Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Office of the Secretary Of Defense

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 4:

PE 0603851D8Z I Environmental Security Technology Certification Program

Date: May 2017

Advanced Component Development & Prototypes (ACD&P)

Appropriation/Budget Activity

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COST (\$ in Millions)	Prior Years ⁽⁺⁾	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	269.024	51.380	52.491	54.583	-	54.583	58.647	59.550	60.717	61.994	Continuing	Continuing
P514: Environmental Security Technology Certification Program	263.024	51.380	52.491	54.583	-	54.583	58.647	59.550	60.717	61.994	Continuing	Continuing

 $^{^{(+)}}$ The sum of all Prior Years is 6.000 million less than the represented total due to several projects ending

A. Mission Description and Budget Item Justification

(U) The Environmental Security Technology Certification Program (ESTCP) demonstrates and validates promising and innovative environmental and energy technologies that target DoD's most urgent needs. Technologies selected are projected to provide a return on the investment through cost savings and improved efficiencies. The program responds to: (1) Congressional concern over the slow pace of remediation of environmentally polluted sites on military installations, (2) Congressional direction to conduct demonstrations specifically focused on emerging new technologies, and (3) the need to improve defense readiness by reducing the drain on the Department's operation and maintenance dollars caused by environmental restoration, waste management, and the cost of energy. Preference for demonstrations is given to technologies that have successfully completed all necessary research and development objectives, and address the highest priority DoD requirements.

B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	51.380	52.491	54.433	-	54.433
Current President's Budget	51.380	52.491	54.583	-	54.583
Total Adjustments	0.000	0.000	0.150	-	0.150
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
SBIR/STTR Transfer	-	-			
DTIC Offset	-	-	0.150	-	0.150

Change Summary Explanation

Funding realigned to other programs. Other reductions in FY 18 is a result of department efficiency and economic assumptions adjustments.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Ju	stification:	FY 2018 C	Office of the	Secretary (Of Defense					Date: May	2017	
Appropriation/Budget Activity 0400 / 4					R-1 Progra PE 060385 Technology		rironmental	Security	Project (N P514 / Env Certificatio	rironmental	ne) Security Ted	chnology
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
P514: Environmental Security Technology Certification Program	263.024	51.380	52.491	54.583	-	54.583	58.647	59.550	60.717	61.994	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

(U) The Environmental Security Technology Certification Program (ESTCP) demonstrates and validates promising and innovative environmental and energy technologies that target DoD's most urgent needs. Technologies selected are projected to provide a return on the investment through cost savings and improved efficiencies. The program responds to: (1) Congressional concern over the slow pace of remediation of environmentally polluted sites on military installations, (2) Congressional direction to conduct demonstrations specifically focused on emerging new technologies, and (3) the need to improve defense readiness by reducing the drain on the Department's operation and maintenance dollars caused by environmental restoration, waste management, and the cost of energy. Preference for demonstrations is given to technologies that have successfully completed all necessary research and development objectives, and address the highest priority DoD requirements.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Title: Environmental Technology Demonstration/Validation	31.290	27.247	32.223
Description: Funds are programmed for investments in projects that address priority DoD environmental requirements. The focus of the program is on live site unexploded ordnance (UXO) in the underwater environment, addressing emerging and recalcitrant cleanup issues, range sustainment technologies, and reducing life cycle costs of DoD weapon systems by eliminating hazardous materials. Accomplishments/plans are described for each FY below.			
FY 2016 Accomplishments: Funds were invested in projects that address priority DoD environmental requirements. Focused new investment topics for FY 2016 include: 1) Management of Contaminated Groundwater and 2) Detection, Classification, and Remediation of Military Munitions in Underwater Environments. Details are provided at www.serdp-estcp.org.			
FY 2017 Plans: Funds are planned for continued investment in projects that address priority DoD environmental requirements and new Investments in technology for the most challenging remaining groundwater restoration sites, scale up demonstrations for Underwater Unexploded Ordnance, and demonstrations of environmentally benign surface engineering technology at larger scales.			
FY 2018 Plans:			

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Office of the Secretary	Of Defense	Date: N	lay 2017	
Appropriation/Budget Activity 0400 / 4	PE 0603851D8Z I Environmental Security P	roject (Number/N 514 / Environmen ertification Progra	tal Security Te	echnology
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
Funds are planned for continued investment in projects that address priority D Investments in technology for the most challenging remaining groundwater resulted Underwater Unexploded Ordnance, and demonstrations of environmentally be scales.	storation sites, scale up demonstrations for			
Title: Energy Technology Demonstration/Validation		20.090	25.244	22.36
This initiative responds to Congressional direction for the Department to increatintensity, increase the use of renewable energy, and improve energy security. effective opportunity to meet these requirements on its installations while reduces bed program validates and tests the operational cost and performance of integrated building environment so as to reduce risk, overcome the barriers to The test bed program exploits the Department's existing built infrastructure to energy technologies under the varied climatic conditions and building types De 1) competitive selection of new technologies, 2) systematic and consistent evaried infrastructure and design infras	Emerging energy technologies offer DoD a cost cing energy and operational costs. The DoD innovative energy technologies in a real-world deployment, and facilitate wide-scale deployment evaluate energy efficiency and renewable DD manages. The test bed's key elements are: aluation to determine performance, operational			
FY 2016 Accomplishments: Funds were invested in energy and water projects that constitute the Installatic solicited proposals for funding in two areas: 1) Energy Generation, Storage, D and 2) Cybersecure Connectivity for Energy System Components and Military provided at www.serdp-estcp.org.	ispatch and Management on Military Installations			
FY 2017 Plans:	constitute the Installation Energy Test Red Initiativ	/e.		
Funds are planned to continue investments in energy and water projects that	constitute the installation thereby rest bed initiati			
FY 2018 Plans: Funds are planned to continue investments in energy and water projects that of the plans are planned to continue investments in energy and water projects that of the plans are planned to continue investments in energy and water projects that of the plans are planned to continue investments in energy and water projects that of the plans are planned to continue investments in energy and water projects that of the plans are planned to continue investments in energy and water projects that of the plans are planned to continue investments in energy and water projects that of the plans are planned to continue investments in energy and water projects that of the plans are planned to continue investments in energy and water projects that of the plans are planned to continue investments in energy and water projects that of the plans are planned to continue investments in energy and water projects that of the plans are planned to continue investments in energy and water projects that of the plans are planned to continue investments in energy and water projects that of the plans are planned to continue investments in energy and water projects that of the plans are planned to continue investments in energy and water projects that of the plans are planted to the planted to	-	/e.		

Remarks

Exhibit R-2A, RDT&E Project Justification: FY 2018 Office of the Secretary	Of Defense		Date: May 2017
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
0400 / 4	PE 0603851D8Z I Environmental Security	P514 <i>I Env</i>	vironmental Security Technology
	Technology Certification Program	Certificatio	n Program

D. Acquisition Strategy

ESTCP solicits proposals from all DoD organizations, other Federal Agencies, and the commercial sector. Projects are selected based on an annual competitive process through reviews by multi-agency panels.

E. Performance Metrics

Performance in this program is monitored at two levels. At the lowest level, each individual project is measured against technical and financial milestones on a quarterly and annual basis. At a program-wide level, progress is measured against DoD's environmental requirements and the demonstration and transition of technologies that address these requirements.

Exhibit R-3, RDT&E F	Project C	ost Analysis: FY 2	018 Office	e of the S	Secretary	Of Defen	se					Date:	May 201	7	
Appropriation/Budge 0400 / 4	et Activity	1				PE 060	3851D8Z	ement (N I Environ ification P	mental S		P514 /	: (Number Environmention Prog	ental Sec	urity Tech	nology
Support (\$ in Million	s)			FY 2	2016	FY 2	2017	FY 2 Ba		FY 2	2018 CO	FY 2018 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
Support Contract	C/IDDQ	Noblis : Falls Church, VA	11.760	2.666		2.425		2.380		-		2.380	Continuing	Continuing	-
		Subtotal	11.760	2.666		2.425		2.380		-		2.380	-	-	-
Test and Evaluation	(\$ in Milli	ons)		FY 2	2016	FY 2	2017	FY 2 Ba			2018 CO	FY 2018 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
Energy and Water	C/Various	Various : Various	112.610	18.762		24.032		23.743		-		23.743	Continuing	Continuing	
Weapons Systems and Platforms	C/Various	Various : Various	37.344	9.936		8.011		9.226		-		9.226	Continuing	Continuing	-
Munitions Response	C/Various	Various : Various	29.433	3.945		4.005		5.300		-		5.300	Continuing	Continuing	-
Environmental Restoration	C/Various	Various : Various	46.121	11.299		9.012		10.051		-		10.051	Continuing	Continuing	-
Resource Conservation and Resiliency	C/Various	Various : Various	25.756	4.772		5.006		3.883		-		3.883	Continuing	Continuing	-
		Subtotal	251.264	48.714		50.066		52.203		-		52.203	-	-	_
			Prior					FY 2	2018	FY 2	2018	FY 2018	Cost To	Total	Target Value of
			Years	FY 2	016	FY 2	2017	Ва	se	00	co	Total	Complete	Cost	Contrac

Remarks

bit R-4, RDT&E Schedule Profile:	: FY 2018 Office of	f the Secretary Of [Defense			Date: May 2017
ropriation/Budget Activity) / 4		PE 06038	am Element (Nu 51D8Z <i>I Environm</i> y Certification Pro	nental Security	Project (Number/Name) P514 I Environmental Security Technolo Certification Program	
ID Task Name	Duration	Start Finish	Predecessors	201	5	2016 2017
1	views 173 days? Wilm 217 days?	/ed 10/1/14 Fri 5/29/ Thu 1/1/15 Fri 10/30/ Thu 10/1/15 Fri 5/27/	15 15	Qtr 3 Qtr 4 Qtr	1 Qtr 2 Qtr 3 Qr	2016 tr 4 Otr 1 Otr 2 Otr 3 Otr 4 Otr 1 Otr 2
4 Develop FY 2017 Progra 5 FY 2017 In-Progress Re	m 217 days?	Fri 1/1/16 Mon 10/31/ Ion 10/3/16 Tue 5/30/	16			
	Task		filestone	•	External Tasks	
Project: ESTCP R-4 Jul 2015 Date: Mon 7/20/15	Split	s	ummary	•	External Milestone	
	Progress		roject Summary		Deadline	Φ.
			Page 1			

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Office of the Secretary Of D)efense		Date: May 2017
1	,	P514 / Env	umber/Name) vironmental Security Technology n Program

Schedule Details

	Sta	art	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
In Progress Reviews					
FY 2015 In Progress Reviews	1	2015	3	2015	
FY 2016 In Progress Reviews	1	2016	3	2016	
FY 2017 In Progress Reviews	1	2017	3	2017	
Develop Program					
Develop FY 2016 Program	1	2015	4	2015	
Develop FY 2017 Program	1	2016	4	2016	