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

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 7:

PE 0303228K I Joint Information Environment

Date: March 2019

Operational Systems Development

Appropriation/Budget Activity

COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
Total Program Element	2.789	4.550	7.947	18.077	-	18.077	2.882	2.947	3.021	3.077	Continuing	Continuing
JE1: Joint Regional Security Stacks	2.789	4.550	7.947	18.077	-	18.077	2.882	2.947	3.021	3.077	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Joint Information Environment (JIE) construct is a consolidated secure and defensible environment across 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 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	4.689	7.947	2.797	-	2.797
Current President's Budget	4.550	7.947	18.077	-	18.077
Total Adjustments	-0.139	0.000	15.280	-	15.280
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
SBIR/STTR Transfer	-0.139	-			
Adjustment	_	-	15.280	-	15.280

Change Summary Explanation

Decrease in FY 2018 of -\$0.139 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

UNCLASSIFIED
Page 1 of 8

R-1 Line #220

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Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Defense Informat	tion Systems Agency	Date: March 2019
Appropriation/Budget Activity 0400: Research, Development, Test & Evaluation, Defense-Wide I BA 7: Operational Systems Development	R-1 Program Element (Number/Name) PE 0303228K / Joint Information Environment	t
Increase in FY 2020 of +\$15.280 primarily due to support architecture next-generation JRSS. The funding will also support testing of additional architecture, as well as development and testing of (DoD Cyber Situation).	onal enhancements to JRSS 2.0 capabilities, integ	gration/testing of tech refresh items into

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

Exhibit R-2A, RDT&E Project Justification: PB 2020 Defense Information Systems Agency												
Appropriation/Budget Activity 0400 / 7						am Elemen 28K / Joint I ent	t (Number/ nformation	Number/Name) t Regional Security Stacks				
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
JE1: Joint Regional Security Stacks	2.789	4.550	7.947	18.077	-	18.077	2.882	2.947	3.021	3.077	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

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. 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 Department of Defense (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 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 2018	FY 2019	FY 2020
Title: Joint Regional Security Stacks	4.550	7.947	18.077
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 2019 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 2020 Plans:			

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

Exhibit R-2A, RDT&E Project Justification: PB 2020 D	efense Information Systems Agency	·	Date: N	March 2019	
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303228K / Joint Information Environment		: (Number/l pint Region	Name) al Security St	acks
, , , , , , , , , , , , , , , , , , , ,) S/JMS hardware/software to support tech refresh of end-of-support ing of DoD Cyber Situational Awareness Analytic Capabilities (CSA	t/	FY 2018	FY 2019	FY 2020
FY 2019 to FY 2020 Increase/Decrease Statement: The increase of +\$10.130 from FY 2019 to FY 2020 is at	ributed to architecting, piloting, and testing the proof-of-concept/ne	xt			

Accomplishments/Planned Programs Subtotals

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

generation version of the Joint Regional Security Stack (JRSS).

N/A

Remarks

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

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. 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 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 CYBERCOM. Cyber Operations can take proactive actions to ensure the uninterrupted availability and protection of system and network information.

FY 2018 Actual: 100% successful testing of new pre-production capabilities for Full Packet Capture analytics (e.g. ArcSight and Splunk log); JMS 1.5 data orchestrator aggregation; and JRSS 1.5 active stack capabilities through the Joint Interoperability Test Command. MET

FY 2019 Target: 100% successful testing of JRSS tech refresh hardware/software and testing of six medium complexity analytics.

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

UNCLASSIFIED Page 4 of 8

R-1 Line #220

4.550

7.947

18.077

	exhibit R-2A, RDT&E Project Justification: PB 2020 De	Date: March 2019	
2020 (Estimated): 100% successful testing of JRSS tech refresh hardware/software and testing of six medium complexity analytics.	ppropriation/Budget Activity 400 / 7	PE 0303228K I Joint Information	Project (Number/Name) JE1 I Joint Regional Security Stacks
	' 2020 (Estimated): 100% successful testing of JRSS	tech refresh hardware/software and testing of six medium comp	lexity analytics.

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

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

R-1 Program Element (Number/Name)

PE 0303228K / Joint Information

Project (Number/Name)

JE1 I Joint Regional Security Stacks

Date: March 2019

Environment

Support (\$ in Millions	s)			FY 2	2018	FY 2	2019		2020 ase		2020 CO	FY 2020 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	Total Cost	Target Value of Contract
Certification Testing	Various	Various : Various	0.616	0.916	Oct 2017	0.000		-		-		-	0.000	1.532	-
Test and Evaluation Support	Various	JITC : Various	0.384	0.684	Oct 2017	1.000	Oct 2018	0.500	Oct 2019	-		0.500	Continuing	Continuing	-
Integration Test and Modification	Various	Multiple : Various	0.500	0.800	Dec 2017	0.947	Dec 2018	0.537	Dec 2019	-		0.537	Continuing	Continuing	-
Tech Refresh/Functionality Testing	Various	Multiple : Various	1.289	2.150	Oct 2017	1.900	Dec 2018	0.750	Dec 2019	-		0.750	Continuing	Continuing	-
Analytic Development & Testing (CSAAC)	Various	Multiple : Various	0.000	0.000		4.100	Dec 2018	1.010	Dec 2019	-		1.010	Continuing	Continuing	-
Next generation JRSS	Various	TBD : TBD	-	-		-		15.280	Dec 2019	-		15.280	Continuing	Continuing	-
		Subtotal	2.789	4.550		7.947		18.077		-		18.077	Continuing	Continuing	N/A
			Prior	EV			2040	FY	2020	FY 2	2020	FY 2020	Cost To	Total	Target Value of

	Prior Years	FY 2	018	FY 2	2019	FY 2 Ba	020 se	FY 2	FY 2020 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	2.789	4.550		7.947		18.077		-	18.077	Continuing	Continuing	N/A

Remarks

Appropriation/Budget Activity

0400 / 7

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

khibit R-4, RDT&E Schedule Profile: P	B 2020 De	efen	se I	nfor	mati	on S	Syste	ems	Age	ncy	,												Dat	e : M	arch	201	19	
Appropriation/Budget Activity 400 / 7									0303	32	ram E 28K / ent						me)					Number/Name) nt Regional Security Stacks						
			Y 2	2011			FY	2012	<u> </u>		F	Y 201	3		FY	2014	ļ.		FY	2015			FY	2016	 3		FY 2)17
		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
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		F	Y 2	2018	3		FY 2	2019)		F	Y 202	0		FY	2021			FΥ	2022			FY:	2023	3		FY 2	24
	1																						$\overline{}$		1			
		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
JIE		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

Exhibit R-4A, RDT&E Schedule Details: PB 2020 Defense Information System	Date: March 2019		
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303228K / Joint Information Environment	- , (umber/Name) Regional Security Stacks

Schedule Details

	St	art	Eı	nd
Events by Sub Project	Quarter	Year	Quarter	Year
JIE				
JIE	1	2017	1	2024