported user base and prioritize developing capabilities enabling a more resilient and survivable Department of Defense Information Network (DODIN) in the face of a dynamic and increasingly sophisticated threat environment. ***FY 2020 Plans:*** Develop, pilot, and test integrated capabilities and solutions to support the operational requirements of the JSP user base. Supports such efforts as adaptive security architecture, threat intelligence machine learning, runtime application self protection and Desktop as a Service. Improve delivery of IT services and capabilities of an increasingly mobile, application centric knowledge workforce JSP supports in a dynamic environment with advanced persistent cyber threats targeting DoD information networks (DODIN). ***FY 2021 Plans:*** Develop, pilot, and test integrated capabilities and solutions to support the operational requirements of the JSP user base. Supports such efforts as adaptive security architecture, threat intelligence machine learning, runtime application self protection and Desktop as a Service. Improve delivery of IT services and capabilities of an increasingly mobile, application centric knowledge workforce JSP supports in a dynamic environment with advanced persistent cyber threats targeting DoD information networks (DODIN). ***FY 2020 to FY 2021 Increase/Decrease Statement:*** The increase of +$0.046 from FY 2020 to FY 2021 is attributed to increased costs for FFRDC MITRE/JHU APL contract support.			
Accomplishments/Planned Programs Subtotals	4.884	3.090	3.138

C. Other Program Funding Summary ($ in Millions)
 N/A
Remarks

D. Acquisition Strategy
 N/A

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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	

Appropriation/Budget Activity
0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*

R-1 Program Element (Number/Name)
PE 0604532K *I Joint Artificial Intelligence Center (JAIC)*

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	0.000	0.000	183.834	132.058	-	132.058	128.049	136.045	145.045	154.755	Continuing	Continuing
JA1: *Joint Artificial Intelligence Center (JAIC)*	0.000	0.000	183.834	132.058	-	132.058	128.049	136.045	145.045	154.755	Continuing	Continuing

A. Mission Description and Budget Item Justification

The JAIC was established to preserve and expand our military advantage in support of the Department's 2018 National Defense Strategy (NDS). As a primarily executing body it will accelerate the delivery of Artificial Intelligence (AI) enabled capabilities, scale the Department-wide impact of AI, and synchronize Department of Defense (DoD) AI activities to expand Joint Force advantages. The JAIC mission is to accelerate the delivery of AI to achieve impact scaled across the DoD at relevant speed to transform the DoD and ensure the nation maintains a competitive advantage. JAIC capitalizes on Project Maven's efforts as the pathfinder AI initiative for the DoD to further critical AI architecture and prototyping to rapidly expand AI to other mission areas. As JAIC efforts prove relevant, they will expedite technology transition from the laboratory to operational use, and increase Joint Force capability. Most military data storage, utilization, and analytic tools and systems were designed pre-AI and require specialized integration to enable the insertion of algorithms into their software baseline. JAIC capabilities are commercial technology initiatives that insert commercial AI into existing programs of record.

JAIC will execute an initial sequence of cross-functional use cases to demonstrate value and create momentum, called National Mission Initiatives (NMI). NMIs will rapidly develop and deploy AI across the Joint Force for selected high-priority, pressing operational or business reform challenges. Additionally, JAIC will work closely with individual components to help identify, shape, and accelerate component-specific AI deployments, called Component Mission Initiatives (CMI). Both NMI and CMI efforts will include selecting commercial and academic partners for prototypes, and develop standardized processes with respect to data, testing and evaluation, and cybersecurity. JAIC will use lessons learned from these initial projects to establish new processes and standards that will be repeatable across additional projects and immediately relevant to the Joint Force. This will be done in collaboration with partners across technology companies, consulting firms, academia, government labs, Federally Funded Research and Development Centers (FFRDC), services, and international partners.

To support NDS, the JAIC will catalyze and develop AI capabilities to enhance readiness and lethality and ensure DoD maintains an advantage over adversaries. JAIC will spearhead this unique opportunity to expand the competitive space across all domains with AI. JAIC efforts will directly contribute to increased military readiness towards a more lethal Joint Force, it will strengthen alliances and attract new partners by focusing on global problems, and it will enable Departmental reform to increase performance and affordability. JAIC will cultivate workforce talent by recruiting, developing, and retaining high-quality personnel to enable the development and delivery of AI. This will bring critical skills into the department by drawing outside expertise, and leveraging small companies, start-ups, and universities. Implementing AI at a speed of relevance hinges on the ability to integrate AI better than our adversaries, and the JAIC will enable the Department to adapt AI into how it fights. JAIC will focus on speed of delivery, continuous adaptation, and frequent capability delivery sprints. To fully realize this potential, the JAIC will pioneer AI approaches across the full scale of the global enterprise in a manner that is jointly interoperable with allies, partners, military Services, and agencies. Specifically, JAIC will identify and implement new organizational approaches, establish key AI building blocks and standards, develop and attract AI talent, and introduce new operational models that will enable DoD to systematically take advantage of AI at enterprise scale. The JAIC will fulfill the National Security Strategy and NDS to ensure conventional overmatch through dual-use commercial technology and partnered DoD-developed AI. The JAIC will collaborate with non-governmental organizations, corporations, strategic influencers,

PE 0604532K: *Joint Artificial Intelligence Center (JA...*
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Exhibit R-2, **RDT&E Budget Item Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0604532K *I Joint Artificial Intelligence Center (JAIC)*	

and partners and allies. JAIC will seize the initiative to lead the world in the development and adoption of transformative defense AI solutions that are safe, ethical, and secure. JAIC will spearhead this effort, engaging with the best minds in government, the private sector, academia, and international community.

B. Program Change Summary ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021 Base**	**FY 2021 OCO**	**FY 2021 Total**
Previous President's Budget	0.000	208.834	34.134	-	34.134
Current President's Budget	0.000	183.834	132.058	-	132.058
Total Adjustments	0.000	-25.000	97.924	-	97.924
• Congressional General Reductions	-	-25.000			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustment	-	-	97.924	-	97.924

Change Summary Explanation

The decrease of -$25.000 in FY 2020 is due to a Congressional general reduction.

The increase of +$97.924 in FY 2021 is to accelerate delivery of Artificial Intelligence (AI) algorithms and upgrade AI capabilities for adoption by the Military Departments.

PE 0604532K: *Joint Artificial Intelligence Center (JA...*
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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	
Appropriation/Budget Activity 0400 *I* 7				**R-1 Program Element (Number/Name)** PE 0604532K *I Joint Artificial Intelligence Center (JAIC)*					**Project (Number/Name)** JA1 *I Joint Artificial Intelligence Center (JAIC)*			
COST ($ in Millions)	**Prior Years**	**FY 2019**	**FY 2020**	**FY 2021 Base**	**FY 2021 OCO**	**FY 2021 Total**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**Cost To Complete**	**Total Cost**
JA1: *Joint Artificial Intelligence Center (JAIC)*	0.000	0.000	183.834	132.058	-	132.058	128.049	136.045	145.045	154.755	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

.The JAIC was established to preserve and expand our military advantage in support of the Department's 2018 National Defense Strategy. As a primarily executing body it will accelerate the delivery of Artificial Intelligence (AI) enabled capabilities, scale the Department-wide impact of AI, and synchronize DoD AI activities to expand Joint Force advantages. The JAIC mission is to accelerate the delivery of AI to achieve impact scaled across the DoD at relevant speed to transform the DoD and ensure the nation maintains a competitive advantage. JAIC capitalizes on Project Maven's efforts as the pathfinder AI initiative for the DoD to further critical AI architecture and prototyping to rapidly expand AI to other mission areas. As JAIC efforts prove relevant, they will expedite technology transition from the laboratory to operational use, and increase Joint Force capability. Most military data storage, utilization, and analytic tools and systems were designed pre-AI and require specialized integration to enable the insertion of algorithms into their software baseline. JAIC capabilities are commercial technology initiatives that insert commercial AI into existing programs of record.

JAIC will execute an initial sequence of cross-functional use cases to demonstrate value and create momentum, called National Mission Initiatives (NMI). NMIs will rapidly develop and deploy AI across the Joint Force for selected high-priority, pressing operational or business reform challenges. Additionally, JAIC will work closely with individual components to help identify, shape, and accelerate component-specific AI deployments, called Component Mission Initiatives (CMI). Both NMI and CMI efforts will include selecting commercial and academic partners for prototypes, and develop standardized processes with respect to data, testing and evaluation, and cybersecurity. JAIC will use lessons learned from these initial projects to establish new processes and standards that will be repeatable across additional projects and immediately relevant to the Joint Force. This will be done in collaboration with partners across technology companies, consulting firms, academia, government labs, Federally Funded Research and Development Centers (FFRDC), services, and international partners.

To support the National Defense Strategy (NDS), the JAIC will catalyze and develop AI capabilities to enhance readiness and lethality and ensure DoD maintains an advantage over adversaries. JAIC will spearhead this unique opportunity to expand the competitive space across all domains with AI. JAIC efforts will directly contribute to increased military readiness towards a more lethal Joint Force, it will strengthen alliances and attract new partners by focusing on global problems, and it will enable Departmental reform to increase performance and affordability. JAIC will cultivate workforce talent by recruiting, developing, and retaining high-quality personnel to enable the development and delivery of AI. This will bring critical skills into the department by drawing outside expertise, and leveraging small companies, start-ups, and universities. Implementing AI at a speed of relevance hinges on the ability to integrate AI better than our adversaries, and the JAIC will enable the Department to adapt AI into how it fights. JAIC will focus on speed of delivery, continuous adaptation, and frequent capability delivery sprints. To fully realize this potential, the JAIC will pioneer AI approaches across the full scale of the global enterprise in a manner that is jointly interoperable with allies, partners, military Services, and agencies. Specifically, JAIC will identify and implement new organizational approaches, establish key AI building blocks and standards, develop and attract AI talent, and introduce new operational models that will enable DoD to systematically take advantage of AI at enterprise scale. The JAIC will fulfill the National Security Strategy and NDS to ensure conventional overmatch through dual-use commercial technology and partnered DoD-developed AI. The JAIC will collaborate with non-

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governmental organizations, corporations, strategic influencers, and partners and allies. JAIC will seize the initiative to lead the world in the development and adoption of transformative defense AI solutions that are safe, ethical, and secure. JAIC will spearhead this effort, engaging with the best minds in government, the private sector, academia, and international community.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Joint Artificial Intelligence Center (JAIC)	-	183.834	132.058

Description: JAIC develops, tests, prototypes and demonstrates innovative AI, Machine Learning (ML), data infrastructure, and model/algorithm test and assessment capabilities to integrate AI capabilities across numerous domains and technical areas including maintenance and supply chain, personnel recovery, infrastructure assessment, geospatial monitoring during disaster, and cyber sense making. JAIC develops and evaluates integrated prototype technologies in realistic operating environments with DoD entities to assess the performance or cost reduction potential of applying such advanced technology to scale across multiple services. JAIC does this by aligning rapid prototype projects under NMIs and leverages existing commercial technology for DoD use, built upon a common architecture that enables the DoD to rapidly scale AI capability.

FY 2020 Plans:
JAIC continues AI enabled product delivery to enable the National Defense Strategy across multiple National Mission Initiative (NMI) focus areas. JAIC continues to deliver AI Capability lines of effort begun during FY2019 in the areas of Predictive Maintenance (PMx) and Humanitarian Assistance and Disaster Relief (HA/DR), and expand into the National Mission Initiative Areas of Cyber Sense-making, Intelligence Business Automation, Joint Warfighting and Predictive Health. Second, the JAIC continues to build the Joint Common Foundation (JCF), a cloud enabler that provides foundational AI tools and to enable centralized direction, and decentralized development and experimentation. JAIC will develop and harden the JCF Development and Test environments to provide reusable AI workspaces, development tools, data repository and data ingestion and conditioning. Third, the JAIC will grow into the DoD AI Center of Excellence brokering partnerships among AI stakeholders, growing DoD-wide expertise in AI engineering, mathematics, cognitive services and data science, and providing a governance framework for synchronizing the DoD AI strategy and the implementation of FY2019 NDAA Section 238 tasks.
The JAIC continues the Predictive Maintenance (PMx) NMI begun in FY19 to improve the availability of military airframes by minimizing downtime for maintenance. In FY20, the JAIC will work with the Army to operationalize an AI-enabled advance engine health model to replace imprecise, manually intensive aircraft maintenance schedule. AI-enabled predicted engine failures will allow operational planners, program offices, and supply personnel to anticipate and provide maintenance intervention ahead of otherwise reactive and costly depot maintenance. In FY20, the JAIC will work with stake holders to analyze and reform existing workflows, perform environmental data analysis and identify alternative ways to create a user interface for maintenance stakeholders to leverage high performance computing results to better anticipate fleet health and availability.
The JAIC continues the HA/DR NMI begun in FY19 to create AI-enabled geo-rectified disaster response maps in minutes rather than hours or days. This capability will be used to transform disaster center response operations that currently rely on time consuming, manually curated maps to identify disaster perimeters (e.g. fire or flood lines), vulnerable infrastructure and to direct

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency		Date: February 2020
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
first responders with greater speed, precision and agility. In FY20 the JAIC will work with component transition partners to test end-to-end integration of AI model performance in delivering Keyhole Markup Language (KML) map layers for use in response center's Common Operating Picture (COP). This will require the test and evaluation of each part of the AI pipeline from sensors, to models, to integrating data feeds and ultimately designing a user interface that emergency response operators will use to understand, edit, validate and employ the use of AI-enabled map layers to protect infrastructure and save lives. In FY20 the JAIC will begin the Joint Warfighting NMI to increase the speed, precision and agility of warfighting through improved Joint All-Domain Command and Control (JADC2), the autonomous application of systems, sensors, and targeting solutions, and accelerated AI-enabled mission command. Currently, structuring and organizing operations and intelligence data sources is manual, slow and imprecise. The Joint Warfighting NMI will develop an application platform for JADC2 using open-API tools to automate the fusion and curation of a unified purpose-built information set. During FY20, the Joint Warfighting NMI will conduct an exhaustive assessment of current tools, techniques and data sources within scope for the JADC2 platform, build a viable architecture and repeatable data curation and fusion pipeline. This open API data fusion platform, will provide the foundation for future AI enabled workflows related to the identification, tracking and targeting within a well understood and appropriately governed data-driven command and control eco system. In FY20 the JAIC will begin the Warfighter Health NMI to accelerate health classification, individual diagnoses, and enable resilient field medicine. AI enabled capabilities can enable population inferences about treatments, readiness, and work conditions with greater speed and precision. In FY20 this NMI will focus on building a structured Medical Readiness repository of data that fuses multiple sources of health care, physical performance and veterans affairs assessments in order to leverage AI capabilities to reduce the time it takes to perform Readiness and Disability Adjudications hours to minutes per warfighter. The Warfighter Health NMI will create a repeatable AI architecture and pipeline for classifying disability conditions during FY20, setting the conditions for FY21. ***FY 2021 Plans:*** JAIC will begin to transition the lines of effort in the areas of Predictive Maintenance (PMx) and Humanitarian Assistance and Disaster Relief (HA/DR) to service and component partners. These capabilities are expected to be available on the JCF for reuse by many. As soon as an NMI has fully transitioned ongoing lines of effort, those JAIC resources will be aligned to kick off new AI Capability lines of effort in accordance with the direction of the DOD AI ESG. The JAIC will mature AI enabled capabilities in the National Mission Initiative Areas of Cyber Sense-making, Intelligence Business Automation, Joint Warfighting and Predictive Health and will begin to plan and prepare for their transition to component transition partners. The JAIC will begin up to 5 new lines of effort within the six National Mission areas. By FY21, 90% of NMIs Development and Test will be accomplished in the JCF. The JCF will provide a collaboration portal for the DoD, a registry for DoD AI Projects and optimized JCF virtual environments provisioned with the right tools, suited to the users and developers assigned to given project. In FY21 the JCF will begin testing capabilities on the SIPR domain.			

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency		Date: February 2020
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
In FY21 the JAIC will continue the Cyber Sense-making NMI that was begun in FY20 to shrink timelines for cyber-threat situational awareness using AI anomaly detection and network exploration techniques. In FY21 the NMI will leverage the CSSP gold standard benchmark dataset, and the completed GOTS assessments o AI-enabled cyber threat detection applications to deploy the highest performing tools and models, along with the lessons learned, to the Joint Common Foundation for wide-spread adoption. In FY21 the JAIC will begin the Intelligent Business Automation (IBA) NMI to increase the effectiveness and efficiency of routine tasks by enabling DoD staff to use robotic process automation (RPA) and other AI tools. In FY21, based on the most promising RPA technologies and workflows, this NMI will gain temporary authority to operate (ATO) and authority to connect (ATC), and will conduct operational experiments. The Intelligent Business Automation (IBA) will deliver a platform of Robotic Process Automation (RPA) services and platform to save manhours, reduce routine errors in back-office processes. In FY21 the JAIC will continue the Joint Warfighting NMI started in FY20 to increase the speed, precision and agility of warfighting through improved Joint All-Domain Command and Control (JADC2), the autonomous application of systems, sensors, and targeting solutions, and accelerated AI-enabled mission command. The Joint Warfighting NMI will continue to develop and mature the application platform for JADC2 using open-API tools to automate the fusion and curation of a unified purpose-built information set. Based on the FY20 assessment of current tools, techniques and data sources within scope for the JADC2 platform, the approved architecture and a repeatable data curation and fusion pipeline, the JW NMI will design and build AI enabled workflows related to the identification, tracking and targeting within a well understood and appropriately governed data-driven command and control eco system. In FY21 the JAIC will continue the Warfighter Health NMI to accelerate health classification, individual diagnoses, and enable resilient field medicine. In FY21, this NMI will leverage the structured Medical Readiness repository of data created in FY20 to reduce the time it takes to perform Readiness and Disability Adjudications hours to minutes per warfighter. In FY21 this NMI will expand on early successes dynamically classifying disabling conditions. The NMI will leverage the Medical Readiness data, architecture, and repeatable AI pipeline to train a machine to recognize all 50 categorically disabling conditions, in anticipation of wide deployment during subsequent fiscal years.			
FY 2020 to FY 2021 Increase/Decrease Statement: The decrease of -$51.776 from FY 2020 to FY 2021 reflects the transfer of several enhance AI-enabled capabilities within the National Mission Initiatives (NMI) begun in FY 2020 in the areas of Humanitarian Assistance and Disaster Relief, Predictive Maintenance, and Cyber Sensemaking.			
Accomplishments/Planned Programs Subtotals	-	183.834	132.058

C. Other Program Funding Summary ($ in Millions)

 N/A

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency		Date: February 2020
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C. Other Program Funding Summary ($ in Millions)

Remarks

D. Acquisition Strategy

 The JAIC acquisition, management, and contracting strategy follows guidance outlined in the DoD 5000 series directives, Federal Acquisition Regulation (FAR) and FAR supplement policies and procedures. Management uses project management tools and meetings to ensure delivery of stated capabilities and performance criteria.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Information Systems Agency			Date: February 2020

Appropriation/Budget Activity 0400 I 7	R-1 Program Element (Number/Name) PE 0604532K I *Joint Artificial Intelligence Center (JAIC)*	Project (Number/Name) JA1 I *Joint Artificial Intelligence Center (JAIC)*

Product Development ($ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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
Product Development	C/Various	TBD : TBD	-	-		183.834	Mar 2020	132.058	Mar 2021	-		132.058	Continuing	Continuing	Continuing
		Subtotal	-	-		183.834		132.058		-		132.058	Continuing	Continuing	N/A

	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	-	183.834	132.058	-	132.058	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2021 Defense Information Systems Agency		Date: February 2020
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	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
Joint Artificial Intelligence Center (JAIC)																												
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Exhibit R-4A, **RDT&E Schedule Details:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
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Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Joint Artificial Intelligence Center (JAIC)				
Joint Artificial Intelligence Center (JAIC)	2	2020	4	2025

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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*					**R-1 Program Element (Number/Name)** PE 0208045K *I C4I Interoperability*							
COST ($ in Millions)	**Prior Years**	**FY 2019**	**FY 2020**	**FY 2021 Base**	**FY 2021 OCO**	**FY 2021 Total**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**Cost To Complete**	**Total Cost**
Total Program Element	809.164	61.208	64.122	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
T30: *MRTFB Test and Evaluation*	185.061	7.809	7.584	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
T40: *Major Range Test Facility Base Operations*	624.103	53.399	56.538	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Defense Information Systems Agency's Joint Interoperability Test Command (JITC) serves as the only joint element of the Department of Defense's (DoD's) Major Range and Test Facility Base (MRTFB) that is operated primarily for Information Technology and National Security Systems (IT/NSS) Test and Evaluation (T&E) support missions. JITC executes the T&E mission in support of Command, Control, Communications, Computers and Intelligence (C4I), and is the DoD's Sole Interoperability Certifier and the only Non-Service Operational Test Agency.

With a focus on T&E for IT, JITC has the unique mission to provide consistent, structured, and effective T&E services that include converged information environment, Cyber, Cloud services, Mobility and NSS. JITC also has the responsibility for ensuring Joint/Coalition interoperability; issuing interoperability certifications; conducting operational evaluations; maintaining a federated IT infrastructure as a MRTFB activity and providing direct interoperability support to the warfighter by ensuring Joint warfighting capabilities are interoperable and support mission needs.

B. Program Change Summary ($ in Millions)

	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	62.814	64.122	62.364	-	62.364
Current President's Budget	61.208	64.122	0.000	-	0.000
Total Adjustments	-1.606	0.000	-62.364	-	-62.364
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.697	-			
• SBIR/STTR Transfer	-0.909	-			
• Adjustments	-	-	-62.364	-	-62.364

Change Summary Explanation

Decrease of -$0.909 in FY 2019 reflects a transfer of funding to Small Business Innovation Reaearch (SBIR) and Small Business Technology Transfer (STTR) programs and a decrease of -$0.697 was achieved by efficiencies gained in Test and Evaluation infrastructure modernization efforts.

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Exhibit R-2, **RDT&E Budget Item Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0208045K *I C4I Interoperability*	

The decrease of -$62.364 in FY 2021 is due to transfer of program from Budget Activity (BA) 7 to BA 6 to accurately align the mission of the program.

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	

Appropriation/Budget Activity 0400 / 7					R-1 Program Element (Number/Name) PE 0208045K / C4I Interoperability					Project (Number/Name) T30 / MRTFB Test and Evaluation		

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
T30: *MRTFB Test and Evaluation*	185.061	7.809	7.584	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Defense Information Systems Agency (DISA), through the Joint Interoperability Test Command (JITC), manages the Department's Interoperability Test, Evaluation, and Certification process that is structured to provide meaningful and independent test results in order to increase stakeholder confidence. The objectives, of the Test and Evaluation (T&E) activities, are to validate that DISA's (and the Department's, where appropriate) deliverables have met operational requirements. The T&E activities target evaluation strategies in the design, development, operational, integration and/or sustainment aspects of every program requiring support. DISA's T&E efforts span a variety of test categories supporting DISA's delivery of Department-wide enterprise solutions as well as Service, Agency, and mission partner developmental, operational, Information Assurance, and interoperability testing, validation and certification efforts. These efforts are focused on T&E for Information Technology (IT) that includes the Joint Information Environment (JIE), Cyber, Cloud services, and Mobility.

As the Department of Defense (DoD) Joint Interoperability Certification Authority, JITC annually:
• Issues hundreds of interoperability testing and certification related products.
• Manages the scheduling and executes multiple annual distributed Joint Tactical Data Link hardware in the loop interoperability test events. These events are designed to evaluate, certify and re-certify Service/Agency Tactical Data systems.
• Reviews hundreds of Joint Capabilities Integration and Development System documents, interoperability support plans and Legacy Waiver requests on behalf of the DoD Chief Information Officer (CIO) and the Joint Staff.
• Serves as executive agent to DoD Interoperability Steering Group, in support of the DoD CIO, and uses this forum to coordinate policy, adjudicate issues, and to process Interim Certificates to Operate.
• Ensures interoperability test and certification standard practices and procedures are in accordance with DoD policy, and reviews and issues over 600 Joint interoperability certifications annually for DoD's Information Technology and National Security Systems (IT/NSS).
• Manages the scheduling and prioritization of multiple annual distributed Joint Tactical Data Link simulated test events using real components (hardware in the loop interoperability test events) designed to evaluate, certify and re-certify Service/Agency Tactical systems.

JITC provides interoperability test support to Joint, Coalition and Allied operations in theater by providing Interoperability test support within the area of responsibility and supports exercises intended to evaluate Joint, Coalition and Allied operations in, or planning to deploy to theater by:
• Providing on-demand rapid response contingency support to Regional Combatant Commands (COCOMs) as required, and conducting assessments of interoperability exercises.
• Conducting assessments during one of the largest interoperability exercises (the Endeavors).
• Broadening its support to the Joint Staff and functional COCOMs with a multitude of interoperability assessment services.
• Maintaining a 24x7 Warfighter Command, Control, Communications, Computers and Intelligence (C4I) Interoperability Hotline that connects warfighters to subject matter experts to resolve IT interoperability challenges.

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Exhibit R-2A, **RDT&E Project Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
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• Establishing the framework for the conduct of annual independent evaluations and the status of interoperability through DoD Interoperability Communications Exercises (DICE).
• Emulating a distributed Joint Task Force network, providing realism and operational significance during the assessments and evaluations of data integrity, interfacing and responsiveness coupled with efficient configuration tactics, techniques, and procedures.
• Including first responder local and federal communications as part of the task force.

As the only non-Service Operational Test Agency (OTA) within DoD, JITC conducts operational testing of IT/NSS under realistic conditions to determine the operational effectiveness, suitability, interoperability, and security; and independently assesses the operational impact of system issues on mission accomplishment. JITC is the OTA for DISA-managed programs, and also upon request serves as the OTA for other Agencies such as the Defense Logistics Agency, Department of Homeland Security, and the National Security Agency.

JITC designs Operational Test and Evaluation (OT&E) events to determine if IT/NSS meet user requirements, offering sustaining support services to users to assist Acquisition Program Managers with meeting their overall milestone objectives.

JITC focuses its efforts towards core T&E improvements, better T&E policy for IT/NSS and designing new test methodologies to better assess Enterprise Service systems, aligning with the Information Technology Service Management model evaluating fulfillment services for suitability.

The T&E project supports the strategy development and investment plans in support of maintaining, improving and operating the DISA Major Range and Test Facility Base (MRTFB). Specific goals for DISA's MRTFB each year are to:
• Integrate evolving technologies that are able to leverage efficiencies such as virtualization, enterprise elements such as Infrastructure as a Service and Platform as a Service, and the foundational Cyber assets mandated by the JIE.
• Expand test infrastructure and operations to allow for rapid, on-demand provisioning, and federation across the DoD and Cyber integration with enterprise environments.
• Design consistent, repeatable test methodologies that ensure efficient T&E on changing or emerging technologies.
• Provide T&E guidance/oversight to nearly 130 DISA programs, creating synergy and efficiencies across the large DISA IT portfolio, gaining insight in new technologies and commercial best practices.

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021**
Title: DoD's Joint Interoperability Certification Authority	6.889	6.664	-
Description: Plans and executes interoperability certifications for Department of Defense's (DoD)) Information Technology and National Security Systems (IT/NSS) by evaluating joint military operations, conformance to standards, and participating in developmental testing or executing purposefully planned Interoperability Test Events. *FY 2020 Plans:*			

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency		Date: February 2020
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Evolve customer accessibility through enhanced T&E capabilities by employing automation technologies to include cloud services. Continue to reduce risk and identify/analyze trends by employing new technology and methodology to conduct data analysis in the operational environment. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** The decrease of -$6.664 from FY 2020 to FY 2021 is due to transfer of program from BA 7 to BA 6 to accurately align the mission of the program.			
Title: Operational Test and Evaluation ***Description:*** Conduct operational testing of IT/NSS under realistic operational conditions to determine the operational effectiveness, suitability, interoperability, and security of a particular system. Independently assesses the operational impact of system issues on mission accomplishment. ***FY 2020 Plans:*** Will provide OT&E support for process, procedures, and tools by increasing automation and utilizing virtualization as needed, to better evaluate performance and to improve operational testing capabilities for evolving requirements. Will continue to provide OT&E support to COCOMs, Military Services, and Defense Agencies as requested. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** The decrease of -$0.800 in FY 2020 to F2021 is due to transfer of program from BA 7 to BA 6 to accurately align the mission of the program.	0.800	0.800	-
Title: Support to Warfighter ***Description:*** Provides pre/post-production evaluations including: collecting relevant data during a continuous monitoring effort, and providing on-the-spot evaluations of problem areas and viable mission-oriented solutions to warfighting COCOMs during exercises and contingency operations. ***FY 2020 Plans:*** Support to be focused primarily on the Asia Pacific region, consistent with the National Defense Strategy. Will sustain a Warfighter Support capability sufficient to respond to critical fielded system issues only. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** The decrease of -$0.120 from FY 2020 to FY 2021 is due to transfer of program from BA 7 to BA 6 to accurately align the mission of the program.	0.120	0.120	-
Accomplishments/Planned Programs Subtotals	7.809	7.584	-

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C. Other Program Funding Summary ($ in Millions)

 N/A

Remarks

D. Acquisition Strategy

 T&E Mission Support Services (MSS) cost plus and firm fixed price contract provides T&E support by performing a wide range of non-personal services to encompass testing, scientific, engineering, logistic, administrative, and ancillary support of the DISA T&E missions. The T&E MSS contract provides for expansion and contraction of staff years as workload dictates.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Information Systems Agency				Date: February 2020

Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0208045K / C4I Interoperability	Project (Number/Name) T30 / MRTFB Test and Evaluation

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test and Evaluation	C/T&M	Northop Grumman Mission System : FT Huachuca, AZ	36.487	-		-		-		-		-	0.000	36.487	-
Test and Evaluation	C/T&M	Interop Joint Venture : FT Huachuca, AZ	44.342	-		-		-		-		-	0.000	44.342	-
Test and Evaluation	C/T&M	Northop Grumman Technology : FT Huachuca, AZ	25.831	-		-		-		-		-	0.000	25.831	-
Test and Evaluation	C/Various	Various : Various	15.076	-		1.529	Oct 2019	-		-		-	0.000	16.605	-
Test and Evaluation	Option/ CPFF	ALION SCIENCE & TECH CORP : Various	0.026	0.010	Oct 2018	-		-		-		-	0.000	0.036	-
Test and Evaluation	Option/ CPFF	AMERICAN SYSTEMS CORP : Various	0.346	0.080	Oct 2018	-		-		-		-	0.000	0.426	-
Test and Evaluation	Option/ CPFF	MANTECH TELECOMMUNICATIONS AND INFORMATION : Various	1.408	0.305	Oct 2018	-		-		-		-	0.000	1.713	-
Test and Evaluation	Option/ CPFF	OBERON ASSOCIATES : Various	0.285	0.072	Oct 2018	-		-		-		-	0.000	0.357	-
Test and Evaluation	Option/ CPFF	TASC, INC : Various	5.110	1.132	Oct 2018	-		-		-		-	0.000	6.242	-
Subtotal			128.911	1.599		1.529		-		-		-	0.000	132.039	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Information Systems Agency												Date: February 2020	

Appropriation/Budget Activity
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R-1 Program Element (Number/Name)
PE 0208045K / C4I Interoperability

Project (Number/Name)
T30 / MRTFB Test and Evaluation

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Managment Services	C/Various	Defense Information Systems Agency : Various	56.150	6.210	Oct 2018	6.055	Oct 2019	-		-		-	0.000	68.415	-
Subtotal			56.150	6.210		6.055		-		-		-	0.000	68.415	N/A

	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	185.061	7.809	7.584	-	-	-	0.000	200.454	N/A

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2021 Defense Information Systems Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0208045K / C4I Interoperability	Project (Number/Name) T30 / MRTFB Test and Evaluation

	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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

MRTFB Test and Evalauation

- Provide Operational Test & Evaluation (OT&E) of DISA acquired systems
- Conduct Joint interoperability test and certification on IT/NSS using the Joint Family of Tactical Data Link (TDL)
- Operate 24/7 Interoperability Hotline
- Provide Joint/Combined Interoperability Test support to Combatant Commanders
- Provide JIE Compliance Test and Evaluation framework and infrastructure
- Provide Cyberspace Test and Evaluation framework and infrastructure
- Plan and conduct the Defense Interoperability Communications Exercise (DICE)

	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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

MRTFB Test and Evalauation

- Provide Operational Test & Evaluation (OT&E) of DISA acquired systems
- Conduct Joint interoperability test and certification on IT/NSS using the Joint Family of Tactical Data Link (TDL)
- Operate 24/7 Interoperability Hotline
- Provide Joint/Combined Interoperability Test support to Combatant Commanders

Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0208045K / C4I Interoperability	**Project (Number/Name)** T30 / MRTFB Test and Evaluation

	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
Provide JIE Compliance Test and Evaluation framework and infrastructure	███				███																							
Provide Cyberspace Test and Evaluation framework and infrastructure	███				███																							
Plan and conduct the Defense Interoperability Communications Exercise (DICE)	███				███																							

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Exhibit R-4A, RDT&E Schedule Details: PB 2021 Defense Information Systems Agency				Date: February 2020
Appropriation/Budget Activity 0400 *I* 7		**R-1 Program Element (Number/Name)** PE 0208045K *I C4I Interoperability*	**Project (Number/Name)** T30 *I MRTFB Test and Evaluation*	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
MRTFB Test and Evalauation				
Provide Operational Test & Evaluation (OT&E) of DISA acquired systems	1	2017	4	2020
Conduct Joint interoperability test and certification on IT/NSS using the Joint Family of Tactical Data Link (TDL)	1	2017	4	2020
Operate 24/7 Interoperability Hotline	1	2017	4	2020
Provide Joint/Combined Interoperability Test support to Combatant Commanders	2	2017	4	2020
Provide JIE Compliance Test and Evaluation framework and infrastructure	1	2017	4	2020
Provide Cyberspace Test and Evaluation framework and infrastructure	1	2017	4	2020
Plan and conduct the Defense Interoperability Communications Exercise (DICE)	3	2017	4	2020

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	

| Appropriation/Budget Activity 0400 I 7 | | | | R-1 Program Element (Number/Name) PE 0208045K I C4I Interoperability | | | | | Project (Number/Name) T40 I Major Range Test Facility Base Operations | | | |

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
T40: *Major Range Test Facility Base Operations*	624.103	53.399	56.538	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

As the only non-Service activity of the Department of Defense (DoD) Major Range and Test Facility Base (MRTFB), Defense Information Systems Agency (DISA) provides the only dedicated Information Technology (IT) environment investing in a single end-to-end infrastructure for testing the Enterprise Edge to the Tactical Edge. As an MRTFB, Joint Interoperability Test Command (JITC) provides tested IT infrastructure products to the DoD, Federal/non-Federal Government, Commercial vendors, and Allied partners.

The DISA MRTFB infrastructure:

• Encompasses two geographic locations (Ft. Huachuca, AZ; Ft. Meade, MD).

• 116K square feet of raised floor space comprised of multiple test environments and test networks supporting over 100 programs on an annual basis.

• Complies with multiple levels of security and is scaled to support approximately 1,000 annual testing events to evaluate the DoD's converged information environment, Cyber, Cloud services, Mobility, and National Security Systems (NSS).

• Encompasses a significant portfolio of reference implementations, test tools, and supporting IT systems to aid both test execution and data collection/analysis.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: MRTFB Improvements and Operations	53.399	56.538	-
Description: Information Technology and National Security Systems (IT/NSS), Command and Control (C2), Defense reform initiatives, and the Department of Defense's (DoD's) migration towards more agile development and acquisition of IT capabilities by providing Test and Evaluation (T&E) support, including infrastructure, testing capabilities and events, policies and processes to Regional Combatant Commands (COCOMS), Military Services, DoD Agencies, other Federal Government agencies, private industry, Coalition partners and allies. *FY 2020 Plans:* As an MRTFB, JITC will continue to operate the DISA IT Test infrastructure standarized test bed at Fort George G. Meade, MD and Fort Huachuca, AZ. JITC will continue to support the Agency and the Department by expanding the use of cloud technologies			

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Exhibit R-2A, **RDT&E Project Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0208045K *I C4I Interoperability*	**Project (Number/Name)** T40 *I Major Range Test Facility Base Operations*

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021**
to provide seamless distributed testing services and efficient use of testing equipment and resources. JITC will continue to maintain technical workforce, support base operations, communications, and operating expenses at each location. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** The decrease of -$56.538 from FY 2020 to FY 2021 is due to transfer of program from BA 7 to BA 6 to accurately align the mission of the program.			
Accomplishments/Planned Programs Subtotals	53.399	56.538	-

C. Other Program Funding Summary ($ in Millions)
 N/A
Remarks

D. Acquisition Strategy

 A T&E Mission Support Services (MSS) cost plus and firm fixed price contract provides T&E support by performing a wide range of non-personal services to encompass testing, scientific, engineering, logistic, administrative, and ancillary support of the DISA T&E missions. The T&E MSS contract provides maximum flexibility and allow for expansion and contraction of staff years as workload dictates. An additional contract is a Federal Preferential Sole Source Procurement set-aside which provides consolidated facilities support.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Information Systems Agency													Date: February 2020	
Appropriation/Budget Activity 0400 *I* 7				**R-1 Program Element (Number/Name)** PE 0208045K *I* C4I Interoperability						**Project (Number/Name)** T40 *I Major Range Test Facility Base Operations*				

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Test and Evaluation 1	C/T&M	Northrop Grumman Mission System : Ft. Huachuca, AZ	75.279	-		-		-		-		-	0.000	75.279	-
Test and Evaluation 2	C/T&M	Interop Joint Venture : Ft. Huachuca, AZ	99.188	-		-		-		-		-	0.000	99.188	-
Test and Evaluation 3	C/T&M	Northrop Grumman Information Technology : Ft. Huachuca, AZ	49.746	-		-		-		-		-	0.000	49.746	-
Test and Evaluation 4	C/Various	VARIOUS - pending development of query : VARIOUS	54.481	-		-		-		-		-	0.000	54.481	-
Test and Evaluation 5	Option/ CPFF	ALION SCIENCE & TECHNOLOGY CORP : Various	0.617	-		-		-		-		-	0.000	0.617	-
Test and Evaluation 6	Option/ CPFF	AMERICAN SYSTEMS COPR : Various	1.559	-		-		-		-		-	0.000	1.559	-
Test and Evaluation 7	Option/ CPFF	MANTECH TELECOMMUNICATIONS AND INFORMATION : Various	9.903	-		-		-		-		-	0.000	9.903	-
Test and Evaluation 8	Option/ CPFF	OBERON ASSOCIATES : Various	12.980	-		-		-		-		-	0.000	12.980	-
Test and Evaluation 9	Option/ CPFF	TASC, INC. : Various	3.951	-		-		-		-		-	0.000	3.951	-
Test and Evaluation 10	Option/ CPFF	BEACON GROUP SW, INC : Various	21.363	7.711	Oct 2018	-		-		-		-	0.000	29.074	-
Test and Evaluation 11	Option/ CPFF	Multiple : Various	-	12.001	Oct 2018	30.226	Oct 2019	-		-		-	0.000	42.227	-
Test and Evaluation 12	C/CPFF	Various : Various	25.386	8.355	Oct 2018	-		-		-		-	0.000	33.741	-

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Exhibit R-3, **RDT&E Project Cost Analysis:** PB 2021 Defense Information Systems Agency													**Date:** February 2020	
Appropriation/Budget Activity 0400 *I* 7						**R-1 Program Element (Number/Name)** PE 0208045K *I C4I Interoperability*						**Project (Number/Name)** T40 *I Major Range Test Facility Base Operations*		

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			354.453	28.067		30.226		-		-		-	0.000	412.746	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Management Services	Various	Defense Information Systems Agency : Ft. Huachuca, AZ	269.650	25.332	Oct 2018	26.312	Oct 2019	-		-		-	0.000	321.294	-
Subtotal			269.650	25.332		26.312		-		-		-	0.000	321.294	N/A

			Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			624.103	53.399		56.538		-		-		-	0.000	734.040	N/A

Remarks

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Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0208045K *I* *C4I Interoperability*	**Project (Number/Name)** T40 *I* *Major Range Test Facility Base Operations*

	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
Develop and Implement Interoperability test systems to support warfighters																								███	███	███	███	███

	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
Develop and Implement Interoperability test systems to support warfighters	███	███	███	███	███	███																						

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Exhibit R-4A, RDT&E Schedule Details: PB 2021 Defense Information Systems Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0208045K / C4I Interoperability	**Project (Number/Name)** T40 / Major Range Test Facility Base Operations

Schedule Details

Events	Start		End	
	Quarter	**Year**	**Quarter**	**Year**
Develop and Implement Interoperability test systems to support warfighters	1	2017	4	2020

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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	

| **Appropriation/Budget Activity** 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development* | | | | | | **R-1 Program Element (Number/Name)** PE 0302019K *I Defense Info. Infrastructure Engineering and Integration* | | | | | | |

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	165.641	13.540	10.798	16.324	-	16.324	16.538	16.874	17.089	17.342	Continuing	Continuing
E65: *Modeling and Simulation*	103.652	3.423	2.109	4.068	-	4.068	4.151	4.240	4.319	4.410	Continuing	Continuing
T62: *DoD Information Network (DODIN) Systems Engineering and Support*	61.989	10.117	8.689	12.256	-	12.256	12.387	12.634	12.770	12.932	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Defense Information Infrastructure Engineering and Integration effort encompasses two projects: Modeling and Simulation and DoD Information Network (DODIN) Systems Engineering and Support. There are two major activities under the Modeling and Simulation project: Modeling and Simulation and DODIN Enterprise Wide Systems Engineering (EWSE).

The DODIN EWSE activity resolves near term (one to three years) high-priority technical issues defined by DoD Chief Information Officer (DoD CIO) and Defense Information Systems Agency (DISA), that impact operational capabilities affecting DODIN End-to-End (E2E) interoperability and performance.

The Modeling and Simulation project provides architecture, systems engineering and E2E analytical functions for DISA and its customers, ensuring integrated capabilities to fulfill warfighter mission requirements. Ongoing beneficiaries of these capabilities include DoD CIO, the DISA Network Services Directorate, the DISA Enterprise Services Directorate, Program Executive Office-Mission Assurance, the Defense Information Systems Network Command Center and Joint Communications Simulation System users in DoD.

The DODIN Systems Engineering and Support project performs discovery, research, development and experimentation of emerging and commercial technologies through the Office of the Chief Technology Officer (OCTO) Emerging Technology Directorate (EM) (formerly OCTO) to fill capability shortfalls and technology gaps across the Future Years Defense Program (FYDP). EM identifies these gaps/shortfalls, pursues leading innovative solutions from industry, academia, and the Federal sector, and engages industry partners for commercial best practices. EM conducts technical system engineering reviews and oversight of DISA and DoD enterprise products and services. EM resolves mission partner gaps and agency challenges requiring technical and/or process innovation in Machine Learning/Artificial Intelligence (AI), Mobility, Assured Identity, Rapid Transition, Cyber Defense, and Blockchain among other technologies.

PE 0302019K: *Defense Info. Infrastructure Engineering...*
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Exhibit R-2, **RDT&E Budget Item Justification:** PB 2021 Defense Information Systems Agency			**Date:** February 2020	
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*		**R-1 Program Element (Number/Name)** PE 0302019K I *Defense Info. Infrastructure Engineering and Integration*		

B. Program Change Summary ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021 Base**	**FY 2021 OCO**	**FY 2021 Total**
Previous President's Budget	16.121	15.798	16.226	-	16.226
Current President's Budget	13.540	10.798	16.324	-	16.324
Total Adjustments	-2.581	-5.000	0.098	-	0.098
• Congressional General Reductions	-	-5.000			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-2.025	-			
• SBIR/STTR Transfer	-0.556	-			
• Adjustment	-	-	0.098	-	0.098

Change Summary Explanation

The decrease in FY 2019 is due to the decrease of -$0.556 for a transfer of funding to Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs and the decrease of -$2.025 was reprogrammed to support Other Transaction Authority (OTA) requirement.

The decrease of -$5.000 in FY 2020 reflects a congressional general reduction.

The increase of +$0.098 is due to the expansion to resolve mission partner gaps and agency challenges requiring technical and or process innovation.

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency										Date: February 2020	

Appropriation/Budget Activity 0400 / 7				R-1 Program Element (Number/Name) PE 0302019K / Defense Info. Infrastructure Engineering and Integration						Project (Number/Name) E65 / Modeling and Simulation	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
E65: *Modeling and Simulation*	103.652	3.423	2.109	4.068	-	4.068	4.151	4.240	4.319	4.410	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Modeling and Simulation project provides architecture, systems engineering and end-to-end (E2E) analytical functions for the Defense Information Systems Agency (DISA) and its customers, ensuring integrated capabilities to fulfill warfighter mission requirements. Modeling and Simulation activities support the Department of Defense (DoD) communications planning and investment strategy, including: application performance assessments, contingency planning, network capacity planning and diagnostics, and systems-level modeling and simulation. Project efforts provide across-theater information awareness for Combatant Commands through application solutions for integrated networks, including DoD's missions in Afghanistan and the Defense Information Systems Network (DISN) by: (1) supporting the development and implementation of DoD Information Network (DODIN) Enterprise Wide Systems Engineering (EWSE) processes essential to evolving the DODIN in a manner that enables interoperability and E2E performance for critical DODIN programs; (2) developing standardized DISA systems analyses and integration processes to improve systems integration across DISA for all DISA developed communication systems and services; and (3) providing the underlying modeling and simulation and analytical support for E2E DISA and DoD systems engineering and assessment.

Project efforts provide DoD decision makers with services and a suite of tools capable of identifying key points of impact on DoD command and control information systems and recommending trade-offs within the DODIN configuration with regard to prioritized performance, availability, and security. This effort will reduce the risk in products deployed to the warfighter through improved network performance and traffic analysis, and an efficient means of troubleshooting and subsequent redesign.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Modeling and Simulation *FY 2020 Plans:* Will provide architecture and model development to Cyber Development architecture for developing future DODIN cyber architecture and cyber portfolio management. This task will develop DoD Cybersecurity Analysis and Review (DoDCAR) analysis tools for implementing DoDCAR based cyber architecture and system assessment methods. This effort will develop modeling and simulation tools to analyze planned changes to the DISN optical and Internet Protocol (IP) core network, data centers, internet and commercial cloud computing gateways, and network security solutions. Will develop capabilities for analysis of software defined networking. Will perform test and evaluation of DISN Internet Access Point security solutions with government and contracted labor support. Will research technologies and solutions that can be transitioned to operations and will demonstrate feasibility through solutions analysis and proof-of-concept development and test. Will perform product and solution assessments using developed modeling tools to provide technical solutions for information technology (IT) capabilities to ensure compatibility	3.423	2.109	4.068

PE 0302019K: *Defense Info. Infrastructure Engineering...*
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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency		Date: February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0302019K *I Defense Info. Infrastructure Engineering and Integration*	**Project (Number/Name)** E65 *I Modeling and Simulation*

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021**
and interoperability with the DISN, data centers, and Joint Information Environment (JIE) solution architectures. Will develop application performance monitoring framework to support reliable operation of enterprise services and applications. *FY 2021 Plans:* Revision of DoD Cybersecurity Analysis and Review (DoDCAR) analysis tools and testing of implementations of DoDCAR based cyber architecture and system assessment methods. This effort will develop add Mil-Cloud networking, and the evaluation of network security solutions. Will expand the testing of Mil-Cloud access point solutions with government and contracted labor support. Will perform additional product and solution testing. Will evaluate performance monitoring framework to support reliable operation of enterprise services and applications. This task will develop continued assessment, testing, prototype improvement and implementation of DoDCAR processes. This includes portfolio management against threat coverage of DoD Networks. Will continue fielding modeling tools integrated with the DISN for automated DISN views and troubleshooting tools. Will develop modeling and simulation tools to analyze planned changes to the DISN optical and IP core network, data centers, internet and commercial cloud computing gateways, and network security solutions. Will develop capabilities for analysis of software defined networking. Will perform test and evaluation of DISN Internet Access Point security solutions with government and contracted labor support. Will research technologies and solutions that can be transitioned to operations and will demonstrate feasibility through solutions analysis and proof-of-concept development and test. Will perform product and solution assessments using developed modeling tools to provide technical solutions for IT capabilities to ensure compatibility and interoperability with the DISN, on-premise and cloud data centers, and JIE solution architectures. Will develop application performance monitoring to support reliable operation of enterprise services and applications. *FY 2020 to FY 2021 Increase/Decrease Statement:* The increase of +$1.959 is due to additional efforts to develop and test model driven telemetry to replace Simple Network Management Protocol (SNMP) for performance monitoring; and the research into a Hybrid Multi-Cloud Orchestration architecture to mirror industry methodologies on various option for orchestration tool suites. Managing various cloud offerings such as MilCloud 2.0, Joint Enterprise Defense Infrastructure (JEDI) and other private or non-private cloud offerings.			
Accomplishments/Planned Programs Subtotals	3.423	2.109	4.068

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
• PE 0302019K: *Operation & Maintenance, Defense-Wide*	16.437	16.579	16.911	-	16.911	-	-	-	-	Continuing	Continuing

Remarks

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Exhibit R-2A, **RDT&E Project Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0302019K / *Defense Info. Infrastructure Engineering and Integration*	**Project (Number/Name)** E65 / *Modeling and Simulation*

D. Acquisition Strategy

Enterprise Wide Systems Engineering (EWSE) uses contractors to assist/supplement the Government lead/team for technical activities. Subject matter experts in both large and small businesses are sought for the engineering support. Firm fixed price contracts with one option year are typically used in open competition. Furthermore, technical work with Federally Funded Research and Development Centers (FFRDCs) such as MITRE and MIT Lincoln Lab are established and coordinated when the Government can leverage their expertise and R&D in the key technology.

Modeling and Simulation uses a range of contractors for modeling support to the various projects. Contractors range from small to large business, predominantly using open competition methods and Firm Fixed Price (FFP) tasks and utilizing multi-year (base plus option years) contracts where possible. Support includes network modeling tool and processes development to adapt to ever-evolving DoD programs and projects, analyses, capacity planning, and network redesign using the models. Some specific support (e.g., integration with proprietary software) will require contracting with OPNET (e.g., sole source). Federally Funded Research and Development Centers (FFRDCs) are also considered depending upon the task.

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| **Exhibit R-3**, **RDT&E Project Cost Analysis:** PB 2021 Defense Information Systems Agency | | | | | | | | | | | | | **Date:** February 2020 |

| **Appropriation/Budget Activity** 0400 **/** 7 | | **R-1 Program Element (Number/Name)** PE 0302019K **/** *Defense Info. Infrastructure Engineering and Integration* | | **Project (Number/Name)** E65 **/** *Modeling and Simulation* |

Product Development ($ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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**
Product Development 1	SS/FFP	OPNET Tech, Inc : Bethesda, MD	9.955	0.290	Oct 2018	0.218	Feb 2020	0.276	Feb 2021	-		0.276	Continuing	Continuing	Continuing
Product Development 2	C/CPFF	APPTIS : Chantilly, VA	3.634	0.217	Oct 2018	0.087	Feb 2020	0.187	Feb 2021	-		0.187	Continuing	Continuing	Continuing
Product Development 3	SS/FFP	Falls Church, VA : Falls Church, VA	1.312	-		-		-		-		-	0.000	1.312	-
Product Development 4	C/FFP	Booz Allen, Hamilton : McLean, VA	4.981	0.212	Oct 2018	0.170	Feb 2020	0.250	Feb 2021	-		0.250	Continuing	Continuing	Continuing
Product Development 5	C/FFP	NRL : Washington, DC	0.100	-		-		-		-		-	0.000	0.100	-
Product Development 6	C/CPFF	Soliel, LLC : Reston, VA	3.862	-		-		-		-		-	0.000	3.862	-
Product Development 7	C/FFP	COMPTEL : Arlington, VA	2.805	-		-		-		-		-	0.000	2.805	-
Product Development 8	C/CPFF	COMPTEL : Arlington, VA	0.926	-		-		-		-		-	0.000	0.926	-
Product Development 9	C/CPFF	MIT Lincoln Labs : Cambridge, MA	13.299	-		-		-		-		-	0.000	13.299	-
Product Development 10	MIPR	Various : Various	11.268	-		-		-		-		-	0.000	11.268	-
Enterprise Wide Systems Engineering 11	C/FFP	Northrop Grumman : Fairfax, VA	1.784	-		-		-		-		-	0.000	1.784	-
Clear Sky Pilot	C/CPFF	AFRL Terremark : Various	24.083	-		-		-		-		-	0.000	24.083	-
Narus	C/CPFF	AFRL : Rome, NY	1.450	-		-		-		-		-	0.000	1.450	-
Cyber Accelerator	C/CPFF	DTIC : Alexandria, VA	7.516	-		-		-		-		-	0.000	7.516	-
Commercial Integration Demonstration	C/CPFF	DTIC : Alexandria, VA	2.750	-		-		-		-		-	0.000	2.750	-
Web Content Filtering: Perimeter Defense Integration	C/FFP	Oberon Associates : Ft. Meade, MD	1.854	-		-		-		-		-	0.000	1.854	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Information Systems Agency												Date: February 2020		
Appropriation/Budget Activity 0400 / 7							**R-1 Program Element (Number/Name)** PE 0302019K / Defense Info. Infrastructure Engineering and Integration					**Project (Number/Name)** E65 / Modeling and Simulation		

Product Development ($ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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
Host Based Security Ops Assessment	C/FFP	Summit Technologies, Inc : Ft Meade, MD	0.700	-		-		-		-		-	0.000	0.700	-
Secure Configuration Management Ops Assessment	C/FFP	Cyber Security research and Solutions Corp : Ft Meade	0.964	-		-		-		-		-	0.000	0.964	-
Product Development 11	C/CPFF	Johns Hopkins University Applied Physics : Laurel, MD	0.800	0.061	Oct 2018	-		-		-		-	0.000	0.861	-
Engineering Technical Services	MIPR	Axom Technologies : Fort Meade	0.980	0.170	Oct 2018	-		-		-		-	0.000	1.150	-
Requirements Analysis/ Program Management: Civilian Pay	MIPR	Various : Various	1.537	-		0.520	Feb 2020	-		-		-	Continuing	Continuing	Continuing
Cloud Hosted Shared Services	C/FFP	Nisga's Data Systems LLC : Herndon, VA	1.350	-		-		-		-		-	0.000	1.350	-
Cloud/ Gateway Pilot	C/FFP	Alvarez and Associates : Tysons Corner, VA	0.304	-		-		-		-		-	0.000	0.304	-
Cloud/ Gateway Pilot	C/FFP	BY Light Professional IT Services : : Arlington, VA	0.413	-		-		-		-		-	0.000	0.413	-
DoDCAR	C/FFP	TBD : TBD	-	-		-		-		-		-	Continuing	Continuing	-
		Subtotal	98.627	0.950		0.995		0.713		-		0.713	Continuing	Continuing	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Information Systems Agency														Date: February 2020	

Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0302019K / Defense Info. Infrastructure Engineering and Integration	Project (Number/Name) E65 / Modeling and Simulation

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
IP Network Modeling	SS/FFP	Riverbed : Bethesda, MD	1.056	1.017	Sep 2019	0.588	Sep 2020	1.504	Sep 2021	-		1.504	Continuing	Continuing	-
JCSS/JRSS Modeling	C/FFP	Booz Allen, Hamilton : McLean, VA	1.131	1.246	May 2019	0.251	May 2020	1.210	May 2021	-		1.210	Continuing	Continuing	-
JRSS Modeling	C/FFP	IPKEYS : Annapolis Junction, MD	0.373	-		-		-		-		-	0.000	0.373	-
E2E Performance	C/FFP	Tapestry : Chambersburg, PA	0.251	-		-		0.499	Oct 2020	-		0.499	0.000	0.750	-
E2E Performance	C/FFP	Various : Various	0.142	0.210	Oct 2018	0.275	Oct 2019	0.142	Oct 2020	-		0.142	Continuing	Continuing	-
Subtotal			2.953	2.473		1.114		3.355		-		3.355	Continuing	Continuing	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test and Evaluation	SS/CPFF	Comptel : Arlington, VA	2.072	-		-		-		-		-	0.000	2.072	-
Subtotal			2.072	-		-		-		-		-	0.000	2.072	N/A

			Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			103.652	3.423		2.109		4.068		-		4.068	Continuing	Continuing	N/A

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Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
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	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
Horizontal Engineering																												
Horizontal Engineering																					███	███	███	███	███	███	███	███
Modeling and Simulation Applications																												
Modeling and Simulation Applications																					███	███	███	███	███	███	███	███

	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
Horizontal Engineering																												
Horizontal Engineering	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███
Modeling and Simulation Applications																												
Modeling and Simulation Applications	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███

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Exhibit R-4A, **RDT&E Schedule Details:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0302019K *I Defense Info. Infrastructure Engineering and Integration*	**Project (Number/Name)** E65 *I Modeling and Simulation*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Horizontal Engineering				
Horizontal Engineering	1	2017	4	2025
Modeling and Simulation Applications				
Modeling and Simulation Applications	1	2017	4	2025

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	
Appropriation/Budget Activity 0400 I 7				**R-1 Program Element (Number/Name)** PE 0302019K I Defense Info. Infrastructure Engineering and Integration					**Project (Number/Name)** T62 I DoD Information Network (DODIN) Systems Engineering and Support			
COST ($ in Millions)	**Prior Years**	**FY 2019**	**FY 2020**	**FY 2021 Base**	**FY 2021 OCO**	**FY 2021 Total**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**Cost To Complete**	**Total Cost**
T62: *DoD Information Network (DODIN) Systems Engineering and Support*	61.989	10.117	8.689	12.256	-	12.256	12.387	12.634	12.770	12.932	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The DoD Information Network (DODIN) Systems Engineering and Support project identifies key technology areas that are essential for Defense Information Systems Agency (DISA) including: Machine Learning/Artificial Intelligence (AI), Mobility, Assured Identity, Rapid Transition, Cyber Defense, and Blockchain among other technologies.

The DODIN Systems Engineering and Support Project ensure the technical strategies for the Defense Information Systems Agency (DISA) are in line with the DoD IT Efficiency strategy and the latest Department of Defense Chief Information Office (DoD CIO) Capabilities Planning Guidance (CPG) through the Emerging Technology Directorate (EM). These strategies will establish the foundation for DISA's technology investments and technical development. The EM leverages emerging technology to drive efficiencies and cost savings to the DoD, the Warfighter, and other Federal Agencies, and provides actionable, decision-oriented information to the Secretary of Defense, Joint Staff, Military Services, Combatant Commands, and other mission partners in satisfying DoD mission objectives.

Cyber security and cloud computing present critical near term challenges, especially the ability to securely leverage commercial cloud service offerings. The EM's partnership with Defense Advanced Research Projects Agency (DARPA) will assess and transition technologically relevant and mature solutions. Included are applications with a security wrapper that detect and mitigate cyberattacks; smart routing and managed reputation capability; embedded system defense capabilities; and resilient and intrusion-tolerant network capabilities.

Partnerships with industry, academia, and the Federal sectors will produce requisite cyber measures and ensure optimal use of commercial cloud services. The EM will conduct technology assessments, process improvements, as well as the analysis and review of potential technology solutions, products, capabilities and services to ensure consistency with DODIN architecture and standards. Enabled by the Technology Assessment Framework (TAF) and the DISA Technology Information Repository (DTIR), the EM will perform "quick looks" and deeper technology evaluations to provide critical awareness, characterization, and suitability of specific technologies. These include the assessments of advanced cloud management capabilities; physical containers to enable mobile data center; emerging open source Storage Service Application Programming Interfaces (APIs) and/or abstractions and global standards for storage services; analytic platform performance baselines of emerging commercial analytic platform products; advanced approaches to Continuity of Operations (COOP) in a hybrid cloud environment; and the next generation software defined networks for automating and virtualizing the DODIN.

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021**
Title: Department of Defense Information Network (DODIN) Systems Engineering and Support	10.117	8.689	12.256

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency		Date: February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0302019K *I Defense Info. Infrastructure Engineering and Integration*	**Project (Number/Name)** T62 *I DoD Information Network (DODIN) Systems Engineering and Support*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
FY 2020 Plans: Perform discovery, research, development and experimentation of emerging and commercial technologies to fill capability shortfalls and technology gaps across the Future Years Defense Program (FYDP). Identify gaps/shortfalls, pursues leading innovative solutions from industry, academia, and the Federal sector, and engages industry partners for commercial best practices. Develop technology forecasts and innovation roadmaps for existing and nascent DISA Programs in the following areas: Process/Automation, Cloud, Cyber Security, End-User Devices, Communication (DODIN/Mobile/End-User Devices). Early identification of technology need and explores, develops, and delivers recommended emerging technologies to the DISA Requirements & Analysis Office. Operationalize DISAruptive enhancements, begin training support curriculum, and begin R&D support to innovative ideas received through the DISAruptive portal, the Agency's internal innovation suggestion program. *FY 2021 Plans:* Identify and deliver innovative processes, services, and capabilities across all facets of DISA's operating model. Accelerate the transition of emerging technology through collaboration, outreach, and cooperative research and development agreements (CRADA's) among agency, mission, and industry partners. Work with mission partners to discover, test, and deploy appropriate technological solutions/processes, including efforts in development, security and operations (DevSecOps), Next-Generation Endpoint, Machine Learning/Artificial Intelligence (AI), Assured Identity, Universal Transport, Internet Browser Isolation, Blockchain, Commercial Solutions for Classified (CSfC) , SIPR/NIPR Single Device and Multiple Access Reduced Sign-on. Further Operationalize DISAruptive enhancements, continue training support curriculum, and enhance R&D support to innovative ideas received through the DISAruptive portal. *FY 2020 to FY 2021 Increase/Decrease Statement:* The increase of $3.567 is due to increased support of the DISAruptive program enhancements, training support curriculum, and internal efficiencies and resuming of technical research partnerships with universities to discover, research, and develop technologies; longer commercial technology assessments and evaluations yielding deeper understanding, including more critical awareness, characterization, and suitability of specific technologies; and reinstatement of the Agency's internal innovation suggestion program, DISAruptive.			
Accomplishments/Planned Programs Subtotals	10.117	8.689	12.256

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
• O&M, DW/PE 0302019K: *Operation & Maintenance, Defense-Wide*	2.814	2.899	2.962	-	2.962	3.035	-	-	-	Continuing	Continuing

Exhibit R-2A, **RDT&E Project Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0302019K *I Defense Info. Infrastructure Engineering and Integration*	**Project (Number/Name)** T62 *I DoD Information Network (DODIN) Systems Engineering and Support*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost

Remarks

D. Acquisition Strategy

Market research during the acquisition process includes a review of DISA contracts, other DoD contract vehicles, and other Federal Government agency contracts which are advertised for Government-wide usage. This market research also includes consideration of small businesses including minority/women owned (8A) businesses, Historically Black Colleges and Universities, mentor/protégé and other specialized contract vehicles and processes. Market research evaluates all contractors available from DISA sources for their ability to deliver the products specifically required for the unique program efforts. The program works collaboratively with vendors to obtain generic cost data for planning and analysis purposes. Past and current contract prices for similar work and other government-wide agency contracts provide additional sources of information. Quotes from multiple sources help provide averages for more realistic cost estimates. DISA makes a concerted effort to award many of its contracts to small businesses. Additionally, many of the DISA contracts are awarded with multiple option periods. These have the benefit of fixing labor costs over an extended period and minimizing the administrative costs associated with re-issuing short-term contracts.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Information Systems Agency													Date: February 2020		
Appropriation/Budget Activity 0400 / 7								**R-1 Program Element (Number/Name)** PE 0302019K / Defense Info. Infrastructure Engineering and Integration					**Project (Number/Name)** T62 / DoD Information Network (DODIN) Systems Engineering and Support		

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering and Technical Services	FFRDC	MITRE : McLean, VA	12.910	1.323	Oct 2018	0.505	Oct 2019	0.505	Oct 2020	-		0.505	Continuing	Continuing	Continuing
Industry Tech Res	C/FFP	Gartner : Various	0.249	-		-		-		-		-	0.000	0.249	-
GIG Technical Insertion Engineering	C/FFP	SRA, Inc. : Fairfax, VA	1.211	-		-		-		-		-	0.000	1.211	-
Product Development	C/Various	Raytheon : Various	1.601	-		-		-		-		-	0.000	1.601	-
DAMA-C	MIPR	Defense Micro-electronics Activity : Various	11.794	-		-		-		-		-	0.000	11.794	-
Thin Engineering Support	MIPR	MIT Lincoln Labs : Lexington, MA	4.260	-		-		-		-		-	0.000	4.260	-
Engineering and Technical Support	C/FFP	Moya Technologies, Inc. : Various	1.212	-		-		-		-		-	0.000	1.212	-
Engineering Technical Services	MIPR	Various : Chambersburg, PA	3.315	1.084	Jul 2019	1.000	Jan 2020	1.967	Jan 2020	-		1.967	Continuing	Continuing	Continuing
Product Development	C/FFP	Science and Technology Associates, Inc : Arlington, VA	2.091	-		-		-		-		-	0.000	2.091	-
Product Development	MIPR	SPAWAR : Charleston, SC	0.376	-		-		-		-		-	0.000	0.376	-
Product Development	MIPR	NSA : Ft. Meade, MD	0.691	-		-		-		-		-	0.000	0.691	-
Engineering Technical Services	C/FFP	TWM : Falls Church, VA	0.202	-		-		-		-		-	0.000	0.202	-
Product Development	C/FFP	SOLERS : Arlington, VA	3.023	-		-		-		-		-	0.000	3.023	-
Product Development	C/FFP	Booz Allen Hamilton : McLean, VA	1.062	-		-		-		-		-	0.000	1.062	-
Product Development	MIPR	JITC : Ft. Meade, MD	0.351	-		-		-		-		-	0.000	0.351	-

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| Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Information Systems Agency | | | Date: February 2020 | |

| Appropriation/Budget Activity
0400 / 7 | R-1 Program Element (Number/Name)
PE 0302019K / Defense Info. Infrastructure Engineering and Integration | Project (Number/Name)
T62 / DoD Information Network (DODIN) Systems Engineering and Support |

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering Technical Services	MIPR	Various : Ft. Meade, MD	4.481	-		-		-		-		-	0.000	4.481	-
Engineering Technical Services	C/Various	IV2: IT Consulting Services, LLC : Jackson, WY	1.674	-		-		-		-		-	0.000	1.674	-
Engineering Technical Services	C/FFP	Information Assurance TWM Follow On : Various	0.741	-		-		-		-		-	0.000	0.741	-
Engineering Technical Services	C/CPFF	TIE NEMS: B&D Consulting : Various	0.564	-		-		-		-		-	0.000	0.564	-
Engineering Technical Services	C/Various	Tapestry Technologies, INC : Various	3.173	-		-		-		-		-	0.000	3.173	-
Management Services - Civilian Pay	Various	Various : Ft. Meade, MD	6.428	-		-		-		-		-	0.000	6.428	-
Engineering Technical Services	C/FFP	PMPC-Itility LLC : Ft. Meade, MD	0.580	0.227	Mar 2019	-		-		-		-	Continuing	Continuing	Continuing
Information Assurance	C/CPFF	Tapestry Tech : Chambersburg, PA	-	0.583	Jan 2019	0.600	Jan 2020	0.600	Jan 2021	-		0.600	Continuing	Continuing	Continuing
Sys Engineering	C/CPFF	Various : Ft. Meade, MD	-	4.911	Mar 2019	4.897	Mar 2020	5.114	Dec 2020	-		5.114	Continuing	Continuing	Continuing
Management Services - Civilian Pay	C/CPFF	Various : Ft. Meade	-	1.989	Oct 2018	1.417	Oct 2019	3.570	Mar 2021	-		3.570	Continuing	Continuing	Continuing
Program Management and Knowledge Management	C/FFP	TBD : TBD	-	-		-		-		-		-	Continuing	Continuing	Continuing
(DODIN) Systems Engineering and Support	C/FFP	TBD : TBD	-	-		0.270	Mar 2020	0.500	Mar 2021	-		0.500	Continuing	Continuing	Continuing
Subtotal			61.989	10.117		8.689		12.256		-		12.256	Continuing	Continuing	N/A

	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	61.989	10.117	8.689	12.256	-	12.256	Continuing	Continuing	N/A

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	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Remarks									

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Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0302019K *I Defense Info. Infrastructure Engineering and Integration*	**Project (Number/Name)** T62 *I DoD Information Network (DODIN) Systems Engineering and Support*

	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
Technical Direction Agent (TDA)																												
Technical Direction Agent (TDA)																					█	█	█	█	█	█	█	█
Engineering Support																												
Engineering Support																					█	█	█	█	█	█	█	█
Industry/University Technical Research																												
Industry/University Technical Research																					█	█	█	█	█	█	█	█
Technology Assessments																												
Technology Assessments																					█	█	█	█	█	█	█	█
DISA Ruptive																												
DISA Ruptive																												
Research and Development for technical solutions																												
Research and Development for technical solutions																												

	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
Technical Direction Agent (TDA)																												
Technical Direction Agent (TDA)	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█				
Engineering Support																												
Engineering Support	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█				
Industry/University Technical Research																												
Industry/University Technical Research	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█				
Technology Assessments																												
Technology Assessments	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█				

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Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
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	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
DISA Ruptive																												
DISA Ruptive							██	██	██	██	██	██	██	██	██	██	██	██	██	██	██	██	██	██	██	██		
Research and Development for technical solutions																												
Research and Development for technical solutions						██	██	██	██	██	██	██	██	██	██	██	██	██	██	██	██	██	██	██	██	██		

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Exhibit R-4A, **RDT&E Schedule Details:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	**Year**	**Quarter**	**Year**
Technical Direction Agent (TDA)				
Technical Direction Agent (TDA)	1	2017	4	2024
Engineering Support				
Engineering Support	1	2017	4	2024
Industry/University Technical Research				
Industry/University Technical Research	1	2017	4	2024
Technology Assessments				
Technology Assessments	1	2017	4	2024
DISA Ruptive				
DISA Ruptive	4	2020	3	2025
Research and Development for technical solutions				
Research and Development for technical solutions	4	2019	3	2025

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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	

| Appropriation/Budget Activity
0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7:
Operational Systems Development | | | | | R-1 Program Element (Number/Name)
PE 0303126K I *Long-Haul Communications - DCS* | | | | | | | |

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	293.587	12.572	11.166	11.884	-	11.884	11.674	11.916	12.137	12.392	Continuing	Continuing
PC01: *Presidential and National Voice Conferencing/*	101.820	3.047	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	-
T82: *DISN Systems Engineering Support*	191.767	9.525	11.166	11.884	-	11.884	11.674	11.916	12.137	12.392	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Defense Information Systems Network (DISN) is the Department of Defenses (DoD's) consolidated worldwide telecommunications capability that provides secure, end-to-end information transport for DoD operations. It also provides the warfighter and the Combatant Commands (COCOMs) with a robust Command, Control, Communications, Computing, and Intelligence infrastructure to support DoD net-centric missions and business requirements. The Defense Red Switch Network (DRSN) is a DoD Secure Voice, Command and Control Network that is controlled and directed by the Joint Staff and the Office of the Secretary of Defense. It provides multi-level secure, rapid, ad hoc, voice calling and conferencing capability to the President, Secretary of Defense, Services, COCOMs, subordinate organizations (military and civilian) and coalition allies. DRSN also supports the Presidential and National Voice Conferencing (PNVC) (formerly known as National Emergency Action Decision Network (NEADN)) and the Enhanced Pentagon Capability/Survivable Emergency Conferencing Network. These funds support three major efforts:

DISN Systems Engineering Support: This effort includes engineering for Networking capabilities and optical transport capabilities to ensure the essential operations of a robust and secure DISN; refreshing the systems that instrument and automate the operations, administration, maintenance and provisioning functions and creating a single DISN-wide view for network managers and operators.

PNVC: The PVNC provides selected system engineering for continued development and testing of the PNVC equipment for senior leaders. The PNVC system provides a military, satellite-based, survivable, secure, and near toll-quality voice conferencing capability for the President, Secretary of Defense, Chairman, Joint Chiefs of Staff, and other senior national/military leaders anywhere in the world as needed. Funding supports the acquisition activities for the PNVC baseband equipment, including critical and essential engineering required to develop new vocoder and cryptographic and audio-summing equipment.

DoD Mobility: The Mobility Program will lead the development of an Enterprise Solution to support Controlled Unclassified Information (CUI) and leverage commercial carrier infrastructure to provide entry points for both classified and unclassified wireless capabilities. Continued evolution and expansion, within the Department, of the DoD Mobility program will allow for increased mobile services in direct support of the warfighter and the COCOMs.

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Exhibit R-2, **RDT&E Budget Item Justification:** PB 2021 Defense Information Systems Agency				**Date:** February 2020
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*		**R-1 Program Element (Number/Name)** PE 0303126K *I Long-Haul Communications - DCS*		

B. Program Change Summary ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021 Base**	**FY 2021 OCO**	**FY 2021 Total**
Previous President's Budget	14.353	11.166	11.891	-	11.891
Current President's Budget	12.572	11.166	11.884	-	11.884
Total Adjustments	-1.781	0.000	-0.007	-	-0.007
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-1.257	-			
• SBIR/STTR Transfer	-0.524	-			
• Adjustment	-	-	-0.007	-	-0.007

Change Summary Explanation

The decrease in FY 2019 is due to the decrease of -$0.524 for a transfer of funding to Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs and decrease of -$1.257 due to ramp down in engineering and testing functions as the unclassified capability transitions to sustainment.

The decrease in FY 2021 of -$0.007 is a result of efficiencies realized from consolidation of unclassified and classified engineering Support contract.

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency												Date: February 2020	
Appropriation/Budget Activity 0400 / 7				**R-1 Program Element (Number/Name)** PE 0303126K / Long-Haul Communications - DCS						**Project (Number/Name)** PC01 / Presidential and National Voice Conferencing/			
COST ($ in Millions)	**Prior Years**	**FY 2019**	**FY 2020**	**FY 2021 Base**	**FY 2021 OCO**	**FY 2021 Total**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**		**Cost To Complete**	**Total Cost**
PC01: *Presidential and National Voice Conferencing/*	101.820	3.047	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000		-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-			

A. Mission Description and Budget Item Justification

The Presidential and National Voice Conferencing (PNVC) (formerly called National Emergency Action Decision Network (NEADN)) provides system engineering, development and testing of the equipment for senior leaders. The PNVC system provides a military satellite-based, world-wide, survivable, secure, and near toll-quality voice conferencing capability for the President, Secretary of Defense, Chairman, Joint Chiefs of Staff, and other senior national/military leaders. By implementing new technology capabilities (e.g. Ethernet-Framing and higher data rate), this project provides improved performance to the survivable voice conferencing capability. This project supports the acquisition activities for the PNVC baseband equipment, including engineering required to develop new vocoder, cryptographic and audio-summing equipment.

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021**
Title: Presidential and National Voice Conferencing (PNVC) *Description:* Presidential and National Voice Conferencing (PNVC) Systems Engineering conduct analyses for continuity of NEADN voice conferencing for national/military leaders through PNVC deployment. Program continues engineering, technical analysis, development, and coordination to ensure terminal, baseband, and satellite synchronization for voice conferencing amongst senior leaders.	3.047	-	-
Accomplishments/Planned Programs Subtotals	3.047	-	-

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
• Procurement, DW/PE 0303126K: *Procurement, Defense-Wide*	1.386	-	-	-	-	-	-	-	-	-	-

Remarks
 N/A

D. Acquisition Strategy
 N/A.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Information Systems Agency														Date: February 2020	

| Appropriation/Budget Activity 0400 / 7 | | | | R-1 Program Element (Number/Name) PE 0303126K / Long-Haul Communications - DCS | | | | | Project (Number/Name) PC01 / Presidential and National Voice Conferencing/ | | | | | | |

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
BIG Development Preparation	MIPR	NSA : Various	36.206	-		-		-		-		-	0.000	36.206	-
MSD-III Development	C/T&M	Raytheon : Largo, FL	18.479	-		-		-		-		-	0.000	18.479	-
PNVC Baseband Equipment	Various	Various : Various	9.300	-		-		-		-		-	0.000	9.300	-
Systems Engineering	FFRDC	MITRE : McLean, VA	0.423	-		-		-		-		-	0.000	0.423	-
PNVC Baseband Airborne variant ECP	C/CPFF	Raytheon : Largo, FL	16.880	-		-		-		-		-	0.000	16.880	-
Subtotal			81.288	-		-		-		-		-	0.000	81.288	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
PNVC Software enhancements	C/CPFF	Raytheon : Florida	1.999	0.785	Feb 2019	-		-		-		-	0.000	2.784	-
PNVC Software enhancements	C/CPFF	General Dynamics : NSA	5.416	0.562	Feb 2019	-		-		-		-	0.000	5.978	-
Systems Engineering	C/CPFF	Booz Allen Hamilton : McLean, VA	4.867	0.900	Mar 2019	-		-		-		-	0.000	5.767	-
Systems Engineering	FFRDC	Aerospace Corporation : Falls Church, VA	1.595	0.350	Oct 2018	-		-		-		-	0.000	1.945	-
Systems Engineering	FFRDC	Mitre : McLean, VA	1.410	0.450	Oct 2018	-		-		-		-	0.000	1.860	-
Test and Evaluation	Various	605th : TES	0.540	-		-		-		-		-	0.000	0.540	-
Test and Evaluation	Various	Miscel : BBK	1.680	-		-		-		-		-	0.000	1.680	-
Subtotal			17.507	3.047		-		-		-		-	0.000	20.554	N/A

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Exhibit R-3, **RDT&E Project Cost Analysis:** PB 2021 Defense Information Systems Agency													**Date:** February 2020	
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Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Certifcation Testing	MIPR	Various : Various	3.025	-		-		-		-		-	0.000	3.025	-
		Subtotal	3.025	-		-		-		-		-	0.000	3.025	N/A

			Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
		Project Cost Totals	101.820	3.047		0.000		-		-		-	0.000	104.867	N/A

Remarks

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Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
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	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
PNVC System Testing																												
PNVC System																								███	███	███	███	███
N/A																												
PNVC System Engineering and Management Support																								███	███	███	███	███

	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
PNVC System Testing																												
PNVC System	███	███	███																									
N/A																												
PNVC System Engineering and Management Support	███																											

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Exhibit R-4A, **RDT&E Schedule Details:** PB 2021 Defense Information Systems Agency				**Date:** February 2020	
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Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
PNVC System Testing				
PNVC System	1	2017	4	2019
N/A				
PNVC System Engineering and Management Support	1	2017	2	2019

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency										Date: February 2020	
Appropriation/Budget Activity 0400 *I* 7				**R-1 Program Element (Number/Name)** PE 0303126K *I Long-Haul Communications - DCS*				**Project (Number/Name)** T82 *I DISN Systems Engineering Support*			

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
T82: *DISN Systems Engineering Support*	191.767	9.525	11.166	11.884	-	11.884	11.674	11.916	12.137	12.392	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Defense Information Systems Network (DISN) Systems Engineering Support project encompasses four activities:

Next Generation Networking Technologies (formally known as Internet Protocol (IP) and Optical Transport Technology Refresh): Provides engineering technical expertise to support and integrate newer, more efficient technologies required to replace end of lifecycle equipment and to achieve more efficient Networking technologies. These new technologies provide protected and assured services for critical support to the warfighter as well as other DoD and federal customers.

Element Management System (EMS): Provides operational and network operating systems that instrument and automate the operations, administration, maintenance and provisioning functions creating a single DISN-wide view for network managers and operators. EMS is a component of the DISN Operational Support Systems (OSS).

Peripheral and Component Design (Secure Voice Switches): This equipment satisfies unique military requirements for multi-level security (i.e., extensive conferencing/ conference management capabilities and features, and gateway functions) that are not available in commercial products.

DoD Mobility: The Mobility Program will lead the development of an Enterprise Solution to support Controlled Unclassified Information (CUI) and leverage commercial carrier infrastructure to provide entry points for both classified and unclassified wireless capabilities. Continued evolution and expansion, within the Department, of the DoD Mobility program will allow for increased mobile services in direct support of the warfighter and the COCOMs.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Next Generation Networking Technologies (formally known as Internet Protocol (IP) and Optical Transport Technology Refresh)	4.280	5.061	5.318
Description: Provides engineering technical expertise to support and integrate newer, more efficient technologies required to replace end of lifecycle equipment and to achieve more efficient Networking technologies. These new technologies provide protected and assured services for critical support to the warfighter as well as other DoD and federal customers. **FY 2020 Plans:**			

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency		Date: February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303126K *I Long-Haul Communications - DCS*	**Project (Number/Name)** T82 *I DISN Systems Engineering Support*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
The DISN will continue to perform Research, Test and Evaluation activities in Software Environment, Next Generational Networking to include Gray networks and all associated encryption technologies. *FY 2021 Plans:* The DISN will continue to perform Research, Test and Evaluation activities in Software Environment, Next Generational Networking to include Gray networks and all associated encryption technologies. *FY 2020 to FY 2021 Increase/Decrease Statement:* The increase of +$0.257 from FY 2020 to FY 2021 is due to added effort for Gray networking technologies such as Commercial Solutions for Classified (CSfC) and converged gateways.			
Title: Peripheral and Component Design *Description:* This equipment satisfies unique military requirements for multi-level security (i.e., extensive conferencing/conference management capabilities and features, and gateway functions) that are not available in commercial products. *FY 2020 Plans:* Support upgrades to switch software for Information Assurance (IA)/Cybersecurity improvements and continued integration of IP trunking and IP line-side and gateway functions in evolving system to meet Risk Management Framework (RMF) and Nuclear Command, Control and Communications (NC3) requirements. *FY 2021 Plans:* Support replacement of obsolete equipment as it relates to Secure Voice Switches. *FY 2020 to FY 2021 Increase/Decrease Statement:* The increase of +$0.190 from FY 2020 to FY 2021 is attributed to additional cost for contract support.	1.458	1.627	1.817
Title: Mobility *Description:* The Mobility Program will lead the development of an Enterprise Solution to support Controlled Unclassified Information (CUI) and leverage commercial carrier infrastructure to provide entry points for both classified and unclassified wireless capabilities. Continued evolution and expansion, within the Department, of the DoD Mobility program will allow for increased mobile services in direct support of the warfighter and the Combatant Commands (COCOMs). *FY 2020 Plans:* Developmental and production testing of new-model commercial mobile devices per product baseline, carrier, and platform authenticated against the Mobile Device Manager. Security, interoperability, and functional evaluation of mobile applications. Production testing of the applications development framework and integration testing for infrastructure components, including	3.787	4.478	4.749

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency		Date: February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303126K *I Long-Haul Communications - DCS*	**Project (Number/Name)** T82 *I DISN Systems Engineering Support*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
additional gateway instances supporting secret and top secret domains as well as any commercial off-the-shelf (COTS) component technology refresh requirements against the end-to-end architecture.			
FY 2021 Plans: Developmental and production testing of new-model commercial mobile devices per product baseline, carrier, and platform authenticated against the Mobile Device Manager. Security, interoperability, and functional evaluation of mobile applications. Production testing of the applications development framework and integration testing for infrastructure components, including additional gateway instances supporting secret and top secret domains as well as any COTS component technology refresh requirements against the end-to-end architecture. In addition, Outside Continental United States (OCONUS) development of the Commercial Solutions for Classified (CSfC) converged gateway (C2G) merging of current DoD Enterprise Classified Travel Kit (DEC-TK) gateway and Defense Mobility Classified Capability - Secret (DMCC-S) gateway.			
FY 2020 to FY 2021 Increase/Decrease Statement: The increase of +$0.271 from FY 2020 to FY 2021 is attributed to the OCONUS development of the C2G merging of current DEC-TK gateway and DMCC-S gateway.			
Accomplishments/Planned Programs Subtotals	9.525	11.166	11.884

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
• O&M/PE0303126K: *Operation & Maintenance, Defense-Wide*	51.725	123.058	127.029	-	127.029	128.714	131.137	134.971	134.971	Continuing	Continuing
• Procurement/PE0303126K: *Procurement, Defense-Wide*	150.674	17.574	28.141	-	28.141	26.982	28.460	28.922	29.345	Continuing	Continuing

Remarks

D. Acquisition Strategy

Products acquired for Element Management System (EMS) requirements are professional services, network management software, supporting hardware, and development tools. Professional services will be procured through existing contracts available to DISA. The DISA Computing Services will be used for hardware and software leased managed services, as well as the National Aeronautics and Space Administration (NASA) enterprise equipment contracting vehicle when necessary and applicable.

Exhibit R-2A, **RDT&E Project Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
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The Internet Protocol (IP) enabling of the DRSN Digital Small Switch (DSS-2A) switch, Secure voice conference management improvements, High Altitude Electromagnetic Pulse (HEMP) Phone and related DRSN components will use an existing Air Force Command and Control Switching Systems (CCSS) Depot Support contract with the Secure Voice Switch systems manufacturer (Raytheon) to perform the development and modification work, system integration and testing support.

The Mobility initiative supports systems engineering and development of a DoD Mobility solution. The focus is on acquisitions to support the program across the DoD to include scheduling, delivery approach, and risk management. This also includes the vision and phased approach to unified capabilities for classified and unclassified wireless capabilities to meet DoD needs.

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Appropriation/Budget Activity 0400 / 7			R-1 Program Element (Number/Name) PE 0303126K / Long-Haul Communications - DCS						Project (Number/Name) T82 / DISN Systems Engineering Support					

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Systems Engineering for DSRN Components & Peripherals	Various	Raytheon : Florida	13.794	1.731	Mar 2019	1.627	Mar 2020	1.462	Mar 2021	-		1.462	Continuing	Continuing	Continuing
Systems Engineering for IP Enabling DSS-2A Secure Voice Switch	C/T&M	Raytheon : Florida	21.440	-		-		-		-		-	0.000	21.440	-
Engineering &Technical Services for Information Sharing Services for Voice	C/T&M	SAIC : VA	2.774	-		-		-		-		-	0.000	2.774	-
Engineering & Technical Services for Network Mgmt Solutions for New DISN Element Technologies	C/T&M	Various : VA	2.026	-		-		-		-		-	0.000	2.026	-
Single Sign On	C/T&M	SAIC : Various	1.397	-		-		-		-		-	0.000	1.397	-
System Engineering for VoSIP	C/T&M	Various : Various	1.218	-		-		-		-		-	0.000	1.218	-
Space Vehicle Upload	SS/CPFF	Iridium : McLean, VA	12.635	-		-		-		-		-	0.000	12.635	-
Gateway Improvement	SS/CPFF	Iridium : McLean, VA	13.565	-		-		-		-		-	0.000	13.565	-
Field Application Tool	MIPR	NSWC : Dahlgren	6.635	-		-		-		-		-	0.000	6.635	-
DTCS Handset	SS/CPFF	Iridium : McLean, VA	5.850	-		-		-		-		-	0.000	5.850	-
Command and Control Handset	SS/CPFF	Iridium : McLean, VA	7.275	-		-		-		-		-	0.000	7.275	-
Alt. Supplier Development	MIPR	NSWC : Dahlgren, VA	3.450	-		-		-		-		-	0.000	3.450	-
Radio Only Interface	MIPR	NSWC : Dahlgren, VA	2.525	-		-		-		-		-	0.000	2.525	-
Remote Control Unit	SS/CPFF	Iridium : McLean, VA	2.100	-		-		-		-		-	0.000	2.100	-
Type 1 Security	SS/CPFF	Iridium : McLean, VA	6.455	-		-		-		-		-	0.000	6.455	-
Vehicle Integration	MIPR	NSWC : Dahlgren, VA	3.185	-		-		-		-		-	0.000	3.185	-

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Exhibit R-3, **RDT&E Project Cost Analysis:** PB 2021 Defense Information Systems Agency												**Date:** February 2020		
Appropriation/Budget Activity 0400 *I* 7				**R-1 Program Element (Number/Name)** PE 0303126K *I Long-Haul Communications - DCS*						**Project (Number/Name)** T82 *I DISN Systems Engineering Support*				

Product Development ($ in Millions)				**FY 2019**		**FY 2020**		**FY 2021 Base**		**FY 2021 OCO**		**FY 2021 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**
Systems Engineering for IP and Optical Technology Refresh	Various	DITCO : Various	8.717	-		-		-		-		-	0.000	8.717	-
Engineering & Technical Services for Web Based Mediation	C/T&M	Apptis : VA	1.168	-		-		-		-		-	0.000	1.168	-
System Engineering and Technical Services for ISOM	Various	DITCO : Various	2.915	-		-		-		-		-	0.000	2.915	-
Serialized Asset Management - OSS	C/T&M	SAIC : VA	0.822	-		-		-		-		-	0.000	0.822	-
Gateways - Mobility	C/FFP	Various : Various	7.107	-		-		-		-		-	0.000	7.107	-
Thin Client Solution - Mobility	C/Various	Various : Various (MDM)	2.154	-		-		-		-		-	0.000	2.154	-
New Field Communications	C/FFP	Various : Various	0.550	-		-		-		-		-	0.000	0.550	-
National Conference Management	MIPR	USAF : Raytheon	4.514	-		-		-		-		-	0.000	4.514	-
IP Enable DRSN	MIPR	USAF : Raytheon	1.562	-		-		0.355	Mar 2021	-		0.355	Continuing	Continuing	-
HEMP Phone Development	MIPR	USAF : Raytheon	0.869	-		-		-		-		-	0.000	0.869	-
100G Optical	Various	Various : Various	0.337	-		-		-		-		-	0.000	0.337	-
Defense Production Act III Optical Networking	Various	Various : Various	2.666	-		-		-		-		-	0.000	2.666	-
DoD Mobility Capability Service Assurance	C/FFP	Various (JITC, HYPHONI) : Various	2.316	-		-		-		-		-	0.000	2.316	-
System Engineering & Future Technology Support	SS/CPFF	SPAWAR : Charleston	2.420	-		-		-		-		-	0.000	2.420	-
System Engineering Support DMCC/DMUC	C/FFP	BAH : Annapolis Junction MD	2.000	1.191	Feb 2019	1.339	Feb 2020	1.449	Feb 2021	-		1.449	Continuing	Continuing	-

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Appropriation/Budget Activity 0400 *I* 7						**R-1 Program Element (Number/Name)** PE 0303126K *I Long-Haul Communications - DCS*						**Project (Number/Name)** T82 *I DISN Systems Engineering Support*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
DIUx-Mobility APP Vetting and MSM tools (MTD)	MIPR	Zimperium : Dallas TX	-	2.237	Feb 2019	-		-		-		-	0.000	2.237	-
MES-C-DMCC Buildout/ VDI	SS/CPFF	APRIVA/SPAWAR : APRIVA/SPAWAR	-	-		1.139	Oct 2019	1.300	Oct 2020	-		1.300	Continuing	Continuing	-
		Subtotal	146.441	5.159		4.105		4.566		-		4.566	Continuing	Continuing	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
IT Support - Mobility	C/FFP	Arieds, LLC : Ft. Meade	2.300	-		-		-		-		-	0.000	2.300	-
NS2 SE Support - Mobility	C/FFP	APPTIS : Ft. Meade	0.311	-		-		-		-		-	0.000	0.311	-
IT Support - Mobility	Various	Various : Various	3.000	-		1.050	Oct 2019	1.050	Oct 2020	-		1.050	Continuing	Continuing	-
PNVC Software enhancements	C/CPFF	General Dynamics : NSA	5.900	-		-		-		-		-	0.000	5.900	-
		Subtotal	11.511	-		1.050		1.050		-		1.050	Continuing	Continuing	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Certification Testing	Various	JITC : Various	8.242	-		-		-		-		-	0.000	8.242	-
Test & Evaluation Support - Mobility	Various	JITC : Ft. Meade	5.907	0.286	Feb 2019	0.950	Oct 2019	0.950	Oct 2020	-		0.950	Continuing	Continuing	-
Integration, Test ann Modification - Mobility	Various	Various : Various	7.158	-		-		-		-		-	0.000	7.158	-
DISN Tech Refresh	Various	Various : Various	10.203	4.080	Jan 2019	5.061	Dec 2019	5.318	Dec 2020	-		5.318	Continuing	Continuing	-
Various	Various	Various : Various	2.305	-		-		-		-		-	0.000	2.305	-
		Subtotal	33.815	4.366		6.011		6.268		-		6.268	Continuing	Continuing	N/A

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Appropriation/Budget Activity 0400 *I* 7			**R-1 Program Element (Number/Name)** PE 0303126K *I Long-Haul Communications - DCS*			**Project (Number/Name)** T82 *I DISN Systems Engineering Support*			

	Prior Years	**FY 2019**	**FY 2020**	**FY 2021 Base**	**FY 2021 OCO**	**FY 2021 Total**	**Cost To Complete**	**Total Cost**	**Target Value of Contract**
Project Cost Totals	191.767	9.525	11.166	11.884	-	11.884	Continuing	Continuing	N/A

Remarks

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Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency | **Date:** February 2020

Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303126K / *Long-Haul Communications - DCS*	Project (Number/Name) T82 / *DISN Systems Engineering Support*

	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
DRSN																												
DRSN																						■	■	■	■	■	■	■
OSS																												
OSS																						■	■	■	■			
Technology Refresh																												
Technology Refresh												■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
DISN Tech Refresh																						■	■	■	■	■	■	■
Mobility																												
Lab Purchase (Gateways, NIPR, SIPR, TS Enclave)																						■	■	■	■	■	■	■
DoD Mobility Gateways - Architecture Support																						■	■	■	■	■	■	■
NIPR Enclave (MDM, MAS)																						■	■	■	■	■	■	■
SIPR Enclave (MDM, MAS)																						■	■	■	■	■	■	■
TS Enclave (MDM, MAS)																						■	■	■	■	■	■	■
MDM & MAS Operational Testing																						■	■	■	■	■	■	■
Virtual Desktop Infrastructure (VDI)																												■
PNVC																												■
DISN Tech Refresh																												

	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
DRSN																												
DRSN	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■								
OSS																												

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Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303126K *I Long-Haul Communications - DCS*	**Project (Number/Name)** T82 *I DISN Systems Engineering Support*

	FY 2019				**FY 2020**				**FY 2021**				**FY 2022**				**FY 2023**				**FY 2024**				**FY 2025**			
	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
OSS																												
Technology Refresh																												
Technology Refresh																												
DISN Tech Refresh																												
Mobility																												
Lab Purchase (Gateways, NIPR, SIPR, TS Enclave)																												
DoD Mobility Gateways - Architecture Support																												
NIPR Enclave (MDM, MAS)																												
SIPR Enclave (MDM, MAS)																												
TS Enclave (MDM, MAS)																												
MDM & MAS Operational Testing																												
Virtual Desktop Infrastructure (VDI)																												
PNVC																												
DISN Tech Refresh																												

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Exhibit R-4A, **RDT&E Schedule Details:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
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Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
DRSN				
DRSN	1	2017	4	2023
OSS				
OSS	1	2017	4	2017
Technology Refresh				
Technology Refresh	1	2015	4	2021
DISN Tech Refresh	1	2017	4	2025
Mobility				
Lab Purchase (Gateways, NIPR, SIPR, TS Enclave)	1	2017	4	2025
DoD Mobility Gateways - Architecture Support	1	2017	4	2025
NIPR Enclave (MDM, MAS)	1	2017	4	2025
SIPR Enclave (MDM, MAS)	1	2017	4	2025
TS Enclave (MDM, MAS)	1	2017	4	2025
MDM & MAS Operational Testing	1	2017	4	2025
Virtual Desktop Infrastructure (VDI)	4	2018	3	2020
PNVC	4	2018	4	2019
DISN Tech Refresh	1	2019	3	2024

Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	

| Appropriation/Budget Activity
0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7:
Operational Systems Development | | | | | R-1 Program Element (Number/Name)
PE 0303131K I *Minimum Essential Emergency Communications Network (MEECN)* | | | | | | | |

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	182.036	17.579	17.383	5.560	-	5.560	5.558	5.669	5.774	6.048	Continuing	Continuing
T64: *Special Projects*	70.985	5.481	5.558	5.560	-	5.560	5.558	5.669	5.774	6.048	Continuing	Continuing
T70: *Strategic C3 Support*	111.051	12.098	11.825	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

Minimum Essential Emergency Communications Network (MEECN) provides the Nuclear Command, Control, and Communications (NC3) Engineer with plans and procedures, systems analysis, operational assessments, systems engineering, and development of concepts of operation and architectures. The NC3 System provides connectivity from the President and the Secretary of Defense through the National Military Command System to nuclear execution forces integral to fighting a "homeland-to-homeland," as well as theater nuclear war. MEECN includes the Emergency Action Message dissemination systems and those systems used for integrated Tactical Warning/Attack Assessment, presidential decision-making conferencing, force report back, re-targeting, force management, and requests for permission to use nuclear weapons. Efforts assure positive control of nuclear forces and connectivity between the Secretary of Defense, military forces, and an informed decision-making linkage between the President, the Secretary of Defense, and the Combatant Commands. MEECN ensures our national leadership has proper command and control of our forces during times of national emergency, up to and including nuclear war.

B. Program Change Summary ($ in Millions)

	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	17.579	17.383	17.715	-	17.715
Current President's Budget	17.579	17.383	5.560	-	5.560
Total Adjustments	0.000	0.000	-12.155	-	-12.155
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustment	-	-	-12.155	-	-12.155

Change Summary Explanation

The decrease of -$12.155 is due to the transfer of the Joint Systems Engineering and Integration Office from DISA to USSTRATCOM. Ensures compliance with 2018 National Defense Authorization Act (NDAA).

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Exhibit R-2A, **RDT&E Project Justification:** PB 2021 Defense Information Systems Agency										**Date:** February 2020	
Appropriation/Budget Activity 0400 / 7				**R-1 Program Element (Number/Name)** PE 0303131K / *Minimum Essential Emergency Communications Network (MEECN)*						**Project (Number/Name)** T64 / *Special Projects*	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
T64: *Special Projects*	70.985	5.481	5.558	5.560	-	5.560	5.558	5.669	5.774	6.048	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The mission is performing classified work. All aspects of this project are classified and require special access. Detailed information on this project is not contained in this document.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Special Projects	5.481	5.558	5.560
Description: Program is classified and exhibit will be provided under a separate cover. *FY 2020 Plans:* Program is classified and exhibit will be provided under a separate cover. *FY 2021 Plans:* Program is classified and exhibit will be provided under a separate cover. *FY 2020 to FY 2021 Increase/Decrease Statement:* Program is classified and exhibit will be provided under a separate cover.			
Accomplishments/Planned Programs Subtotals	5.481	5.558	5.560

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

Program is classified and exhibit will be provided under a separate cover.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Information Systems Agency			Date: February 2020

Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303131K / Minimum Essential Emergency Communications Network (MEECN)	Project (Number/Name) T64 / Special Projects

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Classified	Various	Classified : Classified	70.985	5.481	Oct 2018	5.558	Oct 2019	5.560	Oct 2020	-		5.560	Continuing	Continuing	-
		Subtotal	70.985	5.481		5.558		5.560		-		5.560	Continuing	Continuing	N/A

	Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	70.985	5.481		5.558		5.560		-		5.560	Continuing	Continuing	N/A

Remarks

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Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 **/** 7	**R-1 Program Element (Number/Name)** PE 0303131K **/** *Minimum Essential Emergency Communications Network (MEECN)*	**Project (Number/Name)** T64 **/** *Special Projects*

	FY 2012				**FY 2013**				**FY 2014**				**FY 2015**				**FY 2016**				**FY 2017**				**FY 2018**			
	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
Classified																												
Classified																									▮	▮	▮	▮

	FY 2019				**FY 2020**				**FY 2021**				**FY 2022**				**FY 2023**				**FY 2024**				**FY 2025**			
	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
Classified																												
Classified	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	

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Exhibit R-4A, **RDT&E Schedule Details:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303131K *I Minimum Essential Emergency Communications Network (MEECN)*	**Project (Number/Name)** T64 *I Special Projects*

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Classified				
Classified	1	2018	4	2025

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	
Appropriation/Budget Activity 0400 / 7				**R-1 Program Element (Number/Name)** PE 0303131K / Minimum Essential Emergency Communications Network (MEECN)					**Project (Number/Name)** T70 / Strategic C3 Support			

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
T70: *Strategic C3 Support*	111.051	12.098	11.825	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project supports the mission of the Nuclear Command, Control, and Communications (NC3) Systems Engineer to the Joint Staff and Executive Leadership. It also provides NC3 expertise to the Department of Defense (DoD) Chief Information Officer (CIO) National Leadership Command Capability (NLCC) Management Office. Systems Analysis supports long range planning and vulnerability assessments to ensure the NC3 System is adequate under all conditions of stress or war and recommends investment strategies to evolve the Nuclear Command and Control System to achieve desired capabilities. Operational Assessments of fielded systems and weapon platforms provide the sole means for verification of NC3 systems' performance in support of plans and procedures, operation orders, training, equipment, and end-to-end system configuration. Assessments provide strategic and theater level C3 interfaces into the NC3 System. Supporting efforts assure positive control of nuclear forces and connectivity between the Secretary of Defense and strategic and theater forces. Systems Engineering provides the Senior Leadership C3 System with technical and management advice, planning and engineering support, and Test & Evaluation. Leading Edge Command, Control, Communications, Computers, and Intelligence technology is assessed for all communication platforms supporting executive travelers and senior leaders to include the interoperability of hardware and operational procedures. These technology elements support the President's and other DoD command centers and aircraft (e.g., Air Force One and the National Airborne Operations Center).

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Systems Engineering, Analysis and Architecture	12.098	11.825	0.000

Description: Engineering, development, testing and systems analysis to support NLCC capabilities.

FY 2020 Plans:
Will continue oversight and configuration control of the NLCC functional baseline. Will continue to identify NLCC capability gaps, and develop engineering courses of action to close those gaps. Will continue to shape plans for future NLCC capabilities, perform end-to-end testing of fielded capabilities, and perform operational assessments of current capabilities to provide quantitative measures of ongoing system performance and operational efficiency. Will continue to develop the NLCC Reference Architecture, its associated NLCC Roadmap, and the technical architecture patterns that will guide future solution architecture development.

FY 2021 Plans:
Will continue oversight and configuration control of the NLCC functional baseline. Will continue to identify NLCC capability gaps, and develop engineering courses of action to close those gaps. Will continue to shape plans for future NLCC capabilities, perform end-to-end testing of fielded capabilities, and perform operational assessments of current capabilities to provide quantitative measures of ongoing system performance and operational efficiency. Will continue to develop the NLCC Reference Architecture,

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Exhibit R-2A, **RDT&E Project Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303131K *I Minimum Essential Emergency Communications Network (MEECN)*	**Project (Number/Name)** T70 *I Strategic C3 Support*

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021**
NLCC Enterprise Architecture, NLCC Roadmaps, and the technical architecture patterns that will guide future solution architecture development.			
FY 2020 to FY 2021 Increase/Decrease Statement: The decrease of -$11.825 in FY 2020 to FY 2021 is attributed to the transfer of the Joint Systems Engineering and Integration Office from DISA to USSTRATCOM. Ensures compliance with 2018 NDAA.			
Accomplishments/Planned Programs Subtotals	12.098	11.825	0.000

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
• O&M, PE 0303131K: *O&M*	19.027	19.331	19.989	-	19.989	20.246	20.942	22.947	23.364	Continuing	Continuing

Remarks

D. Acquisition Strategy

Full and open competition resulted in contract vehicles with Raytheon, Arlington, VA; Science Applications Int'l Corporation (SAIC), McLean, VA; and Pragmatics, Mclean, VA.

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Exhibit R-3, **RDT&E Project Cost Analysis:** PB 2021 Defense Information Systems Agency													**Date:** February 2020	
Appropriation/Budget Activity 0400 *I* 7						**R-1 Program Element (Number/Name)** PE 0303131K *I Minimum Essential Emergency Communications Network (MEECN)*						**Project (Number/Name)** T70 *I Strategic C3 Support*		

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Systems Engineering 1	C/CPAF	SAIC : McLean, VA	21.699	-		-		-		-		-	0.000	21.699	-
Systems Engineering 2	C/CPAF	Raytheon Company : Arlington, VA	35.600	-		-		-		-		-	0.000	35.600	-
Systems Engineering 3	C/CPFF	Pragmatics : McLean, VA	10.080	-		-		-		-		-	0.000	10.080	-
Systems Engineering 4	C/FP	Raytheon Company : Arlington, VA	24.247	6.050	Feb 2019	6.050	Feb 2020	0.000	Feb 2021	-		0.000	Continuing	Continuing	Continuing
Systems Engineering 5	C/CPFF	BAH : Falls Church, VA	4.273	-		-		-		-		-	0.000	4.273	-
Systems Engineering 6	C/CPFF	Harris Corporation : Melbourne, FL	2.500	-		-		-		-		-	0.000	2.500	-
Systems Engineering 7	C/CPAF	Carson Engineering : Bethesda, MD	1.056	-		-		-		-		-	0.000	1.056	-
System Engineering 8	C/FFP	MITRE Corp : McLean, VA	2.273	1.000	Oct 2018	1.000	Oct 2019	0.000	Oct 2020	-		0.000	Continuing	Continuing	Continuing
System Engineering 9	C/FFP	JHU APL : Laurel, MD	2.500	1.000	Apr 2019	0.551	Apr 2020	0.000	Apr 2021	-		0.000	Continuing	Continuing	Continuing
System Engineering 10	C/FFP	Various : Various	1.342	-		-		-		-		-	0.000	1.342	-
System Engineering	C/CPFF	Jacob FNS : Arlington, Va	-	4.048	Oct 2018	4.224	Dec 2019	-		-		-	Continuing	Continuing	Continuing
Systems Engineering & Integration	C/CPFF	Verizon : Arlington, VA	5.481	-		-		-		-		-	0.000	5.481	-
Subtotal			111.051	12.098		11.825		0.000		-		0.000	Continuing	Continuing	N/A

	Prior Years	FY 2019		FY 2020		FY 2021 Base	FY 2021 OCO	FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	111.051	12.098		11.825		0.000	-	0.000	Continuing	Continuing	N/A

Remarks

Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303131K / *Minimum Essential Emergency Communications Network (MEECN)*	**Project (Number/Name)** T70 / *Strategic C3 Support*

	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
NLCC Program Tracking Report (formally known as NC3 Program Tracking Report)																												
NLCC Program Tracking Report																									█	█	█	█
Systems Analysis Documents																												
Systems Analysis Documents																									█	█	█	█
NLCC Reference Architecture (formally known as NC3 Reference Architecture																												
NLCC Reference Architecture																									█	█	█	█
Operational Assessments																												
Operational Assessments																									█	█	█	█
NLCC Portfolio Roadmap																												
NLCC Portfolio Roadmap																									█	█	█	█
NLCC System Engineering and Integration																												
NLCC System Engineering and Integration																									█	█	█	█
NLCC Target Architecture																												
NLCC Target Architecture																												█

	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
NLCC Program Tracking Report (formally known as NC3 Program Tracking Report)																												
NLCC Program Tracking Report	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█			
Systems Analysis Documents																												
Systems Analysis Documents	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█

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Exhibit R-4, RDT&E Schedule Profile: PB 2021 Defense Information Systems Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303131K / *Minimum Essential Emergency Communications Network (MEECN)*	**Project (Number/Name)** T70 / *Strategic C3 Support*

	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
NLCC Reference Architecture (formally known as NC3 Reference Architecture																												
NLCC Reference Architecture																												
Operational Assessments																												
Operational Assessments																												
NLCC Portfolio Roadmap																												
NLCC Portfolio Roadmap																												
NLCC System Engineering and Integration																												
NLCC System Engineering and Integration																												
NLCC Target Architecture																												
NLCC Target Architecture																												

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Exhibit R-4A, **RDT&E Schedule Details:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303131K *I Minimum Essential Emergency Communications Network (MEECN)*	**Project (Number/Name)** T70 *I Strategic C3 Support*

Schedule Details

Events by Sub Project	Start		End	
	Quarter	**Year**	**Quarter**	**Year**
NLCC Program Tracking Report (formally known as NC3 Program Tracking Report)				
NLCC Program Tracking Report	1	2018	3	2025
Systems Analysis Documents				
Systems Analysis Documents	1	2018	4	2025
NLCC Reference Architecture (formally known as NC3 Reference Architecture				
NLCC Reference Architecture	1	2018	4	2025
Operational Assessments				
Operational Assessments	1	2018	4	2025
NLCC Portfolio Roadmap				
NLCC Portfolio Roadmap	1	2018	1	2025
NLCC System Engineering and Integration				
NLCC System Engineering and Integration	1	2018	1	2025
NLCC Target Architecture				
NLCC Target Architecture	4	2018	3	2025

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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	

| Appropriation/Budget Activity
0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7:
Operational Systems Development | | | | | R-1 Program Element (Number/Name)
PE 0303140K *I Information Systems Security Program* | | | | | | | |

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	0.000	42.262	40.398	8.922	-	8.922	6.485	7.222	9.065	9.109	Continuing	Continuing
IA3: *Information Systems Security Program*	0.000	42.262	40.398	8.922	-	8.922	6.485	7.222	9.065	9.109	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Information Systems Security Program (ISSP) mission focuses on developing Department of Defense (DoD) enterprise solutions to Combatant Commands, Services, and Defense-wide agencies to ensure critical mission execution in the face of cyber attacks. The ISSP ensures that, the network, the computing centers, and core enterprise services will evolve to better support a joint cybersecurity/information assurance model that has common enterprise-scale perimeter defenses and will support a broad range of sharing policies from completely unclassified to tightly-held within a classified community. The ISSP will test and develop active-active defensive capabilities; test and integrate software defined networking and orchestration closed-loop security; perform research, development and engineering of emerging cyber situational awareness technologies; harden the network by providing architecture support, systems engineering and analytical functions for Endpoint and Perimeter defense capabilities; cyber IT infrastructure and automation support to deploy enterprise-wide next generation identity technologies; and develop and evolve an integrated cyber domain security workforce to be on the leading edge of defensive capabilities.

B. Program Change Summary ($ in Millions)

	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	19.611	42.796	12.904	-	12.904
Current President's Budget	42.262	40.398	8.922	-	8.922
Total Adjustments	22.651	-2.398	-3.982	-	-3.982
• Congressional General Reductions	-	-2.398			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	22.717	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.066	-			
• Adjustment	-	-	-3.982	-	-3.982

Change Summary Explanation

The increase of +$22.651 in FY2019 reflects a transfer of funding to Small Business Innovation research (SBIR) and Small Business Technology Transfer (STTR) programs (-$0.066) and an increase of +$22.717 received through a congressional reprogramming action for Secure Application Development (DevSecOps) (+$4.500); Identity Credentialing and Access Management (ICAM) (+$12.200) and Zero Trust Architecture (ZTA) (+$6.000). DevSecOps is to develop integrated tools and standards that enable users and partners to develop, deploy, and operate applications in a security and flexible environment. ICAM will standardize

Exhibit R-2, **RDT&E Budget Item Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0303140K *I Information Systems Security Program*	

credentialing capabilities for secure access to mobile devices and ZTA implements the Department's security protocols by continuously verifying everyone within the network.

The decrease of -$2.398 in FY 2020 is attributable to the Congressional directed transfer of Sharkseer from NSA to DISA ($1.882) and a Congressional general reduction of -$4.280 for unjustified growth.

The decrease of -$3.982 in FY 2021 is due to an increase for Zero Trust Architecture (ZTA) to further develop the DoD architectures for Zero-Trust Architecture and lab development (+$2.462) and a decrease due to the elimination of the DISA Cybersecurity Information Assurance Range, to avoid duplication of effort with the CYBERCOM Range under development. Also a reduction to cyber innovation and "DWR".

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency										Date: February 2020	
Appropriation/Budget Activity 0400 / 7				**R-1 Program Element (Number/Name)** PE 0303140K / *Information Systems Security Program*						**Project (Number/Name)** IA3 / *Information Systems Security Program*	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
IA3: *Information Systems Security Program*	0.000	42.262	40.398	8.922	-	8.922	6.485	7.222	9.065	9.109	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Information Systems Security Program (ISSP) mission focuses on developing Department of Defense (DoD) enterprise solutions to Combatant Commands, Services, and Defense-wide agencies to ensure critical mission execution in the face of cyber attacks. The ISSP ensures that, the network, the computing centers, and core enterprise services will evolve to better support a joint cybersecurity/information assurance model that has common enterprise-scale perimeter defenses and will support a broad range of sharing policies from completely unclassified to tightly-held within a classified community. The ISSP will test and develop active-active defensive capabilities; test and integrate software defined networking and orchestration closed-loop security; perform research, development and engineering of emerging cyber situational awareness technologies; harden the network by providing architecture support, systems engineering and analytical functions for Endpoint and Perimeter defense capabilities; cyber IT infrastructure and automation support to deploy enterprise-wide next generation identity technologies; and develop and evolve an integrated cyber domain security workforce to be on the leading edge of defensive capabilities.

B. Accomplishments/Planned Programs ($ in Millions)

	FY 2019	FY 2020	FY 2021
Title: Zero-Day Network Defense Email Capability	4.500	-	-
Description: Zero-Day Network Defense (ZND) Email Capability Technology Assessment/Evaluation for Tech Refresh.			
Title: DoD Cyber Security Range (CSR)	1.351	1.337	-
Description: The DoD Cyber Security Range (CSR) provides a multi-classification level, operationally realistic, DODIN representative, cyber security environment to sustain and enhance the professional development of the DoD cyber security workforce. *FY 2020 Plans:* Continue providing the Cybersecurity (CS) / Information Assurance (IA) Range platform to test new Cybersecurity efforts using the CS Range; Continue to support capability to leverage CS Range for training and capstone events; Support capability for remote access to CS Range for testing, training and exercises. Implement Joint Regional Security Stacks (JRSS) Cloud Learning Environment improvements, JRSS Management System (JMS) Enhancements, and replicate the tactical network boundaries of the four services. *FY 2020 to FY 2021 Increase/Decrease Statement:*			

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency		Date: February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303140K *I Information Systems Security Program*	**Project (Number/Name)** IA3 *I Information Systems Security Program*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
The decrease of -$1.337 between FY 2020 and FY 2021 is due to the elimination of the DISA Cybersecurity Information Assurance Range to avoid duplication of effort with the CYBERCOM Range under development and apart of the "DWR".			
Title: Endpoint Security Solutions (ESS)	3.000	-	-
Description: Endpoint Security Solutions (ESS) provides counters exploitation and destructive malware, contain exploited threats, and make indicators of attack/compromise visible to the operator; fully supports friendly forces operating in contested cyber environments. Provides Asset Inventory Management Modules (AIMM) to provide near-real time situational awareness of devices. Provides Digital Policy Management System (DPMS) to facilitate development and maintenance of Cybersecurity/Information Assurance Standards. Provides Assured Compliance Assessment Solution (ACAS) to assess the configuration compliance of networks and systems against DoD and all known vulnerabilities.			
Title: Cyber HQs Support	10.300	-	-
Description: Preserves User Activity Monitoring (UAM) capability in countering insider threats at nine Combatant Commands.			
Title: Cyber Innovation and Technology	0.411	1.179	0.464
Description: Provide research and development, conduct technology assessments, rapidly produce prototypes using commercial solutions, validate assumptions, and provide empirical data to drive real time enterprise solutions and decisions in assisting DoD requirement owners for enterprise fielding of innovative gap fillers to address cyber capabilities and militarization of commercial information assurance capabilities tactical edge. All project undertaken directly increase information sharing capabilities and assure C2 functionality against a common operating picture. The program will leverage its robust IT infrastructure to develop small prototypes to find cost saving initiatives across the DoD Information Network (DODIN) in an effort to provide the DoD with faster more reliable communications capabilities. These solutions will look to provide enhanced warfighting technology and research development programs improving the protection, survivability, mobility and combat effectiveness of the DoD. *FY 2020 Plans:* Assess, test, and prototype DoDCAR (DoD Cybersecurity Analysis and Review processes), including portfolio management against threat coverage and analyses of advisory behaviors within DoD Networks. Perform an assessment of Blockchain commercial capabilities, evaluating them for suitability to enhance enterprise level services for DoD entities. *FY 2021 Plans:* Continued assessment, testing, prototype improvement and implementation of DoDCAR (DoD Cybersecurity Analysis and Review processes). This includes portfolio management against threat coverage and the execution of deeper analyses of advisory behaviors within DoD Networks. *FY 2020 to FY 2021 Increase/Decrease Statement:*			

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency		Date: February 2020	
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303140K / Information Systems Security Program	Project (Number/Name) IA3 / Information Systems Security Program	

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
The decrease of -$0.715 from FY 2020 to FY 2021 is due to a reduction in the scope of Cyber Innovation & Technology efforts, specifically early completion of the Blockchain assessment in FY 2020.			
Title: Identity, Credential, and Access Management (ICAM)	12.200	30.000	-
Description: Develop and deploy Identity, Credential, and Access Management (ICAM) efforts associated with automated account provisioning and auditability and federalized authentication services that support credentials for DoD and non-DoD personnel. **FY 2020 Plans:** Conduct the Master User Record (MUR) pathfinder effort and several Automated Account Provisioning (AAP) use-case Pilots. **FY 2020 to FY 2021 Increase/Decrease Statement:** The decrease of -$30.000 from FY 2020 to FY 2021 is due to completion of one-time funding of Master User Record (MUR) pathfinder effort and several Automated Account Provisioning (AAP) use-case pilots.			
Title: Sharkseer	-	1.882	-
Description: SHARKSEER is a critical component of the Cyber Kill Chain that uniquely enhances the defensive posture of the Department of Defense Information Network (DoDIN) by assisting us with mitigating unknown (zero-day) cyber threats in near-real time utilizing orchestration. SHARKSEERs primary mission is to detect and mitigate Zero-Days and Advanced Persistent Threats (APTs) at DoDIN IAPs. SHARKSEER also provides Malware Analytics, Deep Packet Analysis, Global Threat Intelligence, and Cyber Threat Indicator (CTI) sharing to Federal Agencies, Military Departments, and Services. **FY 2020 Plans:** Research and develop next generation advance architecture to provide a more scalable system that can also more effectively respond to unknown cyber security threats that traverse the Department of Defense Information Networks (DoDIN). **FY 2020 to FY 2021 Increase/Decrease Statement:** The decrease of -$1.882 from FY 2020 to FY 2021 is due to completion of next generation advance architecture.			
Title: Zero Trust Architecture (ZTA)	6.000	-	2.462
Description: Will develop, test, and evaluate the technologies required for the implementation of ZTA. **FY 2021 Plans:** To develop, test, and evaluate technologies, identify critical applications on SIPR that are required to improve security, and analyze backbone design, gateway, and mobility infrastructure for necessary improvements. **FY 2020 to FY 2021 Increase/Decrease Statement:**			

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Exhibit R-2A, **RDT&E Project Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303140K *I Information Systems Security Program*	**Project (Number/Name)** IA3 *I Information Systems Security Program*

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021**
The increase of $2.462 between FY 2020 and FY 2021 will further the DoD architectures for Zero-Trust Architecture (ZTA) and lab development. The labs purpose is to replicate the DoD infrastructure in order to validate architectures. Funding will be utilized for lab improvements to test and verify vendor equipment and contractor labor support.			
Title: Secure Application Development (DevSecOps) Program *Description:* Will provide an enterprise capability for an automated DevSecOps platform that programs can use to rapidly and automatically build, accredit, secure, test, deploy, monitor, and protect newly developed applications. *FY 2020 Plans:* Develops integrated tools and standards that enable users and partners to develop, deploy, and operate applications in a secure and flexible environment. *FY 2021 Plans:* Develops integrated tools and standards that enable users and partners to develop, deploy, and operate applications in a secure and flexible environment. *FY 2020 to FY 2021 Increase/Decrease Statement:* The decrease of -$.004 from FY 2020 to FY 2021 is due to an non-pay non-fuel inflation adjustment.	4.500	6.000	5.996
Accomplishments/Planned Programs Subtotals	42.262	40.398	8.922

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
• O&M, DW: *PE 0303140K*	0.000	0.000	56.974	0.000	56.974	59.237	57.545	56.380	58.837	Continuing	Continuing
• Procurement, DW: *PE 0303140K*	0.000	0.000	4.160	0.000	4.160	2.214	4.258	6.300	6.432	Continuing	Continuing

Remarks
 N/A

D. Acquisition Strategy
 N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Information Systems Agency													Date: February 2020	
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Support ($ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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**
ZND Technology Assessment/Evaluation for email capability Tech Refresh	C/FFP	ASRC Federal : Beltsville, MD	-	16.705	Feb 2019	-	-	-	-	-	-	-	0.000	16.705	-
DoD Cyber Security Range (CSR) Virtual Training Environment	C/FFP	ManTech : Fairfax, VA	-	2.198	Feb 2019	-	-	-	-	-	-	-	0.000	2.198	-
DoD Cyber Security Range (CSR) Virtual Training Environment - Re-compete	C/FFP	ManTech : Fairfax, VA	-	0.476	Jun 2019	1.207	Sep 2020	-	-	-	-	-	Continuing	Continuing	-
DoD Endpoint Security Solutions (ESS)	C/FFP	TBD : TBD	-	-		-		-		-		-	0.000	0.000	-
Cyber HQs Support	C/FFP	Bylight : Fort Meade, MD	-	18.705	Jan 2019	-		-		-		-	0.000	18.705	-
Joint Information Operations Range (JIOR) Connection	C/FFP	ManTech : Stafford, VA	-	0.130	Jan 2019	0.130	Sep 2020	-		-		-	Continuing	Continuing	-
DISA EA Model Development for Cyber Security and Network Technical Domains, DODCAR Cyber Analysis Tool Development	C/FFP	Various : Various	-	4.048		0.459	Jan 2020	0.464	Jan 2021	-		0.464	Continuing	Continuing	-
Deployment of Blockchain and Next Generation Identity	C/FFP	TBD : TBD	-	-		6.000	Jan 2020	1.494	Jan 2021	-		1.494	Continuing	Continuing	-
Cyber Innovation and Technology	C/FFP	TBD : TBD	-	-		5.000	Mar 2020	-		-		-	Continuing	Continuing	-
Identity, Credential, and Access Management (ICAM)	C/FFP	TBD : TBD	-	-		27.602	Mar 2020	-		-		-	Continuing	Continuing	-
Sharkseeker	C/FFP	TBD : TBD	-	-		-		4.500		-		4.500	Continuing	Continuing	-
Zero Trust Architecture (ZTA)	C/FFP	TBD : TBD	-	-		-		2.464		-		2.464	Continuing	Continuing	-

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Exhibit R-3, **RDT&E Project Cost Analysis:** PB 2021 Defense Information Systems Agency												**Date:** February 2020		
Appropriation/Budget Activity 0400 / 7							**R-1 Program Element (Number/Name)** PE 0303140K / *Information Systems Security Program*					**Project (Number/Name)** IA3 / *Information Systems Security Program*		

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	Award Date	FY 2020 Cost	Award Date	FY 2021 Base Cost	Award Date	FY 2021 OCO Cost	Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	42.262		40.398		8.922		-		8.922	Continuing	Continuing	N/A

			Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	42.262		40.398		8.922		-		8.922	Continuing	Continuing	N/A

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2021 Defense Information Systems Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303140K / *Information Systems Security Program*	**Project (Number/Name)** IA3 / *Information Systems Security Program*

	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
Zero-Day Network Defense Email Capability																												
Zero-Day Network Defence (ZND) Email Capability Technology Assessment/ Evaluation for Tech Refresh																											█	
Cyber HQs Support																												
Test new Cybersecurity efforts using the CS Range																											█	
Increase capability to leverage CS Range for training and capstone events;																											█	
Increase capability for remote access to CS Range for testing, training and exercises.																											█	
Implement Joint Regional Security Stacks (JRSS) Cloud Learning Environment improvements																											█	
JRSS Management System (JMS) Enhancements																											█	
Replicate the tactical network boundaries of the four services.																											█	
Architecture and Model development																												
DODCAR WG Support																												
Innovation and Technology																												
Block Chain Cyber Innovation Technology Assessment																												
Next Gen Identity Tool Suite Cyber Innovation Technology Assessment																												
Zero Trust Architecture (ZTA)																												
Develop, test, and evaluate the technologies																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2021 Defense Information Systems Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303140K / *Information Systems Security Program*	**Project (Number/Name)** IA3 / *Information Systems Security Program*

	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
Sharkseer																												
To develop Sharkseer 2.0																												

	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
Zero-Day Network Defense Email Capability																												
Zero-Day Network Defence (ZND) Email Capability Technology Assessment/ Evaluation for Tech Refresh	████																											
Cyber HQs Support																												
Test new Cybersecurity efforts using the CS Range	████																											
Increase capability to leverage CS Range for training and capstone events;	████																											
Increase capability for remote access to CS Range for testing, training and exercises.	████																											
Implement Joint Regional Security Stacks (JRSS) Cloud Learning Environment improvements	████																											
JRSS Management System (JMS) Enhancements	████																											
Replicate the tactical network boundaries of the four services.	████																											
Architecture and Model development																												
DODCAR WG Support					████████████████████████████████████																							
Innovation and Technology																												

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Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303140K *I Information Systems Security Program*	**Project (Number/Name)** IA3 *I Information Systems Security Program*

	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
Block Chain Cyber Innovation Technology Assessment						████████████████████████████████████																						
Next Gen Identity Tool Suite Cyber Innovation Technology Assessment						████████████████████████████████████																						
Zero Trust Architecture (ZTA)																												
Develop, test, and evaluate the technologies											██																	
Sharkseer																												
To develop Sharkseer 2.0											██																	

Exhibit R-4A, **RDT&E Schedule Details:** PB 2021 Defense Information Systems Agency			**Date:** February 2020	
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303140K *I Information Systems Security Program*		**Project (Number/Name)** IA3 *I Information Systems Security Program*	

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Zero-Day Network Defense Email Capability				
Zero-Day Network Defence (ZND) Email Capability Technology Assessment/ Evaluation for Tech Refresh	4	2018	4	2019
Cyber HQs Support				
Test new Cybersecurity efforts using the CS Range	4	2018	4	2019
Increase capability to leverage CS Range for training and capstone events;	4	2018	4	2019
Increase capability for remote access to CS Range for testing, training and exercises.	4	2018	4	2019
Implement Joint Regional Security Stacks (JRSS) Cloud Learning Environment improvements	4	2018	4	2019
JRSS Management System (JMS) Enhancements	4	2018	4	2019
Replicate the tactical network boundaries of the four services.	4	2018	4	2019
Architecture and Model development				
DODCAR WG Support	2	2020	3	2025
Innovation and Technology				
Block Chain Cyber Innovation Technology Assessment	3	2020	3	2024
Next Gen Identity Tool Suite Cyber Innovation Technology Assessment	3	2020	3	2024
Zero Trust Architecture (ZTA)				
Develop, test, and evaluate the technologies	4	2021	3	2025
Sharkseer				
To develop Sharkseer 2.0	4	2021	3	2025

Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*					**R-1 Program Element (Number/Name)** PE 0303150K *I Global Command and Control System*							

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	572.655	44.974	17.218	3.695	-	3.695	4.201	4.364	4.446	4.538	Continuing	Continuing
CC01: *Global Command and Control System-Joint (GCCS-J)*	572.655	44.974	17.218	3.695	-	3.695	4.201	4.364	4.446	4.538	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Global Command and Control System-Joint (GCCS-J) funds a Joint Command and Control (JC2) portfolio which includes: GCCS-J, Joint Planning and Execution Services (JPES), and JC2 Architecture.

The GCCS-J Program is the Department of Defense (DoD) Joint C2 system of record. It incorporates core planning and assessment tools required by Combatant Commanders and their subordinate Joint Task Force Commanders while meeting the readiness support requirements of the Services. GCCS-J is used by all nine Combatant Commands (COCOMs) at sites around the world, supporting joint and coalition operations. The Services rely heavily on GCCS-J components to reduce their command and control (C2) operational costs. It provides support for commanders and staffs as they conduct joint and multinational operations by providing a fused picture of the battle space within an integrated system that is supporting joint warfighter needs today. GCCS-J is currently focused on sustainment, synchronization, and modernization to meet emerging operational needs by modifying and enhancing elements or capabilities in order to implement new requirements, enhance functionality, increase efficiency and lower operating and deployment costs while taking advantage of the progress made by current operational systems and technologies. The GCCS-J program is also executing incremental modernization of C2 capabilities using the Joint Requirements Oversight Council (JROC) approved needs.

JPES is a portfolio of capabilities supporting joint policies, processes, procedures, and reporting structures. It is supported by communications and information technology used by the Joint Planning and Execution Community (JPEC). JPEC uses these capabilities to monitor the following activities: planning, execute mobilization, deployment, employment and sustainment, redeployment, and demobilization.   At full maturity, the JPES capabilities will be integrated with other adaptive planning and execution systems to facilitate the rapid development and sustainment of plans and a seamless, dynamic transition to execution in a net-centric environment. One of the key capabilities residing within the JPES portfolio of sustaining the existing Joint Operational Planning and Execution System (JOPES) while modernization of JOPES is planned and implemented. The JPES portfolio also includes a core set of infrastructure services consisting of the JPES Framework (JFW) and a variety of mission applications to include Joint Force Projection (JFP), Joint Capabilities Requirements Manager (JCRM) and eventually the capabilities that will replace JOPES.

JC2 Architecture is a reference architecture that aligns closely to the DoD Information Enterprise Architecture. The JC2 Architecture describes architectural and operational concepts, technical constructs, and is a repository for valuable reference information relating to C2 standards and information security. It is the authoritative source of information and technical direction for the JC2 arena.

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Exhibit R-2, **RDT&E Budget Item Justification:** PB 2021 Defense Information Systems Agency				**Date:** February 2020	
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*			**R-1 Program Element (Number/Name)** PE 0303150K *I Global Command and Control System*		

B. Program Change Summary ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021 Base**	**FY 2021 OCO**	**FY 2021 Total**
Previous President's Budget	46.900	25.218	33.075	-	33.075
Current President's Budget	44.974	17.218	3.695	-	3.695
Total Adjustments	-1.926	-8.000	-29.380	-	-29.380
• Congressional General Reductions	-	-8.000			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.221	-			
• SBIR/STTR Transfer	-1.705	-			
• Adjustments	-	-	-29.380	-	-29.380

Change Summary Explanation

The decrease in FY 2019 is due to the decrease of -$1.705 for a transfer of funding to Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs and decrease of -$0.221 was reprogrammed to support Other Transaction Authority (OTA) requirement.

The decrease of -$29.380 in FY 2021 is attributed to the transfer of funds from BA7 to BA 8 to support Global Command and Control System-Joint under the Software & Digital Technology pilot program.

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	

Appropriation/Budget Activity 0400 / 7				R-1 Program Element (Number/Name) PE 0303150K / Global Command and Control System					Project (Number/Name) CC01 / Global Command and Control System-Joint (GCCS-J)			

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
CC01: *Global Command and Control System-Joint (GCCS-J)*	572.655	44.974	17.218	3.695	-	3.695	4.201	4.364	4.446	4.538	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Global Command and Control System – Joint (GCCS-J) is DoD's Joint Command and Control (JC2) system of record and provides the foundation for migration of service-unique C2 systems into a Joint, interoperable environment. The Defense Information System Agency's (DISAs) portfolio includes funding to support GCCS-J, Joint Planning and Execution Services (JPES), and the development and sustainment of the JC2 Architecture. GCCS-J incorporates the core planning and assessment tools required by combatant commanders and their subordinate Joint Task Force Commanders while meeting the readiness support requirements of the Services. Adaptive Planning and Execution Joint Planning Services are being developed to modernize the adaptive planning functions in a net centric environment. DISA continues to provide support for the operational system to ensure continued access to information integration and decision-support capabilities that enable the exercise of authority and direction over assigned and attached forces, in a net-centric, collaborative information environment. Additionally, DISA provides critical C2 capabilities to the Commander-in-Chief, Secretary of Defense, National Military Command Center, Combatant Commands (COCOMs), Joint Force Commanders, and Service Component Commanders.

JPES is a set of capabilities that address components of the DOD's Adaptive Planning Roadmap (13 December 2005) and Adaptive Planning Roadmap II (5 March 2008). JPES produces enhancements to the Joint Operations Planning and Execution System (JOPES), focused adaptive planning capabilities, and provides a set of core infrastructure services necessary to provide the warfighter a fully interoperable environment where functionality can be easily added as mission needs dictate.

The JC2 Architecture is a foundational element of JC2 capabilities for the Department. The JC2 Architecture provides a set of net-centric tenets associated with data, functional service and the C2 infrastructure that describes architectural and operational concepts, technical constructs, and is a repository for valuable reference information relating to C2 standards and information security. Each year, the DISA architecture team produces a transitional architecture that documents the current state of C2 capabilities, anticipated changes/enhancements either in progress or planned by the JC2 community.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Development and Strategic Planning	38.601	13.944	-
Description: Develop, publish, and execute a GCCS-J migration and modernization strategy that achieves the following GCCS-J Modernization objectives in accordance with Joint C2 Mission operational priorities and the DoD's JC2 Reference Architecture: • Continue to decompose applicable existing applications into services • Limit local deployment and move as much to the enterprise as possible • Continue to expose data and scale services to support an enterprise implementation			

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303150K / Global Command and Control System	Project (Number/Name) CC01 / Global Command and Control System-Joint (GCCS-J)

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
• Continue to evolve more economical hardware and software architecture without impact to the operational user or Family of Systems (FoS)/interface partners • Reduce overall sustainment cost through use of more cost effective and appropriate Commercial-off-the-Shelf (COTS) and Hardware (HW) products • Evolve to use of agile development practices • Consolidation of clients and tools *FY 2020 Plans:* Cyber security analysis, research and development is an ongoing aspect of the software lifecycle required to keep the system securely deployed. Continue to maintain the synchronization across DoD of GCCS-J, joint interfaces and the GCCS Family of Systems; continue to deliver capabilities as prioritized by the warfighter; and meet emerging operational priorities. Will continue the development work towards initial operating capability (IOC) and full operational capability (FOC) with the infrastructure framework, the software development kit (SDK) and system visualization. This will allow the FOC capabilities to build upon and interface with the framework. Additionally, start the FOC development with the following capabilities for the GCCS-JE System: - Data Management, Admin & Support, Situational Awareness, Mission Support, and Force Protection. *FY 2020 to FY 2021 Increase/Decrease Statement:* The decrease of -$13.944 from FY 2020 to FY 2021 is attributed to the transfer of funds from BA7 to BA 8 to support Global Command and Control System- Joint under the Software & Digital Technology pilot program.			
Title: Joint Planning and Execution Services (JPES) *Description:* JPES is a collection of capabilities supporting joint policies, processes, procedures, and reporting structures, that are supported by communications and information technology used by the Joint Planning and Execution Community (JPEC). JPEC uses these capabilities to monitor, plan, and execute: mobilization, deployment, employment, sustainment, redeployment, and demobilization activities associated with joint operations. *FY 2020 Plans:* Maintain, fix and enhance performance on JPES, Newsgroups, Joint Capabilities Requirments Manager (JCRM) and Preferred Forces Generation (PFG) and develop any additional data services. *FY 2021 Plans:*	6.373	3.274	3.695

Exhibit R-2A, **RDT&E Project Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303150K *I Global Command and Control System*	**Project (Number/Name)** CC01 *I Global Command and Control System-Joint (GCCS-J)*

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021**
Continue to modernize JPES by improving performance on the Framework, integrating with additional external partners, developing additional data services and enhancements to the user interface. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** The increase of +$0.421 from FY 2020 to FY 2021 is due to the transition from DoD Information Assurance Certification and Accreditation Process (DIACAP) to Risk Management Framework (RMF) for Joint Operation Planning and Execution System (JOPES) and the related development activities to maintain the Authority to Operation (ATO).			
Accomplishments/Planned Programs Subtotals	44.974	17.218	3.695

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
• PE 0303150K: *Operation & Maintenance, Defense-Wide*	92.415	93.315	90.559	-	90.559	-	-	-	-	Continuing	Continuing

Remarks

D. Acquisition Strategy

Use of performance-based contract awards is maximized while use of Time and Material contracts is minimized to those providing programmatic support versus software development, integration, or testing. All development, integration, and migration efforts within the portfolio are primarily supported through Cost Reimbursable Task Orders issued under competitively awarded contracts. Acquisition Strategies are structured to retain contractors capable of satisfying cost, schedule, and performance objectives. Contract awards incorporate provisions requiring contractors to establish and manage specific earned value data. This strategy mitigates risk by requiring monthly Contract Performance Reviews (CPRs) and utilizing award fee contracts where appropriate to incentivize performance. Both GCCS-J and JPES apply formal acquisition rigor to include reporting requirements, as appropriate, by acquisition program designation.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Information Systems Agency			Date: February 2020
Appropriation/Budget Activity 0400 / 7		**R-1 Program Element (Number/Name)** PE 0303150K / *Global Command and Control System*	**Project (Number/Name)** CC01 / *Global Command and Control System-Joint (GCCS-J)*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Product Development 1	C/CPFF	NGMS : Reston, VA	20.289	-		-		-		-		-	0.000	20.289	-
Product Development 2	FFRDC	MITRE : McLean, VA	7.077	-		-		-		-		-	0.000	7.077	-
Product Development 3	SS/FFP	Dynamic Systems : Los Angeles, CA	3.189	-		-		-		-		-	0.000	3.189	-
Product Development 4	C/CPFF	Pragmatics : McLean, VA	31.239	-		-		-		-		-	0.000	31.239	-
Product Development 6	C/CPIF	BAH : McLean, VA	3.369	-		-		-		-		-	0.000	3.369	-
Product Development 7	C/CPIF	JPES Framework : Various	19.554	0.587	Dec 2018	-		-		-		-	0.000	20.141	-
Product Development 8	C/CPFF	RTB Development : Various	13.116	-		-		-		-		-	0.000	13.116	-
Product Development 9	C/CPFF	IGS Development : Various	12.398	-		-		-		-		-	0.000	12.398	-
Product Development 10	C/CPFF	SAIC : Falls Church, VA	4.826	-		-		-		-		-	0.000	4.826	-
Product Development 11	MIPR	SSC : San Diego, CA	13.317	-		-		-		-		-	0.000	13.317	-
Product Development 12	C/CPFF	NGMS : Reston, VA	67.014	-		-		-		-		-	0.000	67.014	-
Product Development 13	MIPR	NGIT : Various	1.772	-		-		-		-		-	0.000	1.772	-
Product Development 14	C/CPFF	NGMS : Reston, VA	86.191	-		2.100	Dec 2019	-		-		-	Continuing	Continuing	Continuing
Product Development 15	C/CPIF	Booz Allen Hamilton : McLean, VA	3.283	-		-		-		-		-	0.000	3.283	-
Product Development 16	C/CPFF	Booz Allen Hamilton : Various	3.685	-		-		-		-		-	0.000	3.685	-
Product Development 17	C/CPAF	Booz Allen Hamilton : Falls Church, VA	1.229	-		-		-		-		-	0.000	1.229	-
Product Development 18	C/CPAF	AB Floyd : Alexandria, VA	12.477	-		-		-		-		-	0.000	12.477	-
Product Development 19	C/CPAF	Femme Comp Inc : Chantilly, VA	7.249	-		-		-		-		-	0.000	7.249	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Information Systems Agency													Date: February 2020	
Appropriation/Budget Activity 0400 *I* 7						**R-1 Program Element (Number/Name)** PE 0303150K *I Global Command and Control System*				**Project (Number/Name)** CC01 *I Global Command and Control System-Joint (GCCS-J)*				

Product Development ($ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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**
Product Development 20	C/CPFF	SAIC : Falls Church, VA	5.876	-		-		-		-		-	0.000	5.876	-
Product Development 21	C/CPIF	Booz Allen Hamilton : McLean, VA	5.865	-		-		-		-		-	0.000	5.865	-
Product Development 22	MIPR	JDISS : Various	6.039	-		-		-		-		-	0.000	6.039	-
Product Development 23	C/FFP	NGMS : Reston, VA	4.790	-		-		-		-		-	0.000	4.790	-
Product Development 24	MIPR	SPAWAR : Charleston, SC	10.755	0.720	Sep 2019	1.681	Sep 2020	-		-		-	Continuing	Continuing	Continuing
Product Development 25	MIPR	Dept of Energy, Army Research Lab, PD Intelligence Fusion, GSA/FAS : Various	5.710	-		-		-		-		-	0.000	5.710	-
Product Development 26	C/CPAF	Tactical 3-D COP : Various	3.200	-		-		-		-		-	0.000	3.200	-
Product Development 27	SS/FFP	JITC : Various	20.400	-		-		-		-		-	0.000	20.400	-
Product Development 28	C/CPFF	JCRM : McLean, VA	8.600	-		-		-		-		-	Continuing	Continuing	Continuing
Product Development 30	C/CPFF	Systems Engineering and Integration : Various	14.030	-		-		-		-		-	0.000	14.030	-
Product Development 31	C/Various	GCCS-J : Various	5.367	-		-		-		-		-	0.000	5.367	-
Product Development 32	C/CPFF	CRSA/GDIT LLC : Chantilly, VA	10.500	3.693	Jun 2019	-		-		-		-	0.000	14.193	-
Product Development 33	C/FFP	Interimage Inc : Arlington, VA	4.673	1.506	Mar 2019	3.026	Mar 2020	1.000	Mar 2021	-		1.000	Continuing	Continuing	Continuing
Engineering Services and Integration 29	SS/FFP	GCCS-J : Various	6.782	-		-		-		-		-	6.782	13.564	-
I3 Engineering Services & SW Development	C/Various	NGIT : Various	1.811	-		-		-		-		-	0.000	1.811	-

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Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303150K / Global Command and Control System	**Project (Number/Name)** CC01 / Global Command and Control System-Joint (GCCS-J)

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Product Development 29	C/FFP	JOPES modernization : Washington, DC	10.248	-		-		-		-		-	Continuing	Continuing	Continuing
Product Development 34	C/CPFF	JPES Solution : Falls Church, VA	7.400	-		2.542	Jun 2020	0.307	Jun 2021	-		0.307	Continuing	Continuing	Continuing
Product Development 35	C/CPFF	Leidos : Gaithersburg, MD	0.000	-		0.307	Aug 2019	-		-		-	Continuing	Continuing	Continuing
Product Development	C/CPFF	GCCS-JE OTA : McLean, VA	16.005	9.287	Oct 2019	-		-		-		-	0.000	25.292	-
Product Development 37	C/CPFF	Leidos OTA : McLean, VA	-	10.134	Feb 2019	-		-		-		-	Continuing	Continuing	Continuing
Product Development 38	C/CPFF	GCCS-J : Various	-	11.801	May 2019	-		-		-		-	Continuing	Continuing	Continuing
Product Development 39	C/CPFF	Bluestone Logic : McLean, VA	-	1.499	Sep 2019	-		-		-		-	Continuing	Continuing	Continuing
Product Development 40	C/CPFF	C2 Systems Engineering : TBD	-	-		3.563	Aug 2020	-		-		-	Continuing	Continuing	Continuing
Product Development 41	C/CPFF	Tapestry : Chambersburg, PA	-	3.048	Jun 2019	-		-		-		-	Continuing	Continuing	Continuing
Product Development 42	C/CPFF	Leidos : McLean, VA	-	0.670	Jun 2019	-		-		-		-	Continuing	Continuing	Continuing
Product Development 36	C/CPFF	TBD : C2 Systems Engineering	-	-		0.179	Aug 2020	0.442	Aug 2021	-		0.442	Continuing	Continuing	Continuing
Subtotal			459.325	42.945		13.398		1.749		-		1.749	Continuing	Continuing	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Support 1	C/T&M	Oracle : Various	1.003	-		-		-		-		-	0.000	1.003	-
Support 2	C/CPFF	JC2 Common Interface : Various	4.808	-		-		-		-		-	0.000	4.808	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Information Systems Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303150K / *Global Command and Control System*	**Project (Number/Name)** CC01 / *Global Command and Control System-Joint (GCCS-J)*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Support Costs - Engineering Support 3	FFRDC	MITRE : Various	0.754	-		1.382	Nov 2019	1.400	Nov 2020	-		1.400	Continuing	Continuing	Continuing
Support Costs - Engineering Support 4	C/CPFF	Pragmatics : McLean, VA	3.799	-		-		-		-		-	0.000	3.799	-
Support Costs - Engineering Support 5	C/CPFF	IPA : College Park, MD	0.283	-		-		-		-		-	0.000	0.283	-
Support Cost 6	C/FFP	STA : Falls Church, VA	2.772	-		-		-		-		-	0.000	2.772	-
Support Costs	C/CPFF	GCCS-J : Various	4.557	-		-		-		-		-	0.000	4.557	-
Support Cost 7	C/FFP	Pragmatics : McLean, VA	3.564	-		-		-		-		-	Continuing	Continuing	Continuing
Subtotal			21.540	-		1.382		1.400		-		1.400	Continuing	Continuing	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test & Evaluation 1	C/CPFF	SAIC : Falls Church, VA	0.744	-		-		-		-		-	0.000	0.744	-
Test & Evaluation 2	MIPR	JITC : Ft. Huachuca, AZ	32.565	0.800	Oct 2018	1.836	Oct 2019	0.546	Oct 2020	-		0.546	Continuing	Continuing	Continuing
Test & Evaluation 3	MIPR	DIA : Various	9.104	0.629	Jan 2019	-		-		-		-	Continuing	Continuing	Continuing
Test & Evaluation 4	MIPR	DAA : Various	4.352	0.600	Sep 2019	0.602	Oct 2019	-		-		-	Continuing	Continuing	Continuing
Test & Evaluation 5	C/CPFF	SAIC : Falls Church, VA	9.681	-		-		-		-		-	0.000	9.681	-
Test & Evaluation 6	C/CPAF	SAIC : Falls Church, VA	23.133	-		-		-		-		-	0.000	23.133	-
Test & Evaluation 7	C/CPFF	Pragmatics : McLean, VA	0.308	-		-		-		-		-	0.000	0.308	-
Test & Evaluation 8	MIPR	JITC : Various	0.005	-		-		-		-		-	0.000	0.005	-
Test & Evaluation 9	MIPR	JITC : Various	0.897	-		-		-		-		-	0.000	0.897	-

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Exhibit R-3, **RDT&E Project Cost Analysis:** PB 2021 Defense Information Systems Agency | **Date:** February 2020

Appropriation/Budget Activity 0400 **/** 7	R-1 Program Element (Number/Name) PE 0303150K **/** *Global Command and Control System*	Project (Number/Name) CC01 **/** *Global Command and Control System-Joint (GCCS-J)*

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test & Evaluation 10	MIPR	DISA FSO : Various	1.059	-		-		-		-		-	0.000	1.059	-
Test & Evaluation 11	MIPR	TEMC Test Support : Various	0.229	-		-		-		-		-	0.000	0.229	-
Test & Evaluation 12	MIPR	DISA TEMC : Falls Church, VA	0.971	-		-		-		-		-	0.000	0.971	-
Test & Evaluation 13	MIPR	STRATCOM : Offut, NE	1.155	-		-		-		-		-	0.000	1.155	-
Test & Evaluation 14	MIPR	DISA FSO : Falls Church, VA	1.200	-		-		-		-		-	0.000	1.200	-
Test & Evaluation 15	C/CPFF	TQI : Falls Church, VA	1.698	-		-		-		-		-	0.000	1.698	-
Test & Evaluation 16	C/CPFF	TQI : Falls Church, VA	0.494	-		-		-		-		-	0.000	0.494	-
Test & Evaluation 17	MIPR	Slidell : Various	0.436	-		-		-		-		-	0.000	0.436	-
Subtotal			88.031	2.029		2.438		0.546		-		0.546	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Management Services	MIPR	SSC Atlantic : Charleston, SC	3.759	-		-		-		-		-	0.000	3.759	-
Subtotal			3.759	-		-		-		-		-	0.000	3.759	N/A

			Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			572.655	44.974		17.218		3.695		-		3.695	Continuing	Continuing	N/A

Remarks

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Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency	**Date:** February 2020

Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303150K *I Global Command and Control System*	**Project (Number/Name)** CC01 *I Global Command and Control System-Joint (GCCS-J)*

	FY 2012				**FY 2013**				**FY 2014**				**FY 2015**				**FY 2016**				**FY 2017**				**FY 2018**			
	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**
Development and Strategic Planning																					▮	▮	▮	▮	▮	▮	▮	▮
Integration and Test																					▮	▮	▮	▮	▮	▮	▮	▮

	FY 2019				**FY 2020**				**FY 2021**				**FY 2022**				**FY 2023**				**FY 2024**				**FY 2025**			
	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**
Development and Strategic Planning	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮
Integration and Test	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮

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Exhibit R-4A, RDT&E Schedule Details: PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303150K *I Global Command and Control System*	**Project (Number/Name)** CC01 *I Global Command and Control System-Joint (GCCS-J)*

Schedule Details

Events	Start		End	
	Quarter	**Year**	**Quarter**	**Year**
Development and Strategic Planning	1	2017	4	2025
Integration and Test	1	2017	4	2025

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Exhibit R-2, **RDT&E Budget Item Justification:** PB 2021 Defense Information Systems Agency											**Date:** February 2020	

Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*						**R-1 Program Element (Number/Name)** PE 0303153K *I Defense Spectrum Organization*						

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	192.642	5.748	19.528	20.113	-	20.113	21.932	20.125	27.064	17.136	Continuing	Continuing
JS1: *Joint Spectrum Center*	192.642	5.748	19.528	20.113	-	20.113	21.932	20.125	27.064	17.136	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Defense Spectrum Organization (DSO) provides a full array of electromagnetic spectrum services and capabilities, ranging from short notice on-the-ground operational support at the forward edge, to long range planning in pursuit of national strategic objectives. These services/capabilities are in direct support of Combatant Commanders, the Department of Defense (DoD) Chief Information Officer, Military Services, and Defense Agencies. The DSO is the focal point for electromagnetic spectrum analysis and the development of integrated spectrum plans and strategies to address current and future needs for DoD spectrum access. In addition, DSO serves as DoD's spectrum advocate at national and international forums and conducts extensive outreach to both industry and government. DSO also implements enterprise spectrum management capabilities to enhance spectrum efficiency and agility to improve spectrum-dependent capabilities in support of United States and Coalition operations. This includes acquiring, implementing and sustaining the Global Electromagnetic Spectrum Information System (GEMSIS) which provides an integrated catalog of joint net-centric spectrum management tools and services. Electromagnetic Spectrum Management enables information dominance through effective spectrum operations.

B. Program Change Summary ($ in Millions)

	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	7.457	21.698	9.836	-	9.836
Current President's Budget	5.748	19.528	20.113	-	20.113
Total Adjustments	-1.709	-2.170	10.277	-	10.277
• Congressional General Reductions	-	-2.170			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-1.499	-			
• SBIR/STTR Transfer	-0.210	-			
• Adjustment	-	-	10.277	-	10.277

Change Summary Explanation

The decrease of -$0.210 in FY 2019 reflects a transfer of funding to Small Business innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs. The decrease of -$1.499 in FY 2019 is due to a decrease in the number of prototype assessments that were accomplished for future capabilities during FY 2019.

The decrease of -$2.170 in FY 2020 is due to a Congressional general reduction.

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Exhibit R-2, **RDT&E Budget Item Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0303153K *I Defense Spectrum Organization*	

The increase of $10.277 in FY2021 is a result of increase to develop Joint Electromagnetic Battle Management (EMBM) capabilities that provide situational awareness and joint integrating leveraging in the Electronic Warfare Planning Management Tool, the Joint Spectrum Data Repository and the Global Command & Control System – Joint (GCCS-J).

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency										Date: February 2020	
Appropriation/Budget Activity 0400 / 7				**R-1 Program Element (Number/Name)** PE 0303153K / *Defense Spectrum Organization*					**Project (Number/Name)** JS1 / *Joint Spectrum Center*		
COST ($ in Millions)	**Prior Years**	**FY 2019**	**FY 2020**	**FY 2021 Base**	**FY 2021 OCO**	**FY 2021 Total**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**Cost To Complete**	**Total Cost**
JS1: *Joint Spectrum Center*	192.642	5.748	19.528	20.113	-	20.113	21.932	20.125	27.064	17.136	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Joint Spectrum Center (JSC), which is a division of Defense Spectrum Organization (DSO), designs, develops, and maintains Department of Defense (DoD) automated spectrum management systems, evaluation tools, and databases. The databases are the prime sources of information for DoD use of the electromagnetic (EM) spectrum. The JSC provides technical measurement and analysis in support of DoD spectrum policy decisions to ensure the development, acquisition, and operational deployment of systems are compatible with other spectrum dependent systems operating within the same EM environment (EME). Additional efforts focus on improving future warfighter EM spectrum utilization through technological innovation, and influencing research and development emerging technology efforts.

Improved spectrum support includes the Global Electromagnetic Spectrum Information System (GEMSIS), a net centric capability that will provide commanders with an increased common picture of spectrum situational awareness of friendly and hostile forces while transparently deconflicting competing mission requirements for spectrum use. This capability will enable the transformation from the current preplanned and static assignment strategy into autonomous and adaptive spectrum operations.

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021**
Title: Advanced Spectrum Tools	0.883	0.883	0.883
Description: The Joint Spectrum Data Repository and Tools program supports development of spectrum management tools, spectrum modeling and simulation capabilities, spectrum database development, and spectrum data transformation and standardization. This program provides the Combatant Commands (COCOMs) and Military Services with the spectrum management tools and associated databases to manage spectrum resources at the strategic and operational level. It also provides the DoD acquisition community with analytical tools to conduct Electromagnetic Environmental Effects (E3) analyses and Spectrum Supportability Risk Assessments (SSRA). *FY 2020 Plans:* Will continue to make enhancements to Spectrum Technology and Testbed Initiative in support of Spectrum Engineering Analysis and Relocation efforts. Supports evaluation of future and existing spectrum analysis tools. *FY 2021 Plans:* Will make enhancements to analytical tools in support of Spectrum Engineering Analysis and Relocation efforts. Supports evaluation of future and existing spectrum analysis tools. *FY 2020 to FY 2021 Increase/Decrease Statement:*			

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Exhibit R-2A, **RDT&E Project Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 **/** 7	**R-1 Program Element (Number/Name)** PE 0303153K **/** *Defense Spectrum Organization*	**Project (Number/Name)** JS1 **/** *Joint Spectrum Center*

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021**
No change statement required.			
Title: DoD Electromagnetic Environmental Effects (E3) Program	3.315	4.203	4.203
Description: The DoD E3 Program supports the Joint Capabilities Integration and Development System (JCIDS) process and the DoD acquisition process to ensure that E3 control and spectrum supportability are incorporated into the development, testing, and procurement of information technology and National Security Systems. The E3 Program also supports the development of the Joint Ordnance E3 Risk Assessment Database (JOERAD) and Hazards of Electromagnetic Radiation to Ordnance (HERO) electromagnetic environmental effects surveys in support of the COCOMs and Joint Task Forces. JOERAD develops algorithms and provides analytical capabilities to perform real-time risk assessments to evaluate platform/system safety and identify equipment limitations in the operational EM environment. JOERAD enables operators to make critical decisions about the hazards associated with the use of ordnance within complex EM environments. A SSRA is performed by program managers and materiel developers on all programs that are acquiring or incorporating spectrum-dependent systems or equipment per DoDI 4650.1. These assessments encompassed regulatory, technical, and operational spectrum and E3 issues and associated risks. *FY 2020 Plans:* Will conduct Joint Ordnance Commanders Group (JOCG) HERO Subgroup meetings, support the JOCG Executive Steering Committee and develop and maintain the Services' HERO susceptibility data records. Will conduct forward deployed base HERO surveys for the COCOMs/Services, and CONUS based emitter surveys for ordnance safety database validation and update the DoD ordnance RF safety requirements. Will update MIL-HDBK-235, "EME Profiles" and develop EME profiles to address blue force jammer and electronic warfare environments. Will conduct monthly DoD E3 Integrated Product Team (IPT) Meetings. Will provide technical support to DoD CIO, the Joint Staff, and other DoD Components on E3, spectrum, hazards of EM radiation matters. Will review JCIDS and ISP acquisition documents assigned by the Joint Staff and DoD CIO and update guidance instructions as necessary. Will provide E3 and SS training to the DoD Components and develop/maintain training curricula at the Defense Acquisition University. *FY 2021 Plans:* Will continue to conduct JOCG HERO Subgroup meetings, support the JOCG Executive Steering Committee and develop and maintain the Services' HERO susceptibility data records. Will conduct forward deployed base HERO surveys for the COCOMs/ Services, and CONUS based emitter surveys for ordnance safety database validation and update the DoD ordnance radio frequency (RF) safety requirements. Will update military handbooks as needed to keep pace with technology. Will conduct monthly DoD E3 Integrated Product Team (IPT) Meetings. Will provide technical support to DoD CIO, the Joint Staff, and other DoD Components on E3, spectrum, hazards of EM radiation matters. Will review JCIDS and ISP acquisition documents assigned			

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303153K / *Defense Spectrum Organization*	**Project (Number/Name)** JS1 / *Joint Spectrum Center*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
by the Joint Staff and DoD CIO and update guidance instructions as necessary. Will provide E3 and SS training to the DoD Components and develop/maintain training curricula at the Defense Acquisition University. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** No change statement required.			
Title: Emerging Spectrum Technologies (EST) *Description:* DSO has the responsibility to investigate emerging spectrum related technologies and evaluate their applicability to improve future warfighter EM spectrum utilization through technological innovation. The goal of the EST program is to identify the opportunities and risks associated with emerging spectrum-related technologies in the early stages of the technology development, influence and lead technology development in order to maximize DoD spectrum utilization, and ensure that spectrum policies incorporate optimal technology to meet DoD mission requirements. Within EST there is an increased focus on Dynamic Spectrum Access (DSA). DSA is realized through wireless networking architectures and technologies that enable wireless devices to dynamically adapt their spectrum access according to criteria such as policy constraints, spectrum availability, propagation environment, and application performance requirements. *FY 2020 Plans:* Will collaboration efforts with the Science and Technology community (including ASDR&E, Service Labs and DARPA) to develop and execute the technology roadmaps and integration strategies that result in system flexibility and operational agility. Revisions will be made to the current spectrum management architecture to reflect transforming spectrum operations through application of EST in accordance with the new DoD EMS Spectrum Strategy. Prototype capabilities that provide increased operational agility will be developed and demonstrated. Will continue to develop initiatives including the roadmap, standards, architecture, and business processes to exploit and/or minimize the impact of emerging technologies on DoD spectrum operations. *FY 2021 Plans:* Will continue collaboration efforts with the Science and Technology community (including ASDR&E, Service Labs and DARPA) to develop and execute the technology roadmaps and integration strategies that result in system flexibility and operational agility. Revisions will be made to the current spectrum management architecture to reflect transforming spectrum operations through application of EST in accordance with the new DoD EMS Spectrum Strategy. Prototype capabilities that provide increased operational agility will be developed and demonstrated. Continue to develop initiatives that include the roadmap, standards, architecture, and business processes to exploit and/or minimize the impact of emerging technologies on DoD spectrum operations. ***FY 2020 to FY 2021 Increase/Decrease Statement:***	0.744	1.630	2.215

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Exhibit R-2A, **RDT&E Project Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
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B. Accomplishments/Planned Programs ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021**
Increase of +$0.585 from FY 2020 to FY 2021 is due to a increase in number of emerging spectrum technology assessments that will be accomplished for future capabilities during FY 2021.			
Title: Global Electromagnetic Spectrum Information System (GEMSIS) *Description:* The GEMSIS is a net centric capability that will provide operational commanders with an increased common picture of spectrum situational awareness of friendly and hostile forces while transparently deconflicting competing mission requirements for spectrum use. This capability will enable the transformation from the current preplanned and static assignment strategy into autonomous and adaptive spectrum operations. *FY 2020 Plans:* Will perform Spectrum XXI (SXXI) Legacy, End-to-End Supportability System (E2ESS), and Joint Spectrum Data Repository (JSDR) maintenance and version releases. *FY 2021 Plans:* Will continue (SXXI) Legacy, E2ESS, and JSDR maintenance and version releases. *FY 2020 to FY 2021 Increase/Decrease Statement:* No change statement required.	0.806	12.812	12.812
Accomplishments/Planned Programs Subtotals	5.748	19.528	20.113

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
• O&M, DW/PE 0303153K: *O&M, DW*	34.409	34.270	34.902	-	34.902	35.743	36.408	36.930	36.930	Continuing	Continuing

Remarks

D. Acquisition Strategy

Engineering support services are provided by the use of a contract. Competition is being used under existing Indefinite Delivery Indefinite Quantity (IDIQ) contracts. Task orders will be a mix of Firm Fixed Price (FFP) and Cost Plus Fixed Fee (CPFF) as dictated by specific tasks to be accomplished.

Exhibit R-3, **RDT&E Project Cost Analysis:** PB 2021 Defense Information Systems Agency			**Date:** February 2020
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Technical Engineering Services 1	C/FFP	Multi : Various	175.502	5.418	Oct 2018	7.198	Nov 2019	9.176	Nov 2020	-		9.176	Continuing	Continuing	Continuing
Technical Engineering Services 2	MIPR	Various : Various	5.769	0.330	Oct 2018	12.000	Oct 2019	10.573	Oct 2020	-		10.573	Continuing	Continuing	Continuing
		Subtotal	181.271	5.748		19.198		19.749		-		19.749	Continuing	Continuing	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test & Evaluation	MIPR	JITC : Ft. Huachuca	2.312	-		-		-		-		-	0.000	2.312	-
		Subtotal	2.312	-		-		-		-		-	0.000	2.312	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Management Services	FFRDC	MITRE : Ft. Monmouth, NJ	9.059	-		0.330	Nov 2019	0.364	Nov 2020	-		0.364	Continuing	Continuing	Continuing
		Subtotal	9.059	-		0.330		0.364		-		0.364	Continuing	Continuing	N/A

	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	192.642	5.748	19.528	20.113	-	20.113	Continuing	Continuing	N/A

Remarks

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Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
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	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
Joint Spectrum Center																												
Spectrum Tool (SXXI, Coalition Joint Spectrum Management Planning Tool (CJSMPT), JSDR) Version Releases																							▆	▆	▆	▆	▆	▆
JOERAD Releases																							▆	▆	▆	▆	▆	▆
Emerging Spectrum Technology Research Projects																							▆	▆	▆	▆	▆	▆
Spectrum Data Sharing Capability Deployments																							▆	▆	▆	▆	▆	▆
Increment Two GEMSIS																					▆	▆	▆	▆	▆	▆	▆	▆
E3 Program Outputs																					▆	▆	▆	▆	▆	▆	▆	▆
EMBM SA Capability																												

	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
Joint Spectrum Center																												
Spectrum Tool (SXXI, Coalition Joint Spectrum Management Planning Tool (CJSMPT), JSDR) Version Releases	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆
JOERAD Releases	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆
Emerging Spectrum Technology Research Projects	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆
Spectrum Data Sharing Capability Deployments	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆
Increment Two GEMSIS	▆	▆	▆	▆	▆																							
E3 Program Outputs	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆	▆

Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303153K *I Defense Spectrum Organization*	**Project (Number/Name)** JS1 *I Joint Spectrum Center*

	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
EMBM SA Capability						███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███		

PE 0303153K: *Defense Spectrum Organization*
Defense Information Systems Agency

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Exhibit R-4A, **RDT&E Schedule Details:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303153K / *Defense Spectrum Organization*	**Project (Number/Name)** JS1 / *Joint Spectrum Center*

Schedule Details

Events by Sub Project	Start		End	
	Quarter	**Year**	**Quarter**	**Year**
Joint Spectrum Center				
Spectrum Tool (SXXI, Coalition Joint Spectrum Management Planning Tool (CJSMPT), JSDR) Version Releases	3	2017	4	2025
JOERAD Releases	3	2017	4	2025
Emerging Spectrum Technology Research Projects	3	2017	4	2025
Spectrum Data Sharing Capability Deployments	3	2017	4	2025
Increment Two GEMSIS	1	2017	4	2019
E3 Program Outputs	1	2017	4	2025
EMBM SA Capability	2	2020	4	2025

PE 0303153K: *Defense Spectrum Organization*
Defense Information Systems Agency

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Exhibit R-2, **RDT&E Budget Item Justification:** PB 2021 Defense Information Systems Agency											**Date:** February 2020	
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*					**R-1 Program Element (Number/Name)** PE 0303167K *I Pre-Auctioned Spectrum Relocation Fund*							
COST ($ in Millions)	**Prior Years**	**FY 2019**	**FY 2020**	**FY 2021 Base**	**FY 2021 OCO**	**FY 2021 Total**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**Cost To Complete**	**Total Cost**
Total Program Element	0.000	1.258	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	-
JS1: *Pre-Auctioned Spectrum Relocation Fund*	0.000	1.258	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	-

A. Mission Description and Budget Item Justification

Funding supports Pre-Auctioned Spectrum relocation and sharing activities.

B. Program Change Summary ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021 Base**	**FY 2021 OCO**	**FY 2021 Total**
Previous President's Budget	0.000	0.000	0.000	-	0.000
Current President's Budget	1.258	0.000	0.000	-	0.000
Total Adjustments	1.258	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments	1.258	-	-	-	-

Change Summary Explanation

Increase of +$1.258 in FY 2019 represent funds received during execution through a transfer from Office of Management and Budget.

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency		Date: February 2020

Appropriation/Budget Activity 0400 *I* 7	R-1 Program Element (Number/Name) PE 0303167K *I Pre-Auctioned Spectrum Relocation Fund*	Project (Number/Name) JS1 *I Pre-Auctioned Spectrum Relocation Fund*

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
JS1: *Pre-Auctioned Spectrum Relocation Fund*	0.000	1.258	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Funding supports Pre-Auctioned Spectrum relocation and sharing activities.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Pre-Auctioned Spectrum Relocation Fund	1.258	0.000	-
Description: Funding supports Pre-Auctioned Spectrum relocation and sharing activities *FY 2020 Plans:* N/A *FY 2020 to FY 2021 Increase/Decrease Statement:* N/A			
Accomplishments/Planned Programs Subtotals	1.258	0.000	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

PE 0303167K: *Pre-Auctioned Spectrum Relocation Fund*
Defense Information Systems Agency

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Information Systems Agency | **Date:** February 2020

Appropriation/Budget Activity 0400 I 7	R-1 Program Element (Number/Name) PE 0303167K I Pre-Auctioned Spectrum Relocation Fund	Project (Number/Name) JS1 I Pre-Auctioned Spectrum Relocation Fund

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Support pre-auction spectrum relocation and sharing activities	Various	Various : Various	0.000	1.258		-		-		-		-	-	-	-
Subtotal			0.000	1.258		-		-		-		-	-	-	N/A

	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	1.258	0.000	-	-	-	-	-	N/A

Remarks

PE 0303167K: *Pre-Auctioned Spectrum Relocation Fund*
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Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303167K *I Pre-Auctioned Spectrum Relocation Fund*	**Project (Number/Name)** JS1 *I Pre-Auctioned Spectrum Relocation Fund*

	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
Auctioned Spectrum Relocation Fund																												
Support pre-auction spectrum relocation activities	███████████																											

PE 0303167K: *Pre-Auctioned Spectrum Relocation Fund*
Defense Information Systems Agency

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Exhibit R-4A, **RDT&E Schedule Details:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303167K *I Pre-Auctioned Spectrum Relocation Fund*	**Project (Number/Name)** JS1 *I Pre-Auctioned Spectrum Relocation Fund*

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Auctioned Spectrum Relocation Fund				
Support pre-auction spectrum relocation activities	1	2019	4	2019

PE 0303167K: *Pre-Auctioned Spectrum Relocation Fund*
Defense Information Systems Agency

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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	

| Appropriation/Budget Activity
0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7:
Operational Systems Development | | | | | R-1 Program Element (Number/Name)
PE 0303170K *I Net Centric Enterprise Services (NCES)* | | | | | | | |

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	0.000	1.750	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	-
T57: *Net Centric Enterprise Services (NCES)*	0.000	1.750	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	-

A. Mission Description and Budget Item Justification

DISA provides a portfolio of services that includes legacy capabilities delivered by the Net-Centric Enterprise Services (NCES) Program supporting a resilient and flexible infrastructure that enables a collaborative environment for secure information sharing across the Department of Defense (DoD). These critical warfighter, Business, and Intelligence Mission Area services enable more than two million authorized DoD users to collaborate across the Combatant Commands (COCOMs)/ Services/Joint Staff/Agency/Mission Partners using a suite of web-accessible services. The portfolio also includes the DoD Visitor service that transitioned from a Government developed service to a Commercial-Off-the-Shelf annual right-to-use licensed service operating on domain controllers throughout the DoD. This service allows personnel to "go anywhere within the DoD, login, and be productive". It includes the privilege management Authentication Gateway Services (AGS) and the DoD Enterprise Portal Service. The AGS is integrated with the Identity and Access Management services supporting brokered Public Key Infrastructure (PKI) authentication for DoD applications without a native PKI authentication capability. The DoD Enterprise Portal Service provides users with a flexible web-based hosting solution to create and manage mission, community, organization, and user focused sites. The individual suite of capabilities within the portfolio of services provides the user with the flexibility to couple the services in varying ways to support their mission needs. This flexibility provides unprecedented secure access to web and application content, critical imagery, intelligence and warfighter information from anywhere, at any time, on any DoD authorized device. The portfolio of enterprise services delivers tangible benefits to the Department by providing capabilities that are applied by the US Forces, Coalition forces, and Allied forces to support full spectrum joint and expeditionary campaign operations. These enabling benefits include the ability to:

• Enhance collaborative decision-making processes
• Improve information sharing and integrated situational awareness
• Share and exchange knowledge and services between enterprise units and commands
• Share and exchange information between previously unreachable and unconnected sources
• Schedule and coordinate meetings with people across the DoD Components
• "Go anywhere in the DoD, login, and be productive"
• Create and manage mission, community, organization, and user-focused sites from global locations
• Exchange knowledge to enable situational awareness, determine the effects desired, select a course of action, the forces to execute it, and accurately assess the effects of that action

The portfolio contains capabilities that are also key enablers to the Defense Information Systems Agency's (DISA) mission of providing a global net-centric enterprise infrastructure in direct support of joint Warfighter, National level leaders, and other mission and coalition partners across the full spectrum of operations.

PE 0303170K: *Net Centric Enterprise Services (NCES)*
Defense Information Systems Agency

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Exhibit R-2, **RDT&E Budget Item Justification:** PB 2021 Defense Information Systems Agency				**Date:** February 2020	
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*			**R-1 Program Element (Number/Name)** PE 0303170K *I Net Centric Enterprise Services (NCES)*		
B. Program Change Summary ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021 Base**	**FY 2021 OCO**	**FY 2021 Total**
Previous President's Budget	0.000	0.000	0.000	-	0.000
Current President's Budget	1.750	0.000	0.000	-	0.000
Total Adjustments	1.750	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments	1.750	-	-	-	-

Change Summary Explanation

Increase of +$1.750 in FY 2019 represent funds received during execution through a transfer from Office of Management and Budget.

PE 0303170K: *Net Centric Enterprise Services (NCES)*
Defense Information Systems Agency

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency		Date: February 2020
Appropriation/Budget Activity 0400 I 7	R-1 Program Element (Number/Name) PE 0303170K I Net Centric Enterprise Services (NCES)	Project (Number/Name) T57 I Net Centric Enterprise Services (NCES)

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
T57: Net Centric Enterprise Services (NCES)	0.000	1.750	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

DISA provides a portfolio of services that includes legacy capabilities delivered by the Net-Centric Enterprise Services (NCES) Program supporting a resilient and flexible infrastructure that enables a collaborative environment for secure information sharing across the Department of Defense (DoD). These critical warfighter, Business, and Intelligence Mission Area services enable more than two million authorized DoD users to collaborate across the Combatant Commands (COCOMs)/Services/Joint Staff/Agency/Mission Partners using a suite of web-accessible services. The portfolio also includes the DoD Visitor service that transitioned from a Government developed service to a Commercial-Off-the-Shelf annual right-to-use licensed service operating on domain controllers throughout the DoD. This service allows personnel to "go anywhere within the DoD, login, and be productive". It includes the privilege management Authentication Gateway Services (AGS) and the DoD Enterprise Portal Service. The AGS is integrated with the Identity and Access Management services supporting brokered Public Key Infrastructure (PKI) authentication for DoD applications without a native PKI authentication capability. The DoD Enterprise Portal Service provides users with a flexible web-based hosting solution to create and manage mission, community, organization, and user focused sites. The individual suite of capabilities within the portfolio of services provides the user with the flexibility to couple the services in varying ways to support their mission needs. This flexibility provides unprecedented secure access to web and application content, critical imagery, intelligence and warfighter information from anywhere, at any time, on any DoD authorized device. The portfolio of enterprise services delivers tangible benefits to the Department by providing capabilities that are applied by the US Forces, Coalition forces, and Allied forces to support full spectrum joint and expeditionary campaign operations. These enabling benefits include the ability to:

• Enhance collaborative decision-making processes
• Improve information sharing and integrated situational awareness
• Share and exchange knowledge and services between enterprise units and commands
• Share and exchange information between previously unreachable and unconnected sources
• Schedule and coordinate meetings with people across the DoD Components
• "Go anywhere in the DoD, login, and be productive"
• Create and manage mission, community, organization, and user-focused sites from global locations
• Exchange knowledge to enable situational awareness, determine the effects desired, select a course of action, the forces to execute it, and accurately assess the effects of that action

The portfolio contains capabilities that are also key enablers to the Defense Information Systems Agency's (DISA) mission of providing a global net-centric enterprise infrastructure in direct support of joint Warfighter, National level leaders, and other mission and coalition partners across the full spectrum of operations.

PE 0303170K: *Net Centric Enterprise Services (NCES)*
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Exhibit R-2A, **RDT&E Project Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303170K *I Net Centric Enterprise Services (NCES)*	**Project (Number/Name)** T57 *I Net Centric Enterprise Services (NCES)*

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021**
Title: Test and Evaluation	1.750	0.000	-
Description: N/A			
FY 2020 Plans: N/A			
FY 2020 to FY 2021 Increase/Decrease Statement: N/A			
Accomplishments/Planned Programs Subtotals	1.750	0.000	-

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
• O&M/PE0303170K:: *Operation & Maintenance, Defense-Wide*	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
• Procurement/PE0303170K:: *Procurement, Defense-Wide*	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

Remarks

D. Acquisition Strategy
 N/A

PE 0303170K: *Net Centric Enterprise Services (NCES)*
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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Information Systems Agency				Date: February 2020

Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303170K / Net Centric Enterprise Services (NCES)	Project (Number/Name) T57 / Net Centric Enterprise Services (NCES)

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Product Development	Various	Various : Various	0.000	1.750		-		-		-		-	-	-	-
		Subtotal	0.000	1.750		-		-		-		-	-	-	N/A

			Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
		Project Cost Totals	0.000	1.750		0.000		-		-		-	-	-	N/A

Remarks

PE 0303170K: *Net Centric Enterprise Services (NCES)*
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Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303170K *I Net Centric Enterprise Services (NCES)*	**Project (Number/Name)** T57 *I Net Centric Enterprise Services (NCES)*

	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
Net Centric Enterprise Services (NCES)																												
Net Centric Enterprise Services (NCES)	████████																											

PE 0303170K: *Net Centric Enterprise Services (NCES)*
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Exhibit R-4A, **RDT&E Schedule Details:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303170K *I Net Centric Enterprise Services (NCES)*	**Project (Number/Name)** T57 *I Net Centric Enterprise Services (NCES)*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Net Centric Enterprise Services (NCES)				
Net Centric Enterprise Services (NCES)	1	2019	4	2019

PE 0303170K: *Net Centric Enterprise Services (NCES)*
Defense Information Systems Agency

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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Information Systems Agency										Date: February 2020	

Appropriation/Budget Activity
0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*

R-1 Program Element (Number/Name)
PE 0303228K *I Joint Information Environment*

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	7.339	7.657	16.269	9.728	-	9.728	2.945	3.019	3.075	3.140	Continuing	Continuing
JE1: *Joint Regional Security Stacks*	7.339	7.657	16.269	9.728	-	9.728	2.945	3.019	3.075	3.140	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Joint Information Environment (JIE) construct is a consolidated secure and defensible environment across Department of Defense (DoD). This is comprised of unified, consolidated and shared information technology (IT) infrastructure, enterprise services, and standardized security architectures throughout the Department of Defense Information Network (DODIN) to achieve full spectrum superiority, improve mission effectiveness, increase security and realize IT efficiencies.

The target objective state of JIE is a DODIN that optimizes the use of DoD's IT assets from the administrative and operational planning at the Pentagon to the tactical edge; to include our mission partners through converging communications, computing, enterprise services, and defense of the DODIN that can be leveraged for all Department missions.

When implemented, JIE will reduce DoD's Total Cost of Ownership (TCO), improved security by reducing the attack surface of our networks, and enable Combatant Commands/Services/Agencies (CC/S/A) to more efficiently access information to perform their missions from any authorized IT device, any time, from anywhere in the world.

B. Program Change Summary ($ in Millions)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	7.947	18.077	2.882	-	2.882
Current President's Budget	7.657	16.269	9.728	-	9.728
Total Adjustments	-0.290	-1.808	6.846	-	6.846
• Congressional General Reductions	-	-1.808			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.290	-			
• Adjustment	-	-	6.846	-	6.846

Change Summary Explanation

Decrease in FY 2019 of -$0.290 reflects a transfer of funding to Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs.

PE 0303228K: *Joint Information Environment*
Defense Information Systems Agency

Exhibit R-2, **RDT&E Budget Item Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0303228K *I Joint Information Environment*	

Decrease in FY 2020 of -$1.808 is due to a Congressional general reduction.

Increase in FY 2021 of $6.846 is due to transferring funds from the Services to DISA for planned deployment and operations.

PE 0303228K: *Joint Information Environment*
Defense Information Systems Agency

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	
Appropriation/Budget Activity 0400 / 7				**R-1 Program Element (Number/Name)** PE 0303228K / *Joint Information Environment*					**Project (Number/Name)** JE1 / *Joint Regional Security Stacks*			

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
JE1: *Joint Regional Security Stacks*	7.339	7.657	16.269	9.728	-	9.728	2.945	3.019	3.075	3.140	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Joint Regional Security Stack (JRSS) is a joint Department of Defense (DoD) security architecture deployed regionally throughout the world. Each of the 23 Non-Secure Internet Protocol Router (NIPR) and 25 Secure Internet Protocol Router (SIPR) stacks is comprised of complementary defensive security solutions that remove redundant Information Assurance (IA) protections; leverages enterprise defensive capabilities with standardized security suites; protects the enclaves after the separation of server and user assets; and provides the tool sets necessary to monitor and control all security mechanisms throughout DoD's Joint Information Environment. The JRSS Management System (JMS) is the management and operational control suite/capability for the JRSS. While the JMS is treated as a related effort, it requires its own experience and evaluation strategy as the JMS is a selection of best of breed capabilities. The JMS is a system-of-systems designed to centralize and enhance the management of the JRSS components and achieve economies of scale by using DoD common suites/infrastructure. The savings are realized by coupling the JRSS and JMS. The JRSS collapses replicated IT security functionality for all DoD components into relatively few regionally located stacks. The JMS provides Centralized Network Management of the JRSS with a standard interoperable set of capabilities across DoD. JMS provides visibility and control over network transport and associated security systems. It enables monitoring and analysis of relevant fault and performance data to determine the impact on current operations and trend analysis. This centralized capability allows standardization of policies, procedures and configurations of critical network transport assets. The JMS enables DoD Components to maintain Title 10 required management and visibility of their IT security while providing high level visibility to Cyber Command (CYBERCOM). Cyber Operations can take proactive actions to ensure the uninterrupted availability and protection of system and network information.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Joint Regional Security Stacks *Description:* The Joint Regional Security Stack (JRSS) is a joint DoD security architecture deployed regionally throughout the world. Each of the 23 NIPR and 25 SIPR stacks is comprised of complementary defensive security solutions that remove redundant Information Assurance (IA) protections; leverages enterprise defensive capabilities with standardized security suites; protects the enclaves after the separation of server and user assets; and provides the tool sets necessary to monitor and control all security mechanisms throughout DoD's Joint Information Environment. *FY 2020 Plans:* Will provide integration, testing, and development of JRSS/JMS hardware/software to support tech refresh of end-of-support/ end-of-life appliances. Support the development and testing of DoD Cyber Situational Awareness Analytic Capabilities (CSAAC) analytics. *FY 2021 Plans:*	7.657	16.269	9.728

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Exhibit R-2A, **RDT&E Project Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303228K *I Joint Information Environment*	**Project (Number/Name)** JE1 *I Joint Regional Security Stacks*

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021**
Will provide integration, testing, and development of JRSS/JMS hardware/software to support tech refresh of end-of-support/end-of-life appliances. Support pathfinder efforts associated with JRSS optimization and evolution. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** The decrease of -$6.541 from FY 2020 to FY 2021 is attributed to efficiencies from the integration of CSAAC capabilities into JRSS and a decrease in tech refresh/functionality testing requirements.			
Accomplishments/Planned Programs Subtotals	7.657	16.269	9.728

C. Other Program Funding Summary ($ in Millions)
 N/A
Remarks
 N/A

D. Acquisition Strategy
 N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Information Systems Agency													Date: February 2020	

Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303228K / *Joint Information Environment*	Project (Number/Name) JE1 / *Joint Regional Security Stacks*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Certification Testing	Various	Various : Various	1.532	0.000		-		-		-		-	0.000	1.532	-
Test and Evaluation Support	Various	JITC : Various	1.068	1.000	Oct 2018	0.500	Oct 2019	0.500	Oct 2021	-		0.500	Continuing	Continuing	-
Integration Test and Modification	Various	Multiple : Various	1.300	0.947	Dec 2018	0.537	Dec 2019	0.682	Dec 2020	-		0.682	Continuing	Continuing	-
Tech Refresh/Functionality Testing	Various	Multiple : Various	3.439	1.900	Dec 2018	0.750	Dec 2019	0.700	Dec 2020	-		0.700	Continuing	Continuing	-
Analytic Development & Testing (CSAAC)	Various	Multiple : Various	0.000	3.810	Dec 2018	1.010	Dec 2019	-		-		-	0.000	4.820	-
Next generation JRSS	Various	TBD : TBD	-	-		13.472	Dec 2019	7.846	Dec 2020	-		7.846	Continuing	Continuing	-
Subtotal			7.339	7.657		16.269		9.728		-		9.728	Continuing	Continuing	N/A

	Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	7.339	7.657		16.269		9.728		-		9.728	Continuing	Continuing	N/A

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2021 Defense Information Systems Agency | | **Date:** February 2020

Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303228K / *Joint Information Environment*	Project (Number/Name) JE1 / *Joint Regional Security Stacks*

	FY 2012				**FY 2013**				**FY 2014**				**FY 2015**				**FY 2016**				**FY 2017**				**FY 2018**			
	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

JIE

JIE

	FY 2019				**FY 2020**				**FY 2021**				**FY 2022**				**FY 2023**				**FY 2024**				**FY 2025**			
	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

JIE

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Exhibit R-4A, **RDT&E Schedule Details:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303228K *I Joint Information Environment*	**Project (Number/Name)** JE1 *I Joint Regional Security Stacks*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
JIE				
JIE	1	2017	4	2025

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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Information Systems Agency		Date: February 2020

Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*	R-1 Program Element (Number/Name) PE 0303267K *I Auctioned Spectrum Relocation Fund*

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	15.804	24.600	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	-
JS1: *Auctioned Spectrum Relocation Fund*	15.804	24.600	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	-

A. Mission Description and Budget Item Justification
 Funding supports Spectrum relocation and sharing activities.

B. Program Change Summary ($ in Millions)

	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	0.000	0.000	0.000	-	0.000
Current President's Budget	24.600	0.000	0.000	-	0.000
Total Adjustments	24.600	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustment	24.600	-	-	-	-

Change Summary Explanation
Increase of +$24.600 in FY 2019 represent funds received during execution through a transfer from Office of Management and Budget.

PE 0303267K: *Auctioned Spectrum Relocation Fund*
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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	
Appropriation/Budget Activity 0400 I 7				**R-1 Program Element (Number/Name)** PE 0303267K I Auctioned Spectrum Relocation Fund					**Project (Number/Name)** JS1 I Auctioned Spectrum Relocation Fund			

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
JS1: *Auctioned Spectrum Relocation Fund*	15.804	24.600	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Funding supports Spectrum relocation and sharing activities.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Auctioned Spectrum Relocation Fund	24.600	0.000	-
Description: Funding supports Spectrum relocation and sharing activities *FY 2020 Plans:* N/A *FY 2020 to FY 2021 Increase/Decrease Statement:* N/A			
Accomplishments/Planned Programs Subtotals	24.600	0.000	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

PE 0303267K: *Auctioned Spectrum Relocation Fund*
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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Information Systems Agency														**Date:** February 2020	
Appropriation/Budget Activity 0400 *I* 7							**R-1 Program Element (Number/Name)** PE 0303267K *I Auctioned Spectrum Relocation Fund*					**Project (Number/Name)** JS1 *I Auctioned Spectrum Relocation Fund*			

Product Development ($ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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**
Support spectrum relocation and sharing activities	Various	Various : Various	15.804	24.600		-		-		-		-	-	-	-
Subtotal			15.804	24.600		-		-		-		-	-	-	N/A

			Prior Years	**FY 2019**		**FY 2020**		**FY 2021 Base**		**FY 2021 OCO**		**FY 2021 Total**	**Cost To Complete**	**Total Cost**	**Target Value of Contract**
Project Cost Totals			15.804	24.600		0.000		-		-		-	-	-	N/A

Remarks

Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303267K *I Auctioned Spectrum Relocation Fund*	**Project (Number/Name)** JS1 *I Auctioned Spectrum Relocation Fund*

	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
Auctioned Spectrum Relocation Fund																												
Support spectrum relocation activities	██████████████████																											

PE 0303267K: *Auctioned Spectrum Relocation Fund*
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Exhibit R-4A, **RDT&E Schedule Details:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303267K *I Auctioned Spectrum Relocation Fund*	**Project (Number/Name)** JS1 *I Auctioned Spectrum Relocation Fund*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Auctioned Spectrum Relocation Fund				
Support spectrum relocation activities	1	2019	4	2020

PE 0303267K: *Auctioned Spectrum Relocation Fund*
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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Information Systems Agency										**Date:** February 2020	

Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*					**R-1 Program Element (Number/Name)** PE 0303430K *I Federal Investigative Services Information Technology*						

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	116.743	59.870	44.001	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
KA1: *Federal Investigative Services Information Technology*	116.743	59.870	44.001	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Develop an enterprise Information Technology (IT) architecture and data strategy for modernizing Investigative capabilities supporting background investigations (BI) (replacing capabilities such as Office of Personnel Management (OPM's) eAdjudication and eApplication). Provides a new, secure infrastructure and investigative support system for Department of Defense (DoD) and Federal Agencies utilizing web/cloud based capabilities and robust cybersecurity. Leverages DoD's cybersecurity capabilities and national security focus to protect government and contractors' personal and investigative information. Supports the distributed adjudication processes with built-in security; active governance structure, and a new national security culture based on process improvement/change management.

B. Program Change Summary ($ in Millions)

	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	55.400	44.001	14.500	-	14.500
Current President's Budget	59.870	44.001	0.000	-	0.000
Total Adjustments	4.470	0.000	-14.500	-	-14.500
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-1.467	-			
• Reprogramming	5.937	-	-	-	-
• Adjustments	-	-	-14.500	-	-14.500

Change Summary Explanation

The net increase of +$4.470 in FY 2019 is attributed to (1) a decrease of -$1.467 which reflects a transfer of funding to Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs and (2) an increase of +$5.937 for additional support required for eApplication (eAPP) development which is the replacement for Electronic Questionnaires for Investigations Processing (eQIP) and additional prototype development to support investigations management.

Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Information Systems Agency	Date: February 2020
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0303430K I *Federal Investigative Services Information Technology*

Decrease of -$14.500 in FY 2021 is due to the transfer of the National Background Investigation Services (NBIS) Program Executive Office (PEO) manpower and funding from DISA to Defense Counterintelligence and Security Agency (DCSA). Ensures compliance with National Defense Authorization Act (NDAA) for Fiscal Year 2018, Section 925.

C. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Background Investigation Information Technology Systems	59.870	44.001	0.000
Description: Implements the decision by the Interagency Deputies Committee and the Office of Management and Budget (OMB) to transfer responsibility for the development and sustainment of new Federal Government background investigation information technology (IT) system(s) from the OPM to the DoD beginning in FY 2017. *FY 2020 Plans:* DoD will continue to enhance and improve the capabilities. As part of an Agile development process, the National Background Investigation System will deploy additional releases in FY 2020 to improve automation of the background investigative process, improve analytic to address insider threat analysis and improve continuous evaluation capabilities and develop capabilities to meet additional Federal Agencies requirements. The system will continue to defend against cyber-attacks and improve defensibility by meeting new and evolving threats. *FY 2021 Plans:* N/A *FY 2020 to FY 2021 Increase/Decrease Statement:* Decrease of -$44.001 in FY 2021 is due to the transfer of the National Background Investigation Services (NBIS) Program Executive Office (PEO) manpower and funding from DISA to Defense Counterintelligence and Security Agency (DCSA). Ensures compliance with National Defense Authorization Act (NDAA)for Fiscal Year 2018, Section 925.			
Accomplishments/Planned Programs Subtotals	59.870	44.001	0.000

D. Other Program Funding Summary ($ in Millions)

Line Item	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
• 0303430K, O&M: *Background Investigation Information Technology Systems*	64.745	82.046	0.000	-	0.000	0.000	0.000	0.000	0.000	146.791	146.791

Remarks

PE 0303430K: *Federal Investigative Services Informati...*
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Exhibit R-2, **RDT&E Budget Item Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0303430K *I Federal Investigative Services Information Technology*	

E. Acquisition Strategy

- Leverage existing secure infrastructure/capabilities coordinated with United States Cyber Command (USCYBERCOM) and Department of Defense (DoD) security functions
- Assess Key Performance Parameter (KPP) of existing Government-Off-The-Shelf (GOTS)/Commercial Off-the-Shelf (COTS) products for enterprise scaling
- Establish support agreements with capability/data providers
- Transition to Cloud Infrastructure and development, security and operations (DevSecOps) pipeline and refactor necessary capabilities for Cloud
- Incrementally test and release the 7 core capabilities using Agile software development methodology
- Government is the Lead System Integrator
- Contract Strategy
-- Integrated Management (IM) prototype capability using Other Transactional Authority (Section 815 NDAA 2015/2016)
-- Re-use / extend successes from the IM prototype
-- Leverage investment in Defense Manpower Data Center (DMDC) developed capabilities for initial deployments:
--- Fingerprint and biometrics processing (Continue to leverage)
--- Automated records checking (ARC) (Transition to system agnostic data broker & Sunset)
--- Adjudication (Transition to integrated architecture with case management and Sunset)
--- Continuous evaluation (CE) (Transition to system agnostic data broker & Sunset)
- Initiate Security Enterprise Architecture leveraging IdAM, Modular Workflow Engines, Artificial Intelligence, Machine Learning, and Natural Language Processing capabilities
- Re-factor ARC, CE, and Adjudication capabilities

PE 0303430K: *Federal Investigative Services Informati...*
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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Information Systems Agency													Date: February 2020	
Appropriation/Budget Activity 0400 / 7					**R-1 Program Element (Number/Name)** PE 0303430K / *Federal Investigative Services Information Technology*						**Project (Number/Name)** KA1 / *Federal Investigative Services Information Technology*			

Product Development ($ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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 Engineering	C/Various	Various : Various	-	3.116	Dec 2018	1.040	Dec 2019	0.000		-		0.000	Continuing	Continuing	-
Application Development	C/Various	Various : Various	116.743	49.924	Nov 2018	38.214	Dec 2019	0.000		-		0.000	Continuing	Continuing	-
Testing	C/Various	Various : Various	-	6.830	Dec 2018	4.747	Dec 2019	0.000		-		0.000	Continuing	Continuing	-
		Subtotal	116.743	59.870		44.001		0.000		-		0.000	Continuing	Continuing	N/A

	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	**Cost To Complete**	**Total Cost**	**Target Value of Contract**
Project Cost Totals	116.743	59.870	44.001	0.000	-	0.000	Continuing	Continuing	N/A

Remarks

Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303430K *I Federal Investigative Services Information Technology*	**Project (Number/Name)** KA1 *I Federal Investigative Services Information Technology*

	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
NBIS																												
IOC Testing																							███	█	█	█	█	
IOC Implementation																								█	█	█	█	█
FOC Development																								█	█	█	█	█
FOC Testing																						█	█	█	█	█	█	
FOC Implementation																								█	█	█	█	█
Post Deployment Improvement - Scheduled Releases																												
Post Deployment Improvement - Scheduled Releases																												

	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
NBIS																												
IOC Testing	█	█	█	█	█	█	█	█																				
IOC Implementation	█	█	█	█	█	█																						
FOC Development	█	█	█	█	█	█	█																					
FOC Testing	█	█	█	█	█	█	█	█	█	█	█																	
FOC Implementation	█	█	█	█	█	█	█	█	█	█																		
Post Deployment Improvement - Scheduled Releases																												
Post Deployment Improvement - Scheduled Releases					█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█

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Exhibit R-4A, RDT&E Schedule Details: PB 2021 Defense Information Systems Agency		Date: February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303430K *I Federal Investigative Services Information Technology*	**Project (Number/Name)** KA1 *I Federal Investigative Services Information Technology*

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
NBIS				
IOC Testing	3	2017	4	2020
IOC Implementation	4	2017	1	2020
FOC Development	4	2017	2	2020
FOC Testing	2	2017	3	2021
FOC Implementation	4	2017	4	2021
Post Deployment Improvement - Scheduled Releases				
Post Deployment Improvement - Scheduled Releases	1	2020	4	2025

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Exhibit R-2, **RDT&E Budget Item Justification:** PB 2021 Defense Information Systems Agency											**Date:** February 2020	
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*					**R-1 Program Element (Number/Name)** PE 0303467K *I Spectrum Efficient National Surveillance Radar (SENSR) Pipeline Spectrum Relocation Fund*							
COST ($ in Millions)	**Prior Years**	**FY 2019**	**FY 2020**	**FY 2021 Base**	**FY 2021 OCO**	**FY 2021 Total**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**Cost To Complete**	**Total Cost**
Total Program Element	0.000	0.230	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	-
JS1: *SENSR Spectrum Pipeline SRF*	0.000	0.230	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	-

A. Mission Description and Budget Item Justification

The Commercial Spectrum Enhancement Act (CSEA) of 2004 created the Spectrum Relocation Fund (CSEA, Title II of P.L. 108-494) to provide a centralized and streamlined funding mechanism through which Federal agencies can recover the costs associated with relocating their radio communications systems from certain spectrum bands, which were authorized to be auctioned for commercial purposes.

On January 29, 2015, the Federal Communications Commission completed an auction of Advanced Wireless Service licenses in the 1695-1710 Megahertz (MHz),1755-1780 MHz, and 2155-2180 MHz bands (collectively, the "AWS-3" bands). On June 23, 2015, the Office of Management and Budget (OMB) notified Congress of the forthcoming transfer of $5.030 billion to federal agencies with systems affected by the AWS-3 transition. Following the conclusion of the 30-day statutory waiting period, OMB transferred the funds to the federal agencies.

The Department of Defense (DoD) received $3.500 billion of the auction proceeds and created a $500 million Spectrum Access Research and Development Program (SAR&DP) to investigate new DoD technologies. The SAR&DP encompasses spectrum technology development that enables the DoD to perform its missions using spectrum-dependent systems in a manner that preferably enhances operational readiness and capability. Being able to operate in accordance with spectrum allocations resulting after the spectrum auction is a necessary, but not sufficient requirement for pursued technology solutions. DoD's transition out of or sharing of the auctioned bands can only be successful if the research and development solutions are sufficiently resilient (survivable and electronically protected) to operate in both the United States and congested/contested spectrum environments wherever forces will be deployed.

This program represents the DISA investment within the SAR&DP.

PE 0303467K: *Spectrum Efficient National Surveillance...*
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Exhibit R-2, **RDT&E Budget Item Justification:** PB 2021 Defense Information Systems Agency				**Date:** February 2020

Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0303467K *I Spectrum Efficient National Surveillance Radar (SENSR) Pipeline Spectrum Relocation Fund*

B. Program Change Summary ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021 Base**	**FY 2021 OCO**	**FY 2021 Total**
Previous President's Budget	0.000	0.000	0.000	-	0.000
Current President's Budget	0.230	0.000	0.000	-	0.000
Total Adjustments	0.230	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments	0.230	-	-	-	-

Change Summary Explanation

Increase of +$0.230 in FY 2019 due to DISA portion of the Department of Defense Spectrum Access Research and Development Program created from the auction of Advanced Wireless Service licenses.

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency		Date: February 2020

Appropriation/Budget Activity 0400 I 7	R-1 Program Element (Number/Name) PE 0303467K I Spectrum Efficient National Surveillance Radar (SENSR) Pipeline Spectrum Relocation Fund	Project (Number/Name) JS1 I SENSR Spectrum Pipeline SRF

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
JS1: SENSR Spectrum Pipeline SRF	0.000	0.230	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Funding supports Spectrum relocation and sharing activities.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: SENSR Spectrum Pipeline SRF	0.230	0.000	-
Description: Funding supports SENSR Spectrum Pipeline relocation and sharing activities **FY 2020 Plans:** N/A **FY 2020 to FY 2021 Increase/Decrease Statement:** N/A			
Accomplishments/Planned Programs Subtotals	0.230	0.000	-

C. Other Program Funding Summary ($ in Millions)
 N/A
Remarks

D. Acquisition Strategy
 N/A

PE 0303467K: *Spectrum Efficient National Surveillance...*
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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Information Systems Agency		Date: February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303467K *I Spectrum Efficient National Surveillance Radar (SENSR) Pipeline Spectrum Relocation Fund*	**Project (Number/Name)** JS1 *I SENSR Spectrum Pipeline SRF*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Funding supports SENSR Spectrum Pipeline relocation and sharing activities	Various	Various : Various	0.000	0.230		-		-		-		-	-	-	-
Subtotal			0.000	0.230		-		-		-		-	-	-	N/A

	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.230	0.000	-	-	-	-	-	N/A

Remarks

Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303467K *I Spectrum Efficient National Surveillance Radar (SENSR) Pipeline Spectrum Relocation Fund*	**Project (Number/Name)** JS1 *I SENSR Spectrum Pipeline SRF*

	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
Auctioned Spectrum Relocation Fund																												
Support SENSR Spectrum Pipeline relocation activities	███████																											

PE 0303467K: *Spectrum Efficient National Surveillance...*
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Exhibit R-4A, **RDT&E Schedule Details:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0303467K *I Spectrum Efficient National Surveillance Radar (SENSR) Pipeline Spectrum Relocation Fund*	**Project (Number/Name)** JS1 *I SENSR Spectrum Pipeline SRF*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Auctioned Spectrum Relocation Fund				
Support SENSR Spectrum Pipeline relocation activities	1	2019	4	2019

PE 0303467K: *Spectrum Efficient National Surveillance...*
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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*					**R-1 Program Element (Number/Name)** PE 0305208K *I Distributed Common Ground/Surface Systems*							
COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	56.127	2.848	2.981	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
NF1: *Distributed Common Ground/Surface Systems*	56.127	2.848	2.981	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

As the sole joint interoperability certification agent, the Joint Interoperability Test Command (JITC) established and maintains a Distributed Development and Test Enterprise (T&E) for the Department of Defense (DoD) Distributed Common Ground/Surface System (DCGS) program, as directed by the Office of the Under Secretary of Defense Intelligence (OUSD(I)). DCGS is an integral and critical component of the overall DoD Intelligence, Surveillance, and Reconnaissance interoperability and data integration strategy which provides world-wide capabilities to receive, process, exploit, and disseminate data from airborne and national reconnaissance sensors/platforms and commercial sources.

B. Program Change Summary ($ in Millions)

	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	2.970	2.981	3.050	-	3.050
Current President's Budget	2.848	2.981	0.000	-	0.000
Total Adjustments	-0.122	0.000	-3.050	-	-3.050
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustment	-0.122	-	-3.050	-	-3.050

Change Summary Explanation

Decrease of -$0.122 in FY19 achieved through efficiencies gained in evolving T&E infrastructure.

The decrease of -$3.050 in FY 2021 is due to transfer of program from Budget Activity (BA) 7 to BA 6 to accurately align the mission of the program.

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	

Appropriation/Budget Activity 0400 *I* 7				R-1 Program Element (Number/Name) PE 0305208K *I Distributed Common Ground/Surface Systems*					Project (Number/Name) NF1 *I Distributed Common Ground/Surface Systems*			

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
NF1: *Distributed Common Ground/Surface Systems*	56.127	2.848	2.981	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Joint Interoperability Test Command (JITC) coordinates with the Military Services and Defense Intelligence Agencies to conduct Joint/Distributed Common Ground/Surface System (DCGS) testing and analysis, including event coordination, configuration, instrumentation and integration functions on the Distributed Development and Test Enterprise (DDTE). Under the DCGS Governance, this effort, referred to as the DCGS Test and Evaluation (T&E) Focus Team (FT), is composed of three parts: the DDTE Focus Group, providing and sustaining a distributed development network; the Strategy Focus Group, looking at current and future net-enabled enterprise T&E methods; and the Execution Focus Group, which leverages the Strategy Focus Group's methodologies in executing DCGS Enterprise assessment events, such as the annual DCGS demonstration, ENTERPRISE CHALLENGE. These efforts improve systems engineering and T&E throughout all phases of the DCGS life-cycle, resulting in improved capabilities to share net-centric data and services between the DCGS Programs of Record (PoRs) and the overarching Defense Intelligence Information Enterprise (DI2E).

Operates and maintains the DDTE, providing DCGS PoRs a virtual, operationally-relevant assessment environment maintaining connectivity between Service facilities, National Agency capabilities, and Coalition partners. DDTE allows robust integration of modeling and simulation T&E capabilities across Joint DCGS events without introducing vulnerabilities to operational Command and Control networks and has enabled improvements in systems engineering, instrumentation and T&E throughout all phases of the DCGS life cycle.

DCGS PoRs and Coalition partners use the DDTE network, which supports the net-centric maturity assessment of the DCGS Enterprise under the DCGS Governance, to integrate architecture, standards, and capabilities for implementation of the DCGS Integration Backbone and support the migration to net-centricity, including DCGS Enterprise services for the Military Departments, DCGS-Special Operations Forces and the DCGS Intelligence Community. National Agency capabilities supporting DCGS include Geospatial Intelligence, Signals Intelligence, Measurement and Signature Intelligence and Human Intelligence, which are integrated and tested in the DDTE domain.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Distributed Common Ground/Surface Systems (DCGS) **FY 2020 Plans:** Continue to revise and evolve test and evaluation (T&E) data collection techniques and analysis strategies in support of DCGS Enterprise community members acquisition programs' interoperability as they integrate capabilities and services solutions to address the operational gaps identified in the OUDS(I) sponsored Distributed Common Ground/Surface System Enterprise Capabilities Based Assessment. Continue to plan, develop and execute enterprise-level data collection during multiple yearly test	2.848	2.981	-

Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency		Date: February 2020	
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0305208K *I Distributed Common Ground/Surface Systems*	**Project (Number/Name)** NF1 *I Distributed Common Ground/Surface Systems*	

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
events. Continue to support DDTE, provide enhanced functionality, expand T&E capability, and perform automated evaluations of net-centric capabilities with improved assessment methodologies and practices due to incorporating new technologies such as cloud computing, mobile technology, and "big data". Continue enhancement of instrumentation and automated data collection tools to support testing on multiple network domains and enclaves where the DCGS PoRs, National Agencies and Coalition Partners test and operate. Continue to develop T&E methodology and tools to support testing of enterprise cybersecurity solutions to determine if they comply with standards, support interoperability between the DCGS PoRs, and meet the DCGS Enterprise cybersecurity requirements. Continue to conduct compliance testing of data, metadata, and web services against established standards to enhance the sharing and promote reuse of net centric solutions. Continuing to expand TaaS capabilities that enable DCGS entities and other COIs to test for standards compliance during the development and acquisition processes. All data collected by these assessment efforts are reflected in an annual DCGS Enterprise Assessment Report that delineates how well the DCGS Enterprise shows progress over time in meeting the capabilities and closing the gaps reflected in the 2016 DCGS Enterprise Initial Capabilities Document. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** The decrease of -$2.981 from FY 2020 to FY 2021 is due to transfer of program from BA 7 to BA 6 to accurately align the mission of the program.			
Accomplishments/Planned Programs Subtotals	2.848	2.981	-

C. Other Program Funding Summary ($ in Millions)
 N/A
Remarks

D. Acquisition Strategy
 N/A

PE 0305208K: *Distributed Common Ground/Surface System...*
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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Defense Information Systems Agency			Date: February 2020

Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0305208K / Distributed Common Ground/Surface Systems	Project (Number/Name) NF1 / Distributed Common Ground/Surface Systems

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
In-House Contracts	MIPR	Various : Various	22.963	1.000	Oct 2018	1.000	Oct 2019	-		-		-	0.000	24.963	-
Subtotal			22.963	1.000		1.000		-		-		-	0.000	24.963	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering & Technical Services 1	C/T&M	Interop : Ft Huachuca	3.763	-		-		-		-		-	0.000	3.763	-
Engineering & Technical Services 2	C/T&M	NGMS : Ft Huachuca	12.927	-		-		-		-		-	0.000	12.927	-
Engineering & Technical Services 3	C/T&M	NGIT : Ft Huachuca	3.612	-		-		-		-		-	0.000	3.612	-
Engineering & Technical Services 4	C/Various	Various : Various	2.173	-		-		-		-		-	0.000	2.173	-
Engineering & Technical Services 5	C/CPFF	TASC : Andover, MA	9.887	-		-		-		-		-	0.000	9.887	-
Engineering & Technical Services 6	MIPR	Various : Various	0.802	1.848	Dec 2018	1.981	Dec 2019	-		-		-	0.000	4.631	-
Subtotal			33.164	1.848		1.981		-		-		-	0.000	36.993	N/A

			Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			56.127	2.848		2.981		-		-		-	0.000	61.956	N/A

Remarks

Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0305208K *I Distributed Common Ground/Surface Systems*	**Project (Number/Name)** NF1 *I Distributed Common Ground/Surface Systems*

	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
DCGS																												
DCGS T&E IPT																									■	■	■	■
Connectivity to Other Testbeds & Test Event Conduct																									■	■	■	■
DDT&E Operation and Maintenance Support																									■	■	■	■

	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
DCGS																												
DCGS T&E IPT	■	■	■	■	■	■	■	■																				
Connectivity to Other Testbeds & Test Event Conduct	■	■	■	■	■	■	■	■																				
DDT&E Operation and Maintenance Support	■	■	■	■	■	■	■	■																				

Exhibit R-4A, **RDT&E Schedule Details:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0305208K *I Distributed Common Ground/Surface Systems*	**Project (Number/Name)** NF1 *I Distributed Common Ground/Surface Systems*

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
DCGS				
DCGS T&E IPT	1	2018	4	2020
Connectivity to Other Testbeds & Test Event Conduct	1	2018	4	2020
DDT&E Operation and Maintenance Support	1	2018	4	2020

PE 0305208K: *Distributed Common Ground/Surface System...*
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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	

Appropriation/Budget Activity				R-1 Program Element (Number/Name)								
0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*				PE 0708012K *I Logistics Support Activities*								

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	0.000	1.317	1.361	1.654	-	1.654	1.710	1.701	1.742	1.779	Continuing	Continuing
LSA: *Logistics Support Activities*	0.000	1.317	1.361	1.654	-	1.654	1.710	1.701	1.742	1.779	Continuing	Continuing

Note
 N/A

A. Mission Description and Budget Item Justification
 Classified

B. Program Change Summary ($ in Millions)

	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	1.317	1.361	1.406	-	1.406
Current President's Budget	1.317	1.361	1.654	-	1.654
Total Adjustments	0.000	0.000	0.248	-	0.248
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	0.000	-			
• Adjustment	0.000	-	0.248	-	0.248

Change Summary Explanation
Program is classified and exhibit will be provided under a separate cover.

PE 0708012K: *Logistics Support Activities*
Defense Information Systems Agency

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	
Appropriation/Budget Activity 0400 / 7				**R-1 Program Element (Number/Name)** PE 0708012K / *Logistics Support Activities*				**Project (Number/Name)** LSA / *Logistics Support Activities*				
COST ($ in Millions)	**Prior Years**	**FY 2019**	**FY 2020**	**FY 2021 Base**	**FY 2021 OCO**	**FY 2021 Total**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**Cost To Complete**	**Total Cost**
LSA: *Logistics Support Activities*	0.000	1.317	1.361	1.654	-	1.654	1.710	1.701	1.742	1.779	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note
 Classified.

A. Mission Description and Budget Item Justification
 Classified.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: LSA	1.317	1.361	1.654
Description: Classified. *FY 2020 Plans:* Classified. *FY 2021 Plans:* Classified. *FY 2020 to FY 2021 Increase/Decrease Statement:* Classified.			
Accomplishments/Planned Programs Subtotals	1.317	1.361	1.654

C. Other Program Funding Summary ($ in Millions)
 N/A
Remarks
 Classified.

D. Acquisition Strategy
 Classified.

PE 0708012K: *Logistics Support Activities*
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Exhibit R-3, **RDT&E Project Cost Analysis:** PB 2021 Defense Information Systems Agency | | **Date:** February 2020

Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708012K / *Logistics Support Activities*	Project (Number/Name) LSA / *Logistics Support Activities*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Classified	Various	Classified : Classified	-	1.317	Oct 2018	1.361	Oct 2019	1.654	Oct 2020	-		1.654	Continuing	Continuing	-
Subtotal			-	1.317		1.361		1.654		-		1.654	Continuing	Continuing	N/A

	Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	1.317		1.361		1.654		-		1.654	Continuing	Continuing	N/A

Remarks

Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708012K / *Logistics Support Activities*	**Project (Number/Name)** LSA / *Logistics Support Activities*

	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
Classified																												
Classified					███																							

PE 0708012K: *Logistics Support Activities*
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Exhibit R-4A, **RDT&E Schedule Details:** PB 2021 Defense Information Systems Agency			**Date:** February 2020	
Appropriation/Budget Activity 0400 **/** 7	**R-1 Program Element (Number/Name)** PE 0708012K **/** *Logistics Support Activities*		**Project (Number/Name)** LSA **/** *Logistics Support Activities*	

<div align="center">Schedule Details</div>

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Classified				
Classified	1	2019	3	2025

PE 0708012K: *Logistics Support Activities*
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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Information Systems Agency											Date: February 2020	

Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*					R-1 Program Element (Number/Name) PE 1203610K *I Teleport Program*							

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	46.584	0.706	5.542	3.239	-	3.239	1.273	1.286	1.311	1.339	Continuing	Continuing
NS01: *Teleport Generation 1/2*	46.584	0.706	1.042	1.240	-	1.240	1.273	1.286	1.311	1.339	Continuing	Continuing
NS03: *SATCOM Gateway*	0.000	0.000	4.500	1.999	-	1.999	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

Department of Defense (DoD) Teleport system is a satellite communications (SATCOM) gateway that links the deployed warfighter to the Global Information Grid. The DoD Teleport program has fielded system capabilities incrementally using a multi-generational approach with Generation 1 and 2 Full Deployment authorized by DoD Chief Information Officer on February 18, 2011. DoD Teleport Generation 3 consists of three phases; Phases 1 and 2 are in Production and Deployment while Phase 3 is in Engineering and Manufacturing Development. Each DoD Teleport investment increases the warfighter's ability to communicate with a world-wide, net-centric set of information capabilities, which is vital for the DoD to maintain a persistent presence among its adversaries.

Currently, the Teleport system operates as an upgrade of SATCOM capabilities at selected DoD SATCOM gateways. This system provides deployed warfighters with seamless worldwide multi-band SATCOM connectivity to the Defense Information System Network (DISN) Service Delivery Nodes and legacy tactical command, control, communications, computers, and intelligence systems. It also provides centralized integration capabilities, contingency capacity, and common interfaces to access the DISN.

DoD Teleport's goal is to provide secure, seamless, interoperable, and economical upgrades to DoD SATCOM Gateways and meet the growing throughput requirements of the deployed warfighter.

The primary beneficiaries of the DoD Teleport investment are the DoD Combatant Commanders, Military Departments, Defense Agencies, and the warfighter. DoD Teleport Generation 3 is designed to meet the growing demands of the warfighter through the execution of the following phases:

Phase 1: Gateway Advanced Extremely High Frequency [Extended Data Rate] terminals provides tactical users with a 350% bandwidth increase in survivable, antijam communications through all peacetime and combat operations by installing Navy Multiband Terminals (NMT) at select Teleport sites. In addition to enhanced throughput, the NMT maintains compatibility with legacy waveforms and current tactical terminals.

Phase 2: Gateway Wideband Global SATCOM X/Ka-band terminals provide enhanced Wideband Global System (WGS) X/Ka capability to warfighters worldwide by installing terminals from the Modernization of Enterprise Terminal (MET) program at DoD Teleport and other gateway sites. This gateway enhancement allows Teleport to replace end-of-life Defense Satellite Communications System (DSCS) terminals while remaining interoperable with tactical WGS X/Ka-band users. The MET enhancement provides a 300% Ka-band capacity increase and an 1100% X-band capacity increase to current enterprise terminal X/Ka capabilities. Additionally, it enables the DoD Teleport system to maintain operational availability consistent with Generation 2 requirements and reduce the overall life-cycle cost of X/Ka capabilities across the DoD.

Exhibit R-2, **RDT&E Budget Item Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 1203610K *I Teleport Program*	

Phase 3: Mobile User Objective System (MUOS) to Legacy Ultra High Frequency (UHF) systems interoperability will provide interoperability between MUOS users and legacy UHF users by installing MUOS-to-Legacy UHF SATCOM Gateway Component (MLGC) suites of equipment at DoD Teleport sites. MUOS is the next generation DoD UHF SATCOM system that will provide the warfighter with modern worldwide mobile communication services, utilizing the Wideband Code Division Multiple Access waveform for use in the military UHF SATCOM band. MLGC suites will provide critical continuity and interoperability as DoD tactical satellite users transition from legacy waveforms and radios to the Joint Tactical Radio System.

B. Program Change Summary ($ in Millions)

	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	0.723	6.158	3.241	-	3.241
Current President's Budget	0.706	5.542	3.239	-	3.239
Total Adjustments	-0.017	-0.616	-0.002	-	-0.002
• Congressional General Reductions	-	-0.616			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.017	-			
• Adjustment	-	-	-0.002	-	-0.002

Change Summary Explanation

The decrease of -$0.017 in FY 2019 of reflects a transfer of funding to Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs.

The decrease of -$0.616 in FY 2020 reflects a congressional general reduction.

The decrease of -$0.002 in FY 2021 is attributed to a very small reduction in planned test activity for technology refresh and technology insertions including MLGC Allied Support.

PE 1203610K: *Teleport Program*
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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency										Date: February 2020	
Appropriation/Budget Activity 0400 / 7				**R-1 Program Element (Number/Name)** PE 1203610K / *Teleport Program*				**Project (Number/Name)** NS01 / *Teleport Generation 1/2*			

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
NS01: *Teleport Generation 1/2*	46.584	0.706	1.042	1.240	-	1.240	1.273	1.286	1.311	1.339	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Teleport program will implement an integrated test approach that will combine the objectives from multiple testing disciplines (e.g., developmental test, operational test, interoperability, and information assurance) throughout the testing lifecycle to support needed system evaluations. The Teleport program executes its own test events to achieve this integrated approach, but will partner with each phase's respective program office generated test activities to leverage the data needed to satisfy Teleport program test objectives. An approach summary for Teleport Gen 1/2 follows:

Generation 1/2 Technology Refresh/Technology Insertion: Funding will be used to maintain the Joint Interoperability Certification of the DoD Teleport System as the system is upgraded and refreshed with new components.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Teleport Program	0.706	1.042	1.240
Description: Department of Defense (DoD) Teleport system is a satellite communications (SATCOM) gateway that links the deployed warfighter to the Department of Defense Information Network (DODIN). The Teleport program supports the warfighter with a world-wide, net-centric set of communication and information capabilities. *FY 2020 Plans:* Funding will be used to maintain the Joint Interoperability Certification of the DoD Teleport System as the system is upgraded with new components. *FY 2021 Plans:* Funding will be used to maintain the Joint Interoperability Certification of the DoD Teleport System as the system is upgraded with new components. *FY 2020 to FY 2021 Increase/Decrease Statement:* Increase of +$0.198 from FY 2020 to FY 2021 is attributed to an increase in research and development activity at the Joint Satellite Communications Engineering Center (JSEC) lab.			
Accomplishments/Planned Programs Subtotals	0.706	1.042	1.240

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Exhibit R-2A, **RDT&E Project Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 **/** 7	**R-1 Program Element (Number/Name)** PE 1203610K **/** *Teleport Program*	**Project (Number/Name)** NS01 **/** *Teleport Generation 1/2*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
• O&M, DW/ PE1203610K: *O&M, DW*	10.449	10.335	11.375	-	11.375	11.505	10.973	11.121	11.294	Continuing	Continuing
• Procurement, DW/ PE1203610K: *Procurement, DW*	21.112	22.324	26.655	-	26.655	31.814	29.879	30.453	31.092	Continuing	Continuing

Remarks

D. Acquisition Strategy

The Teleport Program Office (TPO) uses the DoD preferred evolutionary acquisition approach to acquire Commercial off the Shelf (COTS) and modified COTS equipment when possible. The three TPO procuring agencies, Program Manager Defense Communications and Army Transmission Systems, the Space and Naval Warfare Systems Command, and Defense Information Technology Contracting Organization (DITCO) provide direct contracting support. Assistance from other Departments including Army, Navy, and Air Force is acquired via Military Interdepartmental Purchase Request for both organic and contracted support. The TPO maximizes the use of performance-based contracts and requires contractors to establish and manage specific earned value data to mitigate risk and monitor deviations from cost, schedule, and performance objectives. Performance is evaluated through post-award contract reviews, performance assessment during quarterly program reviews. The MLGC program will use various contract types to employ the vendor best suited to deliver the program's capabilities to the warfighter.

PE 1203610K: *Teleport Program*
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Exhibit R-3, **RDT&E Project Cost Analysis:** PB 2021 Defense Information Systems Agency				**Date:** February 2020

Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1203610K / Teleport Program	**Project (Number/Name)** NS01 / Teleport Generation 1/2

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering Technical Support (Tech Refresh)	MIPR	CERDEC : APG	0.000	-		1.042	Oct 2019	-		-		-	Continuing	Continuing	Continuing
SATCOM, NATO, DISN, and Tactical Radio Tech Support Svcs	MIPR	ANSER : VARIOUS	0.125	-		-		-		-		-	0.000	0.125	0.125
Subtotal			0.125	-		1.042		-		-		-	Continuing	Continuing	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Testing Support Services (Tech Refesh)	MIPR	JITC : Ft. Huachuca	46.459	0.706	Feb 2019	-		1.240	Jan 2020	-		1.240	Continuing	Continuing	-
Subtotal			46.459	0.706		-		1.240		-		1.240	Continuing	Continuing	N/A

			Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			46.584	0.706		1.042		1.240		-		1.240	Continuing	Continuing	N/A

Remarks

Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 1203610K *I Teleport Program*	**Project (Number/Name)** NS01 *I Teleport Generation 1/2*

	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
Teleport Program																												
Integrated testing that supported Teleport system evaluation and Technology Refresh/ Technology Insertion																												

PE 1203610K: *Teleport Program*
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Exhibit R-4A, **RDT&E Schedule Details:** PB 2021 Defense Information Systems Agency					**Date:** February 2020
Appropriation/Budget Activity 0400 **/** 7		**R-1 Program Element (Number/Name)** PE 1203610K **/** *Teleport Program*		**Project (Number/Name)** NS01 **/** *Teleport Generation 1/2*	

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Teleport Program				
Integrated testing that supported Teleport system evaluation and Technology Refresh/ Technology Insertion	2	2019	4	2025

Exhibit R-2A, **RDT&E Project Justification:** PB 2021 Defense Information Systems Agency										**Date:** February 2020	
Appropriation/Budget Activity 0400 *I* 7				**R-1 Program Element (Number/Name)** PE 1203610K *I Teleport Program*					**Project (Number/Name)** NS03 *I SATCOM Gateway*		

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
NS03: *SATCOM Gateway*	0.000	0.000	4.500	1.999	-	1.999	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The SATCOM Gateway is an enterprise system that will adhere to the Joint Information Environment (JIE) architecture, and support all DoD satellite communications requirements, to include Strategic (Presidential, SECDEF, SECSTATE, Chairman Joint Chiefs of Staff, Milestone Decision Authority (MDA)) and Tactical (Combatant Commanders/Services/Agencies (CC/S/A)) users over satellite trunks through the DoD Information Network (DODIN).

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: SATCOM Gateway *Description:* The SATCOM Gateway is an enterprise system that adheres to the Joint Information Environment (JIE) architecture in support of SATCOM operations. The SATCOM Gateway system supports the warfighter to include strategic and tactical users by providing DoD satellite communication requirements over satellite trunks through the DoD Information Network (DODIN). *FY 2020 Plans:* Funding will be used to engineer, develop, test, and evaluate a MUOS terminal planning tool and data controller to support SATCOM operations. *FY 2021 Plans:* Funding will be used to build out software research and development for Full Motion Video (FMV). *FY 2020 to FY 2021 Increase/Decrease Statement:* Decrease of -$2.501 from FY 2020 to FY 2021 is attributed to completion of the development phase and transfer of the requirement into sustainment.	0.000	4.500	1.999
Accomplishments/Planned Programs Subtotals	0.000	4.500	1.999

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
• O&M, DW/ PE1203610K: *O&M, DW*	6.436	7.651	7.999	-	7.999	7.956	7.174	7.220	7.371	Continuing	Continuing
• Procurement, DW/ PE1203610K: *Procurement, DW*	11.405	1.633	2.037	-	2.037	5.447	1.771	1.804	1.842	Continuing	Continuing

PE 1203610K: *Teleport Program*
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Exhibit R-2A, **RDT&E Project Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1203610K / *Teleport Program*	**Project (Number/Name)** NS03 / *SATCOM Gateway*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost

Remarks

D. Acquisition Strategy

N/A

Exhibit R-3, **RDT&E Project Cost Analysis:** PB 2021 Defense Information Systems Agency													**Date:** February 2020		
Appropriation/Budget Activity 0400 / 7						**R-1 Program Element (Number/Name)** PE 1203610K / Teleport Program						**Project (Number/Name)** NS03 / SATCOM Gateway			

Support ($ in Millions)				**FY 2019**		**FY 2020**		**FY 2021 Base**		**FY 2021 OCO**		**FY 2021 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**
Engineering Technical Support (MUOS tool)	Various	TBD : TBD	-	-		4.500	Oct 2019	1.999	Oct 2020	-		1.999	Continuing	Continuing	-
Subtotal			-	-		4.500		1.999		-		1.999	Continuing	Continuing	N/A

			Prior Years	**FY 2019**		**FY 2020**		**FY 2021 Base**		**FY 2021 OCO**		**FY 2021 Total**	**Cost To Complete**	**Total Cost**	**Target Value of Contract**
Project Cost Totals			-	-		4.500		1.999		-		1.999	Continuing	Continuing	N/A

Remarks

Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 **/** 7	**R-1 Program Element (Number/Name)** PE 1203610K **/** *Teleport Program*	**Project (Number/Name)** NS03 **/** *SATCOM Gateway*

	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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
SATCOM Gateway																												
Engineering, development, testing, and evaluation of a MUOS terminal planning tool and data controller supporting SATCOM operations.																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2021 Defense Information Systems Agency					Date: February 2020

Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1203610K / *Teleport Program*	Project (Number/Name) NS03 / *SATCOM Gateway*

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
SATCOM Gateway				
Engineering, development, testing, and evaluation of a MUOS terminal planning tool and data controller supporting SATCOM operations.	2	2020	4	2025

PE 1203610K: *Teleport Program*
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| Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Information Systems Agency | | | | | | | | | | | Date: February 2020 | |

Appropriation/Budget Activity	R-1 Program Element (Number/Name)
0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 8: *Software and Digital Technology Pilot Programs*	PE 0303150K *I Global Command and Control System Software and Digital Technology Pilot Program*

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	-	0.000	0.000	86.750	-	86.750	37.928	33.364	33.097	34.934	Continuing	Continuing
CC01: *Global Command and Control*	-	0.000	0.000	86.750	-	86.750	37.928	33.364	33.097	34.934	Continuing	Continuing

A. Mission Description and Budget Item Justification

This is not a new start. Effort continues from FY 2020, funded in PE 0303150K, Global Command and Control System. The Global Command and Control System-Joint (GCCS-J) funds a Joint Command and Control (JC2) portfolio which includes: GCCS-J, Joint Planning and Execution Services (JPES), and JC2 Architecture.

The GCCS-J Program is the Department of Defense (DoD) Joint C2 system of record. It incorporates core planning and assessment tools required by Combatant Commanders and their subordinate Joint Task Force Commanders while meeting the readiness support requirements of the Services. GCCS-J is used by all nine Combatant Commands (COCOMs) at sites around the world, supporting joint and coalition operations. The Services rely heavily on GCCS-J components to reduce their command and control (C2) operational costs. It provides support for commanders and staffs as they conduct joint and multinational operations by providing a fused picture of the battle space within an integrated system that is supporting joint warfighter needs today. GCCS-J is currently focused on sustainment, synchronization, and modernization to meet emerging operational needs by modifying and enhancing elements or capabilities in order to implement new requirements, enhance functionality, increase efficiency and lower operating and deployment costs while taking advantage of the progress made by current operational systems and technologies. The GCCS-J program is also executing incremental modernization of C2 capabilities using the Joint Requirements Oversight Council (JROC) approved needs.

B. Program Change Summary ($ in Millions)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	0.000	0.000	0.000	-	0.000
Current President's Budget	0.000	0.000	86.750	-	86.750
Total Adjustments	0.000	0.000	86.750	-	86.750
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Reprogrammings	-	-	86.750	-	86.750

Change Summary Explanation

The increase of +$86.750 in FY 2021 is due to realigning funds from O&M appropriation and RDT&E BA 7 to the newly created BA 8: Software and Digital Technology for the Software Pilot Program.

| Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency | | | | | | | | | | **Date:** February 2020 | |

Appropriation/Budget Activity 0400 / 8	R-1 Program Element (Number/Name) PE 0303150K / Global Command and Control System Software and Digital Technology Pilot Program	Project (Number/Name) CC01 / Global Command and Control

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
CC01: *Global Command and Control*	-	0.000	0.000	86.750	-	86.750	37.928	33.364	33.097	34.934	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Global Command and Control System-Joint (GCCS-J) funds a Joint Command and Control (JC2) portfolio which includes: GCCS-J, Joint Planning and Execution Services (JPES), and JC2 Architecture.

The GCCS-J Program is the Department of Defense (DoD) Joint C2 system of record. It incorporates core planning and assessment tools required by Combatant Commanders and their subordinate Joint Task Force Commanders while meeting the readiness support requirements of the Services. GCCS-J is used by all nine Combatant Commands (COCOMs) at sites around the world, supporting joint and coalition operations. The Services rely heavily on GCCS-J components to reduce their command and control (C2) operational costs. It provides support for commanders and staffs as they conduct joint and multinational operations by providing a fused picture of the battle space within an integrated system that is supporting joint warfighter needs today. GCCS-J is currently focused on sustainment, synchronization, and modernization to meet emerging operational needs by modifying and enhancing elements or capabilities in order to implement new requirements, enhance functionality, increase efficiency and lower operating and deployment costs while taking advantage of the progress made by current operational systems and technologies. The GCCS-J program is also executing incremental modernization of C2 capabilities using the Joint Requirements Oversight Council (JROC) approved needs.

B. Accomplishments/Planned Programs ($ in Millions)

	FY 2019	FY 2020	FY 2021
Title: Development and Strategic Planning	0.000	-	86.750
Description: Develop, publish, and execute a GCCS-J migration and modernization strategy that achieves the following GCCS-J Modernization objectives in accordance with Joint C2 Mission operational priorities and the DoD's JC2 Reference Architecture: • Continue to decompose applicable existing applications into services • Limit local deployment and move as much to the enterprise as possible • Continue to expose data and scale services to support an enterprise implementation • Continue to evolve more economical hardware and software architecture without impact to the operational user or Family of Systems (FoS)/interface partners • Reduce overall sustainment cost through use of more cost effective and appropriate Commercial-off-the-Shelf (COTS) and Hardware (HW) products • Evolve to use of agile development practices • Consolidation of clients and tools **FY 2021 Plans:**			

PE 0303150K: *Global Command and Control System Softwa...*
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Exhibit R-2A, **RDT&E Project Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 *I* 8	**R-1 Program Element (Number/Name)** PE 0303150K *I Global Command and Control System Software and Digital Technology Pilot Program*	**Project (Number/Name)** CC01 *I Global Command and Control*

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021**
FY 2021 O&M Plans: $63.724 In FY21, continue to support the Operational Community by incrementally developing, testing, and fielding additional GCCS-J 6.0 capabilities, as identified and prioritized by the Joint Staff and User community. Most notably, this will involve enhancements to the following capability sets: 1) Identification Friend or Foe (IFF), 2) Personnel Recovery Report & Locate (PRRL), and 3) Early Missile Warning. In addition, in FY21, continue to support the Operational Community by incrementally developing, testing, and fielding upgrades to modernize, and enhance the cyber security posture of, the existing baseline in the following areas: 1) pursue IPv6 compliance, 2) modernize the server deployment, 3) enhance cyber security by addressing high priority focus areas, and 4) conducting database consolidation to increase overall system efficiency and performance. These activities will be accomplished utilizing the GCCS-J 4 - 8 weeks Maintenance Release Process (MRP). FY 2021 RDT&E Plans: $23.026 Cyber security analysis is an ongoing aspect of the software lifecycle required to keep the system securely deployed. Continue to maintain the synchronization across DOD of GCCS-J, joint interfaces and the GCCS Family of Systems; continue to deliver capabilities as prioritized by the warfighter; and meet emerging operational priorities. Continue the development of the GCCS-JE Framework to meet the programs Initial Operational Capability. In addition we will execute a development, integration and sustainment contract that will develop the functional capability that will be integrated in the framework design and sustain the capability as it is operationally deployed to the warfighter. *FY 2020 to FY 2021 Increase/Decrease Statement:* The increase from FY 2020 to FY 2021 is due to the implementation of a pilot Budget Authority that combines the GCCS-J funding lines to better support the movement of GCCS-JE System capabilities from development and testing to implementation and sustainment.			
Accomplishments/Planned Programs Subtotals	0.000	-	86.750

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
• PE 0303150K: *Operation & Maintenance, Defense-Wide*	0.000	0.000	27.426	0.000	27.426	26.829	27.199	25.825	25.932	Continuing	Continuing

Remarks

PE 0303150K: *Global Command and Control System Softwa...*
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Exhibit R-2A, **RDT&E Project Justification:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 **/** 8	**R-1 Program Element (Number/Name)** PE 0303150K **/** *Global Command and Control System Software and Digital Technology Pilot Program*	**Project (Number/Name)** CC01 **/** *Global Command and Control*

D. Acquisition Strategy

Use of performance-based contract awards is maximized while use of Time and Material contracts is minimized to those providing programmatic support versus software development, integration, or testing. All development, integration, and migration efforts within the portfolio are primarily supported through Cost Reimbursable Task Orders issued under competitively awarded contracts. Acquisition Strategies are structured to retain contractors capable of satisfying cost, schedule, and performance objectives. Contract awards incorporate provisions requiring contractors to establish and manage specific earned value data. This strategy mitigates risk by requiring monthly Contract Performance Reviews (CPRs) and utilizing award fee contracts where appropriate to incentivize performance. Both GCCS-J and JPES apply formal acquisition rigor to include reporting requirements, as appropriate, by acquisition program designation.

PE 0303150K: *Global Command and Control System Softwa...*
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Exhibit R-3, **RDT&E Project Cost Analysis:** PB 2021 Defense Information Systems Agency												**Date:** February 2020		

Appropriation/Budget Activity 0400 / 8		**R-1 Program Element (Number/Name)** PE 0303150K / *Global Command and Control System Software and Digital Technology Pilot Program*	**Project (Number/Name)** CC01 / *Global Command and Control*

Product Development ($ in Millions)				FY 2019		FY 2020		**FY 2021** **Base**		**FY 2021** **OCO**		**FY 2021** **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**
Product Development	C/CPFF	NMGS: GCCS-J Sustainment : Reston, VA	-	-		-		45.400	Dec 2020	-		45.400	Continuing	Continuing	-
Product Development	C/CPFF	C2 Systems Engineering : TBD	-	-		-		5.200	Dec 2021	-		5.200	Continuing	Continuing	-
Product Development	C/CPFF	GCCS-J Development : TBD	-	-		-		19.575	Jan 2021	-		19.575	Continuing	Continuing	-
Product Development	C/FFP	Configuration Management : Montgomery	-	-		-		1.000	Oct 2020	-		1.000	Continuing	Continuing	-
Product Development	C/FFP	Milcloud Hosting : TBD	-	-		-		3.000	Jan 2021	-		3.000	Continuing	Continuing	-
Product Development	C/FFP	Software Maintenance GEMFIRE : TBD	-	-		-		1.214	Apr 2021	-		1.214	Continuing	Continuing	-
Product Development	C/FFP	Software Maintenance: VMWare : TBD	-	-		-		0.150	Apr 2021	-		0.150	Continuing	Continuing	-
Product Development	C/FFP	Software Maitenance: Redhat : TBD	-	-		-		0.487	Dec 2020	-		0.487	Continuing	Continuing	-
Product Development	C/FFP	Software Maintenance Sybase : TBD	-	-		-		0.652	Sep 2021	-		0.652	Continuing	Continuing	-
Product Development	C/FFP	Software Maintenance : TBD	-	-		-		2.500	Jan 2021	-		2.500	Continuing	Continuing	-
		Subtotal	-	-		-		79.178		-		79.178	Continuing	Continuing	N/A

Exhibit R-3, **RDT&E Project Cost Analysis:** PB 2021 Defense Information Systems Agency												**Date:** February 2020	
Appropriation/Budget Activity 0400 / 8					**R-1 Program Element (Number/Name)** PE 0303150K / *Global Command and Control System Software and Digital Technology Pilot Program*						**Project (Number/Name)** CC01 / *Global Command and Control*		

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Support Cost	C/FFP	TBD : TBD	-	-		-		1.300	May 2021	-		1.300	Continuing	Continuing	-
Subtotal			-	-		-		1.300		-		1.300	Continuing	Continuing	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Test & Evaluation	MIPR	JITC : Various	-	-		-		2.500	Oct 2020	-		2.500	Continuing	Continuing	-
Test & Evaluation	MIPR	DAA : STRATCOM:Various	-	-		-		0.672	Oct 2020	-		0.672	Continuing	Continuing	-
Test & Evaluation	MIPR	RME : Variuos	-	-		-		2.500	Oct 2020	-		2.500	Continuing	Continuing	-
Subtotal			-	-		-		5.672		-		5.672	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Management Services	FFRDC	MITRE : Various	-	-		-		0.600	Oct 2020	-		0.600	Continuing	Continuing	-
Subtotal			-	-		-		0.600		-		0.600	Continuing	Continuing	N/A

	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	-	0.000	86.750	-	86.750	Continuing	Continuing	N/A

Remarks

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Exhibit R-4, **RDT&E Schedule Profile:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 **/** 8	**R-1 Program Element (Number/Name)** PE 0303150K **/** *Global Command and Control System Software and Digital Technology Pilot Program*	**Project (Number/Name)** CC01 **/** *Global Command and Control*

	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
	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**
Development and Strategic Planning																												
Development and Strategic Planning																												
Integration and Test																												
Integration and Test																												

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Exhibit R-4A, **RDT&E Schedule Details:** PB 2021 Defense Information Systems Agency		**Date:** February 2020
Appropriation/Budget Activity 0400 **/** 8	**R-1 Program Element (Number/Name)** PE 0303150K **/** *Global Command and Control System Software and Digital Technology Pilot Program*	**Project (Number/Name)** CC01 **/** *Global Command and Control*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Development and Strategic Planning				
Development and Strategic Planning	1	2020	4	2025
Integration and Test				
Integration and Test	1	2020	4	2025

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