

UNCLASSIFIED

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

Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
0400: Research, Development, Test & Evaluation, Defense-Wide / BA 7: Operational Systems Development					PE 0305128V / 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

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 0305128V / Security and Investigative Activities				Project (Number/Name) 000 / 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	

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 0305128V / <i>Security and Investigative Activities</i>	Project (Number/Name) 000 / <i>Risk Rating Tool</i>
C. Other Program Funding Summary (\$ in Millions) N/A		
Remarks		
D. Acquisition Strategy N/A		
E. Performance Metrics NA		

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 0305128V / Security and Investigative Activities				Project (Number/Name) 000 / Risk Rating Tool				

Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		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 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

UNCLASSIFIED

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 0305128V / Security and Investigative Activities					Project (Number/Name) 000 / 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																												

UNCLASSIFIED

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 / <i>Security and Investigative Activities</i>	Project (Number/Name) 000 / <i>Risk Rating Tool</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Risk Rating Tool</i>				
Production and Deployment	3	2020	4	2020