Department of Defense
Fiscal Year (FY) 2020 Budget Estimates

March 2019

Defense Security Service

Defense-Wide Justification Book Volume 5 of 5

Research, Development, Test & Evaluation, Defense-Wide

THIS PAGE INTENTIONALLY LEFT BLANK

Table of Volumes

Defense Security Service • Budget Estimates FY 2020 • RDT&E Program

Volume 5 Table of Contents

THIS PAGE INTENTIONALLY LEFT BLANK

Department of Defense
FY 2020 President's Budget
Exhibit R-1 FY 2020 President's Budget
Total Obligational Authority
(Dollars in Thousands)

25 Feb 2019

Appropriation	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted
Research, Development, Test & Eval, DW	12,330	16,204		16,204
Total Research, Development, Test & Evaluation	12,330	16,204		16,204

R-120PB: FY 2020 President's Budget (Published Version), as of February 25, 2019 at 08:55:25

Department of Defense
FY 2020 President's Budget
Exhibit R-1 FY 2020 President's Budget
Total Obligational Authority
(Dollars in Thousands)

25 Feb 2019

Appropriation	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)
Research, Development, Test & Eval, DW	12,723				12,723
Total Research, Development, Test & Evaluation	12,723				12,723

R-120PB: FY 2020 President's Budget (Published Version), as of February 25, 2019 at 08:55:25

Department of Defense
FY 2020 President's Budget
Exhibit R-1 FY 2020 President's Budget
Total Obligational Authority
(Dollars in Thousands)

25 Feb 2019

Summary Recap of Budget Activities	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted
Operational System Development	12,330	16,204		16,204
Total Research, Development, Test & Evaluation	12,330	16,204		16,204

Summary Recap of FYDP Programs

Intelligence and Communications	7,265	5,954		5,954
Research and Development	4,565	9,750		9,750
Classified Programs	500	500		500
Total Research, Development, Test & Evaluation	12,330	16,204		16,204

R-120PB: FY 2020 President's Budget (Published Version), as of February 25, 2019 at 08:55:25

Department of Defense
FY 2020 President's Budget
Exhibit R-1 FY 2020 President's Budget
Total Obligational Authority
(Dollars in Thousands)

25 Feb 2019

Summary Recap of Budget Activities	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)
Operational System Development	12,723				12,723
Total Research, Development, Test & Evaluation	12,723				12,723

Summary Recap of FYDP Programs					
Intelligence and Communications	4,364				4,364
Research and Development	7,945				7,945
Classified Programs	414				414
Total Research, Development, Test & Evaluation	12,723				12,723

R-120PB: FY 2020 President's Budget (Published Version), as of February 25, 2019 at 08:55:25

Defense-Wide
FY 2020 President's Budget
Exhibit R-1 FY 2020 President's Budget
Total Obligational Authority
(Dollars in Thousands)

25 Feb 2019

Summary Recap of Budget Activities	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted
Operational System Development	12,330	16,204		16,204
Total Research, Development, Test & Evaluation	12,330	16,204		16,204

Summary Recap of FYDP Programs				
Intelligence and Communications	7,265	5,954		5,954
Research and Development	4,565	9,750		9,750
Classified Programs	500	500		500
Total Research, Development, Test & Evaluation	12,330	16,204		16,204

Defense-Wide
FY 2020 President's Budget
Exhibit R-1 FY 2020 President's Budget
Total Obligational Authority
(Dollars in Thousands)

25 Feb 2019

Summary Recap of Budget Activities	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)
Operational System Development	12,723				12,723
Total Research, Development, Test & Evaluation	12,723				12,723

Summary Recap of FYDP Programs					
Intelligence and Communications	4,364				4,364
Research and Development	7,945				7,945
Classified Programs	414				414
Total Research, Development, Test & Evaluation	12,723				12,723

R-120PB: FY 2020 President's Budget (Published Version), as of February 25, 2019 at 08:55:25

Defense-Wide
FY 2020 President's Budget
Exhibit R-1 FY 2020 President's Budget
Total Obligational Authority
(Dollars in Thousands)

25 Feb 2019

Appropriation	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted

Defense Security Service

   Total Research, Development, Test & Evaluation

R-120PB: FY 2020 President's Budget (Published Version), as of February 25, 2019 at 08:55:25

Defense-Wide
FY 2020 President's Budget
Exhibit R-1 FY 2020 President's Budget
Total Obligational Authority
(Dollars in Thousands)

25 Feb 2019

Appropriation	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)

Defense Security Service

    Total Research, Development, Test & Evaluation

R-120PB: FY 2020 President's Budget (Published Version), as of February 25, 2019 at 08:55:25

Defense-Wide
FY 2020 President's Budget
Exhibit R-1 FY 2020 President's Budget
Total Obligational Authority
(Dollars in Thousands)

25 Feb 2019

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

Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	Sec
195	0604130V	Enterprise Security System (ESS)	07	4,565	9,750		9,750	U
228	0305128V	Security and Investigative Activities	07					U
241	0305327V	Insider Threat	07	7,265	5,954		5,954	U
9999	9999999999	Classified Programs		500	500		500	U
		Operational System Development		12,330	16,204		16,204	
	Total Research, Development, Test & Eval, DW			12,330	16,204		16,204	

R-120PB: FY 2020 President's Budget (Published Version), as of February 25, 2019 at 08:55:25

Defense-Wide
FY 2020 President's Budget
Exhibit R-1 FY 2020 President's Budget
Total Obligational Authority
(Dollars in Thousands)

25 Feb 2019

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

Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Sec
195	0604130V	Enterprise Security System (ESS)	07	7,945				7,945	U
228	0305128V	Security and Investigative Activities	07	2,400				2,400	U
241	0305327V	Insider Threat	07	1,964				1,964	U
9999	9999999999	Classified Programs		414				414	U
		Operational System Development		12,723				12,723	
		Total Research, Development, Test & Eval, DW		12,723				12,723	

R-120PB: FY 2020 President's Budget (Published Version), as of February 25, 2019 at 08:55:25

Defense Security Service
FY 2020 President's Budget
Exhibit R-1 FY 2020 President's Budget
Total Obligational Authority
(Dollars in Thousands)

25 Feb 2019

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

Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	Sec
195	0604130V	Enterprise Security System (ESS)	07	4,565	9,750		9,750	U
228	0305128V	Security and Investigative Activities	07					U
241	0305327V	Insider Threat	07	7,265	5,954		5,954	U
		Operational System Development		11,830	15,704		15,704	
		Total Defense Security Service		11,830	15,704		15,704	

Defense Security Service
FY 2020 President's Budget
Exhibit R-1 FY 2020 President's Budget
Total Obligational Authority
(Dollars in Thousands)

25 Feb 2019

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

Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Sec
195	0604130V	Enterprise Security System (ESS)	07	7,945				7,945	U
228	0305128V	Security and Investigative Activities	07	2,400				2,400	U
241	0305327V	Insider Threat	07	1,964				1,964	U
		Operational System Development		12,309				12,309	
		Total Defense Security Service		12,309				12,309	

R-120PB: FY 2020 President's Budget (Published Version), as of February 25, 2019 at 08:55:25

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

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

THIS PAGE INTENTIONALLY LEFT BLANK

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

THIS PAGE INTENTIONALLY LEFT BLANK

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Defense Security Service										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 0604130V I *Enterprise Security System (ESS)*					

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	118.635	4.565	9.750	7.945	-	7.945	7.587	7.542	4.676	4.770	Continuing	Continuing
000: *Enterprise Security System (ESS)*	118.635	4.565	9.750	7.945	0.000	7.945	7.587	7.542	4.676	4.770	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Defense Security Service (DSS) supports national security and the warfighter through its industrial security oversight, education, and insider threat missions. The DSS is responsible for overseeing the protection of classified information and technologies, and materials in the hands of cleared industry by ensuring compliance with the National Industrial Security Program (NISP) on behalf of 26 Department of Defense (DoD) components and 32 other U.S. Federal agencies. The NISP serves as a single, integrated, cohesive industrial security program to protect classified information and to preserve our Nation's economic and technological interests. The DSS provides security oversight, counterintelligence coverage and support to approximately 10,000 cleared companies (comprising over 12,100 industrial facilities and about 850,000 cleared contractors), and accreditation of more than 55,000 workstations across multiple classified network domains that process classified information, and 160 Secure Internet Protocol Router Networks (SIPRNet) nodes.

B. Program Change Summary ($ in Millions)

	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	4.565	9.750	7.945	-	7.945
Current President's Budget	4.565	9.750	7.945	-	7.945
Total Adjustments	0.000	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	0.000	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

Change Summary Explanation

FY20 continues the enhancement of the NISS development. Development will consist of mitigating unforeseen functionality gaps and bugs identified by the user community, during testing and initial development the completion of increment 2 and the start of increment 3. which will include enhancements to Key Management Personnel (KMP) monitoring, NATO Control Point Inspection Triage Outreach Program, NISP Oversight Report, and Outgoing Foreign Visits.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Defense Security Service										Date: March 2019	

Appropriation/Budget Activity 0400 / 7				R-1 Program Element (Number/Name) PE 0604130V / Enterprise Security System (ESS)					Project (Number/Name) 000 / Enterprise Security System (ESS)		

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
000: Enterprise Security System (ESS)	118.635	4.565	9.750	7.945	0.000	7.945	7.587	7.542	4.676	4.770	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Defense Security Service manages the Enterprise Security System (ESS) to provide an effective, real-time, security support capability for the Military Departments, DoD Agencies, the NISP, and other Federal Agencies. In compliance with the Expanded Electronic Government, President's Management Agenda, and the DoD Enterprise Architecture Framework, ESS is the unified offering of security mission systems to facilitate and automate improved national investigative standards, streamline security processes, and increase DoD community collaboration.

The DSS Mission Information Technology (IT) systems provide critical service to the major DSS mission areas for Industrial Security Oversight and Security Education. DSS performs this critical function through operation of its mission production systems to include the Industrial Security Facilities Database (ISFD), the DSS Gateway, and the USA Learning Portal (STEPP). RDT&E for DSS mission systems primarily includes pre-planned product enhancements and improvements to the applications, research and improve assured information sharing to better posture systems and networks against vulnerabilities, ensure self-defense of systems and networks, and safeguard data at all stages for the DSS to increase efficiencies through web-based systems to manage certification and accreditation activities. These IT systems are as follows:

Office of Designated Approving Authority (ODAA) Business Management System (OBMS). The OBMS will automate the approval and certification process of cleared industry's classified information processing security plans and operations. This will increase mission efficiency by providing a web-based system to manage certification and accreditation activities, provide improved reporting capabilities to support DSS and industry through improved metrics, accreditation timeliness and accuracy and reduce the number of unaccredited systems by providing automated notifications to DSS and industry.

eFCL: The eFCL's centralized repository for information of facilities participating in the National Industrial Security Program (NISP). The eFCL captures facility information related to a cleared facility, from the initial processing of the facility clearance, the record decision of the facility clearance request includes Foreign Ownership Control or Influence (FOCI) information, as well as decommissioning of the facility clearance, and captures the DSS oversight activities. The eFCL will allow users to submit, update, search, and view facility verification requests.

Industrial Security Facilities Database (ISFD). ISFD is the primary DSS mission system that track and execute the National Industrial Security Program for DoD and 32 other Federal Executive Agencies of cleared industrial security facilities. The ISFD provide users with a nationwide perspective on National Industrial Security Program related facilities, as well as, facilities under DSS oversight in the DoD conventional Arms Ammunition and Explosives program. ISFD provides source data for the DoD Joint Personnel Adjudicative System (JPAS) and the Facility Verification Request (FVR) application.

PE 0604130V: Enterprise Security System (ESS)
Defense Security Service
UNCLASSIFIED
Page 2 of 8
R-1 Line #195
Volume 5 - 2

Exhibit R-2A, **RDT&E Project Justification:** PB 2020 Defense Security Service		**Date:** March 2019
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0604130V *I Enterprise Security System (ESS)*	**Project (Number/Name)** 000 *I Enterprise Security System (ESS)*

National Industrial Security System (NISS, formerly known as Field Operations System (FOS). The NISS is the next generation enterprise capability, replacing the Industrial Security Facility Database (ISFD). Additionally, NISS will provide seamless integration of other DSS systems and applications, such as eFCL, OBMS, DD-254, and Mobile Workforce Applications. NISS will provide DSS with comprehensive enhanced capability to manage its entire mission portfolio. NISS will improve information sharing and collaboration, provide timely and accurate data in the hands of field representatives for decision-making. The system produces agency-wide metrics to measure and drive improved performance in security oversight and the protection of national security.

The National Contract Classification System (NCCS). The Federal Acquisition Regulation (FAR) requires a DD Form 254 for each classified contract, and the National Industrial Security Operating Manual (NISPOM)(4-103a) requires a DD 254 be issued by the government with each Invitation for Bid, Request for Proposal, or Request for Quote. The DD Form 254 provides contractor (or a subcontractor) the security requirements and classification guidance necessary to perform on a classified contract. Contract Security Classification Specification required by DoD 5220.22-4, Industrial Security Regulation and the National Industrial Security Program Operating Manual (NISPOM) is to develop a federated system for the oversight and management of classified information access and guidance to perform on classified contracts. The DD 254, an underlying business process, is critical to ensure access to our Nation's classified information is safeguarded.

National Industrial Security Program (NISP) Control Access and Information Security System (NCAISS) formerly known as Identity Management (IdM). NCAISS is mandatory for compliance with Department of Defense (DoD) Public Key Infrastructure (PKI) Program Management Office and Office of the Assistant Secretary of Defense for Networks and Information Integration (ASD-NII), Joint Task Force for Global Networks Operations (JTF-GNO) Communications Tasking Order (CTO) 06-02, CTO 07-015, and Office of Management and Budget (OMB) Memo 11-11 (M-11-11), which directed accelerated use of PKI access across the enterprise. This initiative is designed to enable multiple DSS business systems to have service-accessibility that is controlled through PKI-compliant single sign-on authentication. Potential expanded use of the NCAISS across the DSS enterprise to provide CAC-based authentication for business support applications to support the SIPRNet and JWICS domains, provide enhanced identity and access control analytics. It incorporates any remaining DSS operated application into the DSS NCAISS solution.

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2018**	**FY 2019**	**FY 2020**
Title: Systems Enhancement	4.565	9.750	7.945
Description: FY 2018 Accomplishments: 1. NISS. Completed core development of NISS Initial Operating Capability (IOC) of Increment 1 in 4Q of FY17. Increment 1 includes ISFD and e-FCL core functionality, and will replace both systems once deployed in 4Q FY18. Addressed Completed Independent Verification and Validation (IV&V) and Government Acceptance Testing (GAT) findings from the IOC release. Completed IV&V and GAT of Increment 1 Full Operational Capability (FOC) release in 3Q of FY18. Initiated planning of NISS Increment 2. 2. NCCS. FOC milestone was achieved in FY17 with the release of NCCS v5.9.1. Continue scheduled enhancements (via user community feedback) through version releases (2 release cycles per year) and continue sustainment to include; enhanced search criteria, the automation of the National Interest Determinations (NID) process, data encryption, additional attachment capabilities, and various other minor enhancements to NCCS. 3. NCAISS. Continue integration and application sustainment activities. Contract period of performance ends 1st Qtr FY19.			

Exhibit R-2A, **RDT&E Project Justification:** PB 2020 Defense Security Service		**Date:** March 2019
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0604130V *I Enterprise Security System (ESS)*	**Project (Number/Name)** 000 *I Enterprise Security System (ESS)*

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2018**	**FY 2019**	**FY 2020**
4. eFCL. Continuation of minor updates to support Field operations and system maintenance. A significant portion of the system updates will align operations with new policy (NISPOM Change 2). Additionally, updates will continue to improve the user experience and backend maintenance of the system. ***FY 2019 Plans:*** 1. NISS. Continue development of NISS Increment 2. Increment 2 will include a SIPR instance of NISS, a Cross-domain Solution, and add enhancements to Security Violations, Security Vulnerability Assessments, and Suspicious Contact Reports. Initiate Independent Verification and Verification (IV&V) and Government Acceptance Testing (GAT) of Increment 2. IV&V and GAT findings will be addressed. Initiate planning of NISS Increment 3. 2. NCCS. Continue scheduled enhancements through version releases and sustainment. Agile development approach; two release cycles per year. Future enhancements will address updates to the New DD254 Form. 3. NCAISS. Final option year on current contract completed and NCAISS will be in full operational capability (FOC) sustainment. Complete final transition activities for NCAISS over to Data Center Operations. Long-term sustainment actions and funding will then be aligned by EITS contract support. 4. eFCL. DSS will sunset use eFCL once capabilities have transitioned into NISS. 5. ISFD. DSS will retire ISFD once capabilities have transitioned into NISS. ***FY 2020 Plans:*** 1. NISS. Complete development of NISS Increment 2. Deploy NISS Increment 2 IOC in 2Q FY19. Initiate development of NISS Increment 3. Increment 3 will include enhancements to KMP monitoring, NATO CPI, Triage Outreach Program, NISP Oversight Report, and Outgoing Foreign Visits. Initiate Independent Verification and Verification (IV&V) and Government Acceptance Testing (GAT) of Increment 2. IV&V and GAT findings will be addressed. 2. NCCS. Continue scheduled enhancements through version releases and sustainment. Agile development approach will continue with two release cycles per year. Address any findings/bugs/issues encountered from Independent Verification and Verification (IV&V) and Government Acceptance Testing (GAT). 3. NCAISS. No RDT&E funding required. Continue integration and application sustainment costs under the sustainment contract, with some software upgrades. ***FY 2019 to FY 2020 Increase/Decrease Statement:*** The decreased project costs from FY19 to FY20 is attributed to the DSS not running concurrent, physical hardware and visual MilCloud versions, of NISS NIPR and SIPR instances. Increment 3 will start development efforts to involve enhancements			

Exhibit R-2A, **RDT&E Project Justification:** PB 2020 Defense Security Service		**Date:** March 2019
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0604130V *I Enterprise Security System (ESS)*	**Project (Number/Name)** 000 *I Enterprise Security System (ESS)*

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2018**	**FY 2019**	**FY 2020**
(KMP monitoring, NATO CPI, Triage Outreach Program, NISP Oversight Report, and Outgoing Foreign Visits), user community feedback, and system interfaces rather than significant changes to baseline capabilities.			
Accomplishments/Planned Programs Subtotals	4.565	9.750	7.945

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

DSS will use a variety of appropriate acquisition strategies such as Indefinite Delivery, Indefinite Quantity (IDIQ), Blanket Purchase Agreements (BPA), and multiple or single award contracts for the development of new applications, enhancement of other applications, and perform system integration with COTS and GOTS solutions and technology. These efforts will reduce the contract award process. Lead time and contract overhead, improve technical solutions, deployments, and deliver more effective and efficient automation projects for DSS and the NISP community.

E. Performance Metrics

N/A

PE 0604130V: *Enterprise Security System (ESS)*
Defense Security Service

UNCLASSIFIED
Page 5 of 8

R-1 Line #195

Volume 5 - 5

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Defense Security Service												Date: March 2019		
Appropriation/Budget Activity 0400 *I* 7							**R-1 Program Element (Number/Name)** PE 0604130V *I Enterprise Security System (ESS)*					**Project (Number/Name)** 000 *I Enterprise Security System (ESS)*		

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
NISS Development	C/TBD	TBD : TBD	111.366	2.939	May 2018	8.208	May 2019	6.603	May 2020	-		6.603	Continuing	Continuing	-
NISS Development/ MilCloud	MIPR	DISA : Pensacola, FL	0.000	0.600	May 2018	0.500	May 2019	0.500	May 2020	-		0.500	Continuing	Continuing	-
NCAISS Development	Option/ BPA	Deloitt : Arlington VA	3.466	0.274	Nov 2017	0.000		0.000		-		0.000	Continuing	Continuing	-
NCCS Development	MIPR	DLA : Philadelphia, PA	2.699	0.613	Oct 2017	0.800	Oct 2018	0.600	Oct 2019	-		0.600	Continuing	Continuing	-
SBIR/STTR	MIPR	AT&L : Arlington, VA	1.104	0.139	May 2018	0.242	May 2019	0.242	May 2020	-		0.242	Continuing	Continuing	-
		Subtotal	118.635	4.565		9.750		7.945		-		7.945	Continuing	Continuing	N/A

	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	118.635	4.565	9.750	7.945	-	7.945	Continuing	Continuing	N/A

Remarks

The Enterprise Security System supports development efforts of the next generation of integrated enterprise automated security solutions to replace DSS legacy IT systems.
The ESS architecture will provide seamless integration of other DSS systems and applications such as eFCL, OBMS, NCCS and mobile workforce applications.

PE 0604130V: *Enterprise Security System (ESS)*
Defense Security Service

UNCLASSIFIED
Page 6 of 8

R-1 Line #195

Volume 5 - 6

Exhibit R-4, **RDT&E Schedule Profile:** PB 2020 Defense Security Service		**Date:** March 2019
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0604130V *I Enterprise Security System (ESS)*	**Project (Number/Name)** 000 *I Enterprise Security System (ESS)*

	FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017			
	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
Enterprise Security System																												
Production and Deployment of Appllications																								▮	▮	▮	▮	▮

	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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
Enterprise Security System																												
Production and Deployment of Appllications	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮	▮					

Exhibit R-4A, **RDT&E Schedule Details:** PB 2020 Defense Security Service		**Date:** March 2019
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0604130V *I Enterprise Security System (ESS)*	**Project (Number/Name)** 000 *I Enterprise Security System (ESS)*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Enterprise Security System				
Production and Deployment of Appllications	1	2017	4	2023

PE 0604130V: *Enterprise Security System (ESS)*
Defense Security Service

UNCLASSIFIED
Page 8 of 8

R-1 Line #195

Volume 5 - 8

Exhibit R-2, **RDT&E Budget Item Justification:** PB 2020 Defense Security Service											**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 0305128V *I Security and Investigative Activities*							
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	-	0.000	0.000	2.400	-	2.400	0.000	0.000	0.000	0.000	Continuing	Continuing
000: *Risk Rating Tool*	-	0.000	0.000	2.400	-	2.400	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Defense Security Service manages the Defense Vetting Directorate (DVD) for the entire government to support personnel vetting requirements. DVD has established itself as the mission authority for personnel security, vetting, and insider threat for the federal government. Continuous Evaluation (CE) program incorporates continual monitoring of individuals in support of the federal investigation standards for security clearances. DVD continues to develop the Risk Rating Tool (RRT) to focus data acquisition on individuals demonstrating high behaviors risk as identified by Machine Learning and Bayesian modeling. DVD will expand and test RRT models for the entire DoD population.

B. Program Change Summary ($ in Millions)	**FY 2018**	**FY 2019**	**FY 2020 Base**	**FY 2020 OCO**	**FY 2020 Total**
Previous President's Budget	0.000	0.000	0.000	-	0.000
Current President's Budget	0.000	0.000	2.400	-	2.400
Total Adjustments	0.000	0.000	2.400	-	2.400
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• One Time Increase	-	-	2.400	-	2.400

PE 0305128V: *Security and Investigative Activities*
Defense Security Service

UNCLASSIFIED
Page 1 of 6

R-1 Line #228

Volume 5 - 9

Exhibit R-2A, **RDT&E Project Justification:** PB 2020 Defense Security Service										**Date:** March 2019	
Appropriation/Budget Activity 0400 *I* 7				**R-1 Program Element (Number/Name)** PE 0305128V *I Security and Investigative Activities*						**Project (Number/Name)** 000 *I Risk Rating Tool*	

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
000: *Risk Rating Tool*	-	0.000	0.000	2.400	-	2.400	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Defense Security Service manages the Defense Vetting Directorate (DVD) for the entire government to support personnel vetting requirements. DVD has established itself as the mission authority for personnel security, vetting, and insider threat for the federal government. Continuous Evaluation (CE) program incorporates continual monitoring of individuals in support of the federal investigation standards for security clearances. DVD continues to develop the Risk Rating Tool (RRT) to focus data acquisition on individuals demonstrating high behaviors risk as identified by Machine Learning and Bayesian modeling. DVD will expand and test RRT models for the entire DoD population.

in October of 2017 AAG tested both the commercial and government RRT models. The cross validation tested modeling strength correlation to known adjudicative revocation/denial outcomes. Both models performed in the low-high 80% range of accuracy in identifying high risk populations in top 20% of scores. AAG also recommended additional validation to continue throughout the life cycle and risk-ranking modeling refinement be completed in a research environment to ensure the models continue to perform as required, are auditable, and protected status attributes are continually verified.

DVD will utilize these models Learning and statistics to identify individuals with high risk stressors mapped to the 13 Adjudicative guidelines. Use of these tools are projected to generate cost avoidance in data acquisition by focusing resources on high risks rather than a randomly selected process.

B. Accomplishments/Planned Programs ($ in Millions)

	FY 2018	FY 2019	FY 2020
Title: RRT	0.000	-	2.400
FY 2020 Plans: 1. RRT. Continue development of RRT models with integration of results in future system of use with the National Background Investigation System. 2. Expansion of population to support full DoD Eligible personnel			
3. Expansion of data sets incorporating data currently utilized in systems such as DISS, and MIRADOR			
FY 2019 to FY 2020 Increase/Decrease Statement: NA			
Title: NA	0.000	-	-
Accomplishments/Planned Programs Subtotals	0.000	-	2.400

Exhibit R-2A, **RDT&E Project Justification:** PB 2020 Defense Security Service		**Date:** March 2019
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0305128V / *Security and Investigative Activities*	**Project (Number/Name)** 000 / *Risk Rating Tool*

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

D. Acquisition Strategy
  N/A

E. Performance Metrics
  NA

PE 0305128V: *Security and Investigative Activities*
Defense Security Service

UNCLASSIFIED
Page 3 of 6

R-1 Line #228

Volume 5 - 11

Exhibit R-3, **RDT&E Project Cost Analysis:** PB 2020 Defense Security Service															**Date:** March 2019	

Appropriation/Budget Activity 0400 **/** 7	**R-1 Program Element (Number/Name)** PE 0305128V **/** *Security and Investigative Activities*	**Project (Number/Name)** 000 **/** *Risk Rating Tool*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018 Cost	FY 2018 Award Date	FY 2019 Cost	FY 2019 Award Date	FY 2020 Base Cost	FY 2020 Base Award Date	FY 2020 OCO Cost	FY 2020 OCO Award Date	FY 2020 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Risk Rating Tool - GOTS Model Development	MIPR	Army Analytics Group : Monterey, California	-	-		-		2.200	Sep 2019	-		2.200	Continuing	Continuing	-
Risk Rating Tool - COTS Model Development	MIPR	Army Analytics Group : Monterey, California	-	-		-		0.200	Aug 2019	-		0.200	Continuing	Continuing	-
Subtotal			-	-		-		2.400		-		2.400	Continuing	Continuing	N/A

	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	-	0.000	2.400	-	2.400	Continuing	Continuing	N/A

Remarks

Exhibit R-4, **RDT&E Schedule Profile:** PB 2020 Defense Security Service		**Date:** March 2019
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 0305128V *I Security and Investigative Activities*	**Project (Number/Name)** 000 *I Risk Rating Tool*

	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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
Risk Rating Tool																												
Production and Deployment										■	■																	

PE 0305128V: *Security and Investigative Activities*
Defense Security Service

UNCLASSIFIED
Page 5 of 6

R-1 Line #228

Volume 5 - 13

Exhibit R-4A, **RDT&E Schedule Details:** PB 2020 Defense Security Service		**Date:** March 2019
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0305128V / *Security and Investigative Activities*	**Project (Number/Name)** 000 / *Risk Rating Tool*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Risk Rating Tool				
Production and Deployment	3	2020	4	2020

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Defense Security Service											**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 0305327V *I Insider Threat*						

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	16.237	7.265	5.954	1.964	-	1.964	0.000	0.000	0.000	0.000	Continuing	Continuing
002: *Insider Threat*	16.237	7.265	5.954	1.964	-	1.964	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

The DoD Insider Threat Management and Analysis Center (DITMAC): Oversees the mitigation of insider threats to DoD and U.S. Government installations, facilities, personnel, missions, or resources; Assess enterprise-level risks, refer recommendations for action, synchronize responses, and oversee resolution of identified issues on the insider threats; Develops enterprise-level risk reporting criteria (thresholds) to facilitate component reporting of potential threat information and assess the effectiveness of actions taken by reporting elements to address, mitigate, or resolve the threat posed to DoD missions and resources; Supports the Office of the USD(I) in establishing standards to ensure that the DoD Insider Threat Program complies with applicable statutes, Executive Orders, and other national and DoD regulations and policies that specify insider threat program requirements; Provides a single repository for enterprise-level DoD insider threat-related information; and promotes the collaboration and the insider threat information sharing among DoD Components.

B. Program Change Summary ($ in Millions)

	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	7.265	5.954	1.964	-	1.964
Current President's Budget	7.265	5.954	1.964	-	1.964
Total Adjustments	0.000	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

Change Summary Explanation

Investments are required in technology and analytic capabilities to improve efficiencies enable offsets of future resource requirements across the DoD Insider Threat Enterprise and minimize human risk exposure.

PE 0305327V: *Insider Threat*
Defense Security Service

UNCLASSIFIED
Page 1 of 6

R-1 Line #241

Volume 5 - 15

Exhibit R-2A, **RDT&E Project Justification:** PB 2020 Defense Security Service										**Date:** March 2019	
Appropriation/Budget Activity 0400 *I* 7				**R-1 Program Element (Number/Name)** PE 0305327V *I Insider Threat*					**Project (Number/Name)** 002 *I Insider Threat*		
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**
002: *Insider Threat*	16.237	7.265	5.954	1.964	-	1.964	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The DoD Insider Threat Management and Analysis Center (DITMAC): Oversees the mitigation of insider threats to DoD and U.S. Government installations, facilities, personnel, missions, or resources; Assess enterprise-level risks, refer recommendations for action, synchronize responses, and oversee resolution of identified issues on the insider threats; Develops enterprise-level risk reporting criteria (thresholds) to facilitate component reporting of potential threat information and assess the effectiveness of actions taken by reporting elements to address, mitigate, or resolve the threat posed to DoD missions and resources; Supports the Office of the USD(I) in establishing standards to ensure that the DoD Insider Threat Program complies with applicable statutes, Executive Orders, and other national and DoD regulations and policies that specify insider threat program requirements; Provides a single repository for enterprise-level DoD insider threat-related information; and promotes the collaboration and the insider threat information sharing among DoD Components.

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2018**	**FY 2019**	**FY 2020**
Title: Insider Threat	7.265	5.954	1.964

Description: Continued development of capabilities to better serve the insider threat community, and align with Personnel Vetting mission. Maturing of the systems has facilitated increased use of the DSoS as the case management system for DoD Component's insider threat mission from 11 which was reported in 2017 to 37 as of 4th quarter 2018. A ground up system re-architecture is underway with an initial operating capability scheduled for 4th quarter 2019. The system redesign will provide the next generation platform that can pace and align with the expanding mission. The re-architecture will deliver a new platform that fosters communication/information sharing, adaptability, and an enhanced cyber posture while reducing annual investments in software licensing and technical support.

FY 2019 Plans:
Enhancements to the new platform; development and integration of additional advanced analytic capabilities; assessment of new technologies and interfaces between security domains and with external data sources on behalf of the enterprise.

FY 2020 Plans:
Continue enhancements to the new platform; development and integration of additional advanced analytic capabilities; assessment of new technologies and interfaces between security domains and with external data sources on behalf of the enterprise.

FY 2019 to FY 2020 Increase/Decrease Statement:

Exhibit R-2A, **RDT&E Project Justification:** PB 2020 Defense Security Service		**Date:** March 2019
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0305327V / *Insider Threat*	**Project (Number/Name)** 002 / *Insider Threat*

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2018**	**FY 2019**	**FY 2020**
Decrease from FY19 to FY20 was in support of one time increase to offset future resource requirements across the DoD Insider Threat Enterprise			
Accomplishments/Planned Programs Subtotals	7.265	5.954	1.964

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

D. Acquisition Strategy
 N/A

E. Performance Metrics
 TBD

UNCLASSIFIED

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Defense Security Service | | | | | | | | | | | | | Date: March 2019 |

| Appropriation/Budget Activity 0400 / 7 | R-1 Program Element (Number/Name) PE 0305327V / Insider Threat | Project (Number/Name) 002 / Insider Threat |

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018 Cost	FY 2018 Award Date	FY 2019 Cost	FY 2019 Award Date	FY 2020 Base Cost	FY 2020 Base Award Date	FY 2020 OCO Cost	FY 2020 OCO Award Date	FY 2020 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DITMAC System Of Systems	C/CPFF	NOVETTA : Mclean, VA	16.237	7.265	Sep 2018	5.954	Sep 2019	1.964	Sep 2020	-		1.964	Continuing	Continuing	-
Subtotal			16.237	7.265		5.954		1.964		-		1.964	Continuing	Continuing	N/A

	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	16.237	7.265	5.954	1.964	-	1.964	Continuing	Continuing	N/A

Remarks

Funding will further enhance the capabilities of the Insider Threat program to deter, detect and mitigate threats through operation of the Defense Insider Threat Management and Analysis Center and the expansion of Continuous Evaluation to cover the entire DoD population.

PE 0305327V: Insider Threat
Defense Security Service
UNCLASSIFIED
Page 4 of 6
R-1 Line #241
Volume 5 - 18

Exhibit R-4, **RDT&E Schedule Profile:** PB 2020 Defense Security Service		**Date:** March 2019
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0305327V / *Insider Threat*	**Project (Number/Name)** 002 / *Insider Threat*

	FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017			
	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
Insider Threat																												
Production Development																					███	███	███	███	███	███	███	███

	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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
Insider Threat																												
Production Development	███	███	███	███	███	███	███	███	███	███																		

R-1 Line #241

Exhibit R-4A, **RDT&E Schedule Details:** PB 2020 Defense Security Service		**Date:** March 2019
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0305327V / *Insider Threat*	**Project (Number/Name)** 002 / *Insider Threat*

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

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Insider Threat				
Production Development	4	2015	4	2020

PE 0305327V: *Insider Threat*
Defense Security Service

UNCLASSIFIED
Page 6 of 6

R-1 Line #241

Volume 5 - 20