Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Army											Date: February 2018	
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army I* BA 7: *Operational Systems Development*						**R-1 Program Element (Number/Name)** PE 0205412A I *Environmental Quality Technology - Operational System Dev*						

COST ($ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	-	0.000	0.195	0.249	-	0.249	0.732	0.259	0.265	0.776	0.000	2.476
EE6: *Environmental Information Tech Modernization*	-	0.000	0.195	0.249	-	0.249	0.732	0.259	0.265	0.776	0.000	2.476

A. Mission Description and Budget Item Justification

Conducts system enhancements as required to meet data management, cybersecurity risk, and performance requirements for the Defense Environmental Network Information Exchange (DENIX) defense business system, as well as its database and reporting application, the Knowledge Based Corporate Reporting System (KBCRS).

B. Program Change Summary ($ in Millions)

	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	0.000	0.195	0.202	-	0.202
Current President's Budget	0.000	0.195	0.249	-	0.249
Total Adjustments	0.000	0.000	0.047	-	0.047
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	0.047	-	0.047

Change Summary Explanation

Increase in RDTE funding for subsequent years will be allocated to comply with Cybersecurity Service Provider and Risk Management Framework requirements for the system.

Exhibit R-2A, RDT&E Project Justification: PB 2019 Army										Date: February 2018	

Appropriation/Budget Activity 2040 I 7				R-1 Program Element (Number/Name) PE 0205412A I Environmental Quality Technology - Operational System Dev						Project (Number/Name) EE6 I Environmental Information Tech Modernization	

COST ($ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
EE6: *Environmental Information Tech Modernization*	-	0.000	0.195	0.249	-	0.249	0.732	0.259	0.265	0.776	0.000	2.476
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Environmental Information Technology Management (EITM) program includes support for the Defense Environmental Network Information Exchange (DENIX) defense business system, as well as its database and reporting application, the Knowledge Based Corporate Reporting System (KBCRS). This request for research, development, test and evaluation (RTDE) is to enhance the DBS to a net-centric all services transactional system of record and reporting tool set. This also includes upgrades to incorporate ongoing cybersecurity, cloud computing, and other information technology requirements.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2017	FY 2018	FY 2019
Title: Environmental Information Technology Modernization *Description:* Prototype, develop and implement platform enhancements as required to meet data management requirements for the Knowledge Based Corporate Reporting System and the Defense Environmental Network Information Exchange. *FY 2018 Plans:* The current architecture of the DENIX platform will be expanded from one Level 4 container (Controlled Unclassified Information) to add a separate Level 2 container (Non-Controlled Unclassified Information) within the cloud infrastructure-as-a-service (IaaS) model. *FY 2019 Plans:* The containerization effort from FY 2018 will continue into FY 2019 and will provide DENIX architecture and bandwidth required to support large scale web conferencing and implement necessary user experience updates to the platform. *FY 2018 to FY 2019 Increase/Decrease Statement:* Increase in funding for subsequent years is driven by and consistent with the Deputy Secretary of Defense's Memorandum "Accelerating Enterprise Cloud Adoption" and the goals and objectives of the Army ESOH Strategy 2025. In order to provide optimized performance that improves cyber security and enhances user functionality for mission support DENIX requires a modernization effort over a five year period aligned with the FYDP.	-	0.195	0.249
Accomplishments/Planned Programs Subtotals	-	0.195	0.249

Exhibit R-2A, **RDT&E Project Justification:** PB 2019 Army		**Date:** February 2018
Appropriation/Budget Activity 2040 *I* 7	**R-1 Program Element (Number/Name)** PE 0205412A *I Environmental Quality Technology - Operational System Dev*	**Project (Number/Name)** EE6 *I Environmental Information Tech Modernization*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
• 432612000: *Information Management - Automation*	-	-	3.309	-	3.309	0.337	3.443	3.511	3.582	0.000	14.182

Remarks

This is the associated OMA line that provides daily support for the Defense Environmental Network Information Exchange and associated applications. EITM is managed as a Defense Business System #3180.

D. Acquisition Strategy

The Environmental Information Technology Management (EITM) Program is an Office of the Secretary of the Secretary of Defense sponsored program that was assigned to the Deputy Assistant Secretary of the Army for Environment, Safety, and Occupational Health as the Department of Defense (DoD) overarching authority by the Under Secretary of Defense for Acquisition, Technology, and Logistics in 2001. The DoD Directive 4715.1E defined EITM mission is to ensure efficient use of enterprise environment, safety, and occupational health (ESOH) corporate information management processes by providing and sustaining requirement-driven ESOH corporate data management, Congressional-reporting, and public outreach tools to the DoD, and other DoD stakeholders. Funding provided for this program will allow EITM to continue to develop and modernize the system to meet requirements set forth by the DoD's Risk Management Framework (DoDI 8510.01) as well as the Defense Information Systems Agency's Cloud Computing Security Requirements Guide. Prior to funding being committed, DoD ESOH stakeholders, authoritative information technology organizations, and the program's functional sponsor were consulted to determine necessary system interface upgrades to be incorporated. Expanding DENIX's architecture to create a Level 2 container separate from the current Level 4 container will not only provide a more secure, cybersecurity risk-adverse environment, but it will also optimize performance, capabilities, and mandatory reporting for ESOH stakeholders. This phased solution begins in FY 2018 by prototyping of system architecture optimization that improves user experience, enabling web conferencing in FY 2019 and applying machine learning concepts to improve data quality in FY 2020-2022.

E. Performance Metrics

N/A

| **Exhibit R-3**, **RDT&E Project Cost Analysis:** PB 2019 Army | | | | | | | | | | | | | **Date:** February 2018 |

| **Appropriation/Budget Activity**
2040 *I* 7 | **R-1 Program Element (Number/Name)**
PE 0205412A *I Environmental Quality Technology - Operational System Dev* | **Project (Number/Name)**
EE6 *I Environmental Information Tech Modernization* |

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
System enhancements for required network interfaces to support EITM mission.	C/FFP	Delta Resources : Arlington, VA	0.270	-		0.195		0.249		-		0.249	0.000	0.714	-
Subtotal			0.270	-		0.195		0.249		-		0.249	0.000	0.714	N/A

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.270	-	0.195	0.249	-	0.249	0.000	0.714	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Army		**Date:** February 2018
Appropriation/Budget Activity 2040 / 7	**R-1 Program Element (Number/Name)** PE 0205412A / Environmental Quality Technology - Operational System Dev	**Project (Number/Name)** EE6 / Environmental Information Tech Modernization

Event Name	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
	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
Split architecture prototype																												
User experience and containerization																												
Webinars/virtual conferencing prototype and development																												
Machine learning algorithms																												
Machine learning protoype																												

Exhibit R-4A, **RDT&E Schedule Details:** PB 2019 Army		**Date:** February 2018
Appropriation/Budget Activity 2040 *I* 7	**R-1 Program Element (Number/Name)** PE 0205412A *I Environmental Quality Technology - Operational System Dev*	**Project (Number/Name)** EE6 *I Environmental Information Tech Modernization*

Schedule Details

Events	Start		End	
	Quarter	**Year**	**Quarter**	**Year**
Split architecture prototype	2	2018	2	2019
User experience and containerization	3	2018	3	2020
Webinars/virtual conferencing prototype and development	1	2019	4	2019
Machine learning algorithms	4	2019	4	2021
Machine learning protoype	4	2020	4	2022