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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Army **Date:** May 2021

Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0205412A / Environmental Quality Technology - Operational System Dev							
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	-	10.000	0.250	0.262	-	0.262	-	-	-	-	-	-
EE6: Environmental Information Tech Modernization	-	10.000	0.250	0.262	-	0.262	-	-	-	-	-	-

A. Mission Description and Budget Item Justification

The Environmental Information Technology Management (EITM) program includes support for the Defense Environment, Safety & Occupational Health 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 (RDTE) is to implement necessary enhancements to facilitate DENIX's Platform-as-a-Service capabilities, with additional modernizations that will improve the DoD's ESOH system of record and reporting tool set. This also includes upgrades to incorporate ongoing cybersecurity, cloud computing, and other information technology requirements.

B. Program Change Summary (\$ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	10.000	0.259	0.265	-	0.265
Current President's Budget	10.000	0.250	0.262	-	0.262
Total Adjustments	0.000	-0.009	-0.003	-	-0.003
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-0.009			
• Adjustments to Budget Years	-	-	-0.003	-	-0.003

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: EE6: Environmental Information Tech Modernization

Congressional Add: Securing the availability of green, enhanced coatings

	FY 2020	FY 2021
Congressional Add Subtotals for Project: EE6	10.000	-
Congressional Add Totals for all Projects	10.000	-

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Appropriation/Budget Activity 2040 / 7					R-1 Program Element (Number/Name) PE 0205412A / <i>Environmental Quality Technology - Operational System Dev</i>				Project (Number/Name) EE6 / <i>Environmental Information Tech Modernization</i>			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
EE6: <i>Environmental Information Tech Modernization</i>	-	10.000	0.250	0.262	-	0.262	-	-	-	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Adjustment in accordance with FY22 PB.

A. Mission Description and Budget Item Justification

The Environmental Information Technology Management (EITM) program includes support for the Defense Environment, Safety & Occupational Health Network and 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 (RDTE) is to implement necessary enhancements to facilitate DENIX's Platform-as-a-Service (PaaS) capabilities, with additional modernizations that will improve the DoD's ESOH 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 2020	FY 2021	FY 2022
Title: Environmental Information Technology Modernization	-	0.250	0.262
Description: Prototype, develop, and implement platform enhancements as required to meet data management requirements for the Defense Environment, Safety & Occupational Health Network and Information Exchange (DENIX) and its reporting application, the Knowledge Based Corporate Reporting System (KBCRS).			
FY 2021 Plans: The DENIX platform will continue to use machine learning algorithms to ?learn? the business processes and rules used by OSD for the environmental data calls (Defense Environmental Programs Annual Report to Congress and the Environmental Management Review). ?Learning? this information will pave the way for the prototyping of a tool that will allow KBCRS to predict anomalies and trends in data input, improving data quality.			
FY 2022 Plans: The DENIX platform will continue to use machine learning algorithms to ?learn? the business processes and rules used by OSD for the environmental data calls (Defense Environmental Programs Annual Report to Congress and the Environmental Management Review). ?Learning? this information will pave the way for the prototyping of a tool that will allow KBCRS to predict anomalies and trends in data input, improving data quality.			
FY 2021 to FY 2022 Increase/Decrease Statement:			

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Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0205412A / <i>Environmental Quality Tech nology - Operational System Dev</i>	Project (Number/Name) EE6 / <i>Environmental Information Tech Modernization</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2020	FY 2021	FY 2022
Inflation adjustment			
Accomplishments/Planned Programs Subtotals	-	0.250	0.262

	FY 2020	FY 2021
Congressional Add: Securing the availability of green, enhanced coatings	10.000	-
FY 2020 Accomplishments: Program Increase - Securing the availability of green, enhanced coatings		
Congressional Adds Subtotals	10.000	-

C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u> <u>Base</u>	<u>FY 2022</u> <u>OCO</u>	<u>FY 2022</u> <u>Total</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• OMA - 432612000: <i>Information Mgmt - Automation</i>	-	-	-	-	-	-	-	-	-	-	

Remarks
Information Mgmt - Automation 43261200 - This is the associated OMA line that provides daily support for the DoD Environment, Safety & Occupational Health Network Information Exchange and associated applications. EITM is managed as a Defense Business System #3180.

D. Acquisition Strategy

The Deputy Assistant Secretary of the Army for Environment, Safety & Occupational Health is the designated Executive Agent for the Environmental Information Technology Management (EITM) program. Defined by the DoD Directive 4715.1E, the 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 platform to meet Army and DoD policy-driven cloud computing and cybersecurity requirements. Prior to funding being committed, DoD ESOH stakeholders and authoritative information technology organizations 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 using a PaaS delivery model. 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.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Army **Date:** May 2021

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Product Development (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
System enhancements for required network interfaces to support EITM mission.	C/FFP	Delta Resources : Alexandria, VA	0.706	-		0.250		0.262		-		0.262	0.000	1.218	-
Congressional Add - securing the availability of green, enhanced coatings	TBD	TBD : TBD	-	10.000		-		-		-		-	0.000	10.000	-
Subtotal			0.706	10.000		0.250		0.262		-		0.262	0.000	11.218	N/A
Project Cost Totals			0.706	10.000		0.250		0.262		-		0.262	0.000	11.218	N/A

Remarks
The \$10,000 from FY20 is a congressional addition. The \$10,000 is misaligned into this PE/PROJ.

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Exhibit R-4, RDT&E Schedule Profile: PB 2022 Army			Date: May 2021		
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Event Name	FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026			
	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 prototype					█				█																			

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Exhibit R-4A, RDT&E Schedule Details: PB 2022 Army		Date: May 2021
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Schedule Details

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