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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Office of the Secretary Of Defense **Date:** February 2015

Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
0400: Research, Development, Test & Evaluation, Defense-Wide / BA 4: Advanced Component Development & Prototypes (ACD&P)					PE 0603851D8Z / Environmental Security Technology Certification Program							
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
Total Program Element	129.836	64.756	63.871	52.758	-	52.758	54.496	57.807	62.259	63.074	Continuing	Continuing
P514: Environmental Security Technology Certification Program	129.836	64.756	63.871	52.758	-	52.758	54.496	57.807	62.259	63.074	Continuing	Continuing

A. Mission Description and Budget Item Justification

(U) The Environmental Security Technology Certification Program (ESTCP) demonstrates and validates the most promising 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 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	66.453	51.462	52.190	-	52.190
Current President's Budget	64.756	63.871	52.758	-	52.758
Total Adjustments	-1.697	12.409	0.568	-	0.568
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	12.500			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-0.091			
• SBIR/STTR Transfer	-1.697	-			
• Program Adjustments	-	-	0.568	-	0.568

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Office of the Secretary Of Defense										Date: February 2015		
Appropriation/Budget Activity 0400 / 4					R-1 Program Element (Number/Name) PE 0603851D8Z / Environmental Security Technology Certification Program				Project (Number/Name) P514 / Environmental Security Technology Certification Program			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
P514: Environmental Security Technology Certification Program	129.836	64.756	63.871	52.758	-	52.758	54.496	57.807	62.259	63.074	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 the most promising 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 2014	FY 2015	FY 2016
Title: Environmental Technology Demonstration/Validation	33.604	35.236	28.415
Description: Funds are programmed for investments in projects that address priority DoD environmental requirements. The focus of the program is on live site UXO discrimination demonstrations, 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 2014 Accomplishments: Funds were invested in projects that address priority DoD environmental requirements. Focused new investment topics for FY 2014 included: 1) Remediation of Contaminated Groundwater; 2) In Situ Management of Contaminated Sediments; 3) Airfield Natural Resources Management to Reduce Bird Air-Strike Hazard (BASH) Threats; 4) Wastewater Treatment at DoD Facilities; and 5) Military Munitions Detection, Discrimination, and Remediation. Funding in FY 2014 also supports live site UXO demonstrations. This effort will transition innovative technologies that can reduce DoD's military munitions response liabilities by approximately 75% with an expected cost savings of \$10 billion. Details are provided at www.serdp-estcp.org .			
FY 2015 Plans: Funds are planned for continued investment in projects that address priority DoD environmental requirements. New investment topics for FY 2015 include: 1) Remediation of Contaminated Groundwater; 2) In Situ Management of Contaminated Sediments;			

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015
3) Characterization, Control, and Treatment of Range Contamination; and 4) Military Munitions Detection, Discrimination, and Remediation.			
FY 2016 Plans: Funds are planned for continued investment in projects that address priority DoD environmental requirements.			
Title: Energy Technology Demonstration/Validation		31.152	28.635
Description: Funds are programmed for investments in projects that respond to Congressional direction for the Department to increase energy efficiency, reduce installation energy intensity, increase the use of renewable energy, and improve energy security. Emerging energy technologies offer DoD a cost effective opportunity to meet these requirements for reduced energy consumption and improved energy security on its installations while reducing energy and operational costs.			
FY 2014 Accomplishments: Funds were invested in energy projects that constitute the Installation Energy Test Bed Initiative. The test bed program validates and tests the operational cost and performance of innovative energy technologies in a real-world integrated building environment so as to reduce risk, overcome the barriers to deployment, and facilitate wide-scale deployment. The DoD test bed program exploits the Department's existing built infrastructure to test energy efficiency and renewable energy technologies. In FY 2014 ESTCP solicited proposals in two areas: 1) Smart and Secure Military Installation Energy Management and 2) Advanced Building Energy Management and Control. It is a distributed test bed designed to evaluate energy technologies under the varied climatic conditions and building types DoD manages. The test beds key elements are: 1) competitive selection of new technologies, 2) systematic and consistent evaluation to determine performance, operational readiness and life cycle costs, and 3) development of guidance and design information for future deployment across installations. This process has been developed, piloted, and validated through previous Congressional funding. Information on existing demonstrations can be found at www.serdp-estcp.org .			
FY 2015 Plans: Funds are planned to continue investments in energy and water projects that constitute the Installation Energy Test Bed Initiative.			
FY 2016 Plans: Funds are planned to continue investments in energy and water projects that constitute the Installation Energy Test Bed Initiative.			
Accomplishments/Planned Programs Subtotals		64.756	63.871
C. Other Program Funding Summary (\$ in Millions)			
N/A			
Remarks			

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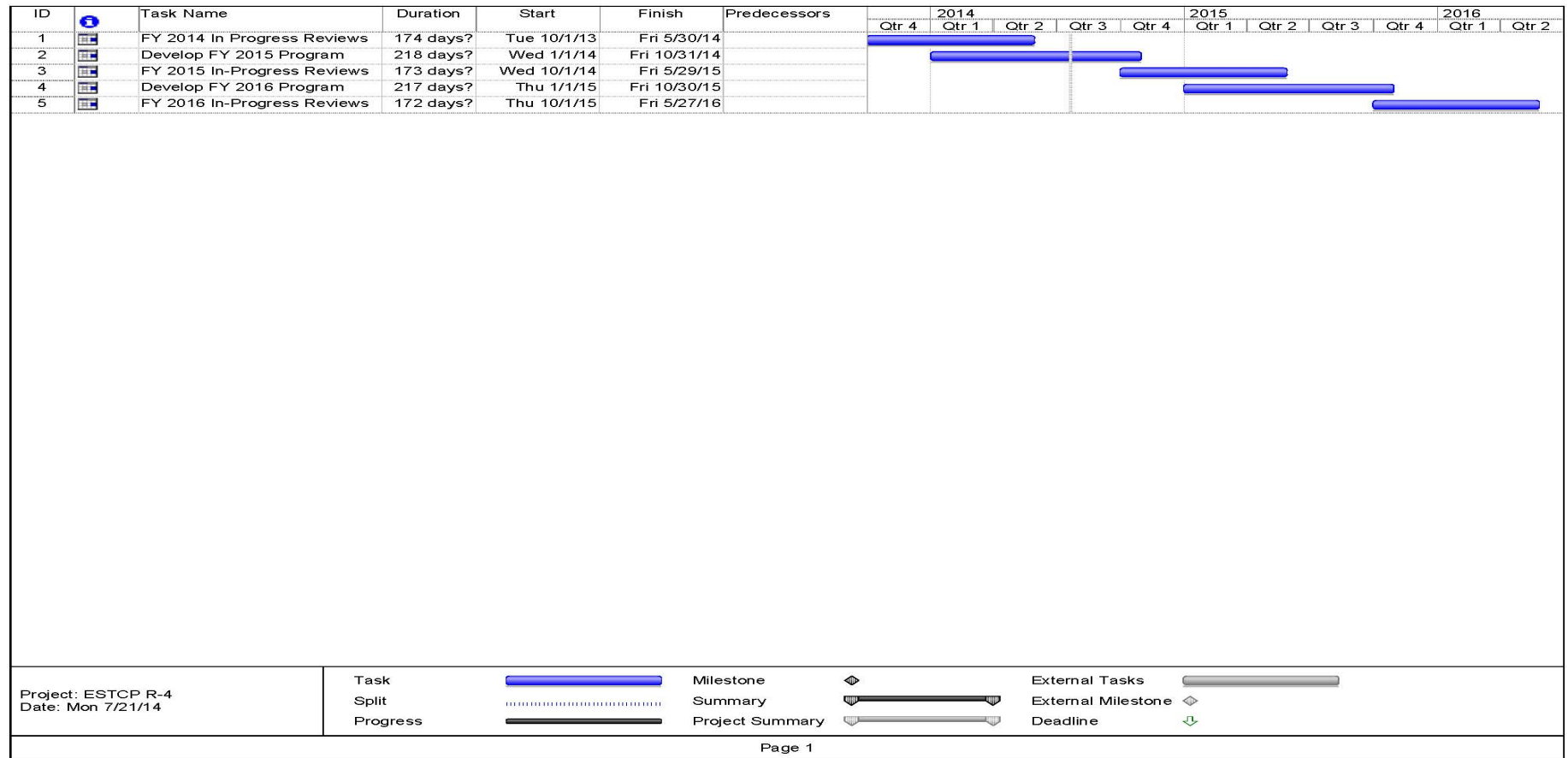
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<u>D. Acquisition Strategy</u> ESTCP solicits proposals from all DoD organizations, other Federal Agencies, and the commercial sector. Projects are selected based on an annual competitive process through reviews by multi-agency panels.		
<u>E. Performance Metrics</u> 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.		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Office of the Secretary Of Defense												Date: February 2015			
Appropriation/Budget Activity 0400 / 4						R-1 Program Element (Number/Name) PE 0603851D8Z / Environmental Security Technology Certification Program				Project (Number/Name) P514 / Environmental Security Technology Certification Program					
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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 Contract	C/IDDQ	HGL : Reston, VA	6.560	2.600		2.600		2.600		-		2.600	Continuing	Continuing	-
Subtotal			6.560	2.600		2.600		2.600		-		2.600	-	-	-
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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
Energy and Water	C/TBD	TBD : TBD	55.661	27.134		28.486		22.368		-		22.368	Continuing	Continuing	-
Weapons Systems and Platforms	C/TBD	TBD : TBD	17.913	9.278		9.153		7.473		-		7.473	Continuing	Continuing	-
Munitions Response	C/TBD	TBD : TBD	13.876	7.187		7.754		6.117		-		6.117	Continuing	Continuing	-
Environmental Restoration	C/TBD	TBD : TBD	22.959	11.892		10.654		8.900		-		8.900	Continuing	Continuing	-
Resource Conservation and Climate Change	C/TBD	TBD : TBD	12.867	6.665		5.224		5.300		-		5.300	Continuing	Continuing	-
Subtotal			123.276	62.156		61.271		50.158		-		50.158	-	-	-
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			129.836	64.756		63.871		52.758		-		52.758	-	-	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Office of the Secretary Of Defense			Date: February 2015
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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Office of the Secretary Of Defense			Date: February 2015
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>In Progress Reviews</i>				
FY 2014 In Progress Reviews	1	2014	2	2014
FY 2015 In Progress Reviews	4	2014	2	2015
FY 2016 In Progress Reviews	4	2015	2	2016
<i>Develop Program</i>				
Develop FY 2015 Program	1	2014	4	2014
Develop FY 2016 Program	1	2015	4	2015