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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2023 Office of the Secretary Of Defense **Date:** April 2022

<b>Appropriation/Budget Activity</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide I BA 5: System Development &amp; Demonstration (SDD)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0305310D8Z / <i>CWMD Systems: System Development Demonstration</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	36.358	19.817	20.132	16.048	-	16.048	18.717	17.650	17.803	18.526	-	-
813: <i>CWMD Systems: System Development &amp; Demonstration</i>	36.358	19.817	20.132	16.048	-	16.048	18.717	17.650	17.803	18.526	-	-

**Note**

New Start (Y/N): No

**A. Mission Description and Budget Item Justification**

This program supports the Department's initiatives to Deter Aggression, Defend the Homeland, Provide Nuclear Deterrence, and Build Sustainable and Long-Term Advantage.

The Countering Weapons of Mass Destruction (CWMD) Systems portfolio aligns with the National Defense Strategy objective of “dissuading, preventing, or deterring state adversaries and non-state actors from acquiring, proliferating, or using weapons of mass destruction.”

The CWMD Systems portfolio enhances warfighter lethality by developing capabilities to exploit and defeat critical nodes of nuclear, chemical, and biological weapons and ballistic missile programs and proliferation networks; and developing offensively-oriented capabilities to disrupt Weapons of Mass Destruction (WMD) proliferation networks and detect, disable, or defeat WMD and delivery systems. Investments result in capabilities fielded to the Joint Force, enabling it to reduce WMD threats and create options for the United States to prevent WMD use.

The Office of the Secretary of Defense uses the CWMD Systems portfolio to invest strategically in projects across the Military Services, Combatant Commands, and Defense Agencies. Funding is prioritized for projects that close Joint Force warfighter capability gaps. An annual investment strategy is used to meet emergent operational and capability needs validated by the Joint Force, yielding new fielded capabilities within one to two years.

The CWMD Systems: Systems Development and Demonstration program invests in maturation of prototypes; integration of technologies, systems and components; developmental and operational test and evaluation; and transition to fielded capabilities that counter WMD proliferation. This program accelerates and enables transition of mature technologies to fielded capabilities by leveraging significant science and technology (S&T) investments made by the Department of Defense, other Federal agencies, and industry. Resulting fielded capabilities illuminate WMD networks; exploit vulnerabilities in networks, programs, facilities, and weapons systems; and disable or defeat WMD and their delivery systems.

This program funds labor, materials, and travel to support the requirements of this program, performed by a government agency or by private individuals or organizations under a contract with the government, for activities and acquisitions including Research, Development, Test & Evaluation (RDT&E), assessments and analyses, research studies, education, and other activities related to capability development and fielding.

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<b>Appropriation/Budget Activity</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide I BA 5: System Development &amp; Demonstration (SDD)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0305310D8Z / <i>CWMD Systems: System Development Demonstration</i>
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<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023 Base</b>	<b>FY 2023 OCO</b>	<b>FY 2023 Total</b>
Previous President's Budget	20.572	20.246	0.000	-	0.000
Current President's Budget	19.817	20.132	16.048	-	16.048
Total Adjustments	-0.755	-0.114	16.048	-	16.048
• Congressional General Reductions	-	-0.114			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.755	-			
• Adjustments to Budget Year	-	-	16.048	-	16.048

**Change Summary Explanation**

FY 2023 funding increase reflects the fact that the FY 2022 President's Budget request did not include out-year funding.

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**Exhibit R-2A, RDT&E Project Justification:** PB 2023 Office of the Secretary Of Defense **Date:** April 2022

<b>Appropriation/Budget Activity</b> 0400 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0305310D8Z / CWMD Systems: System Development Demonstration				<b>Project (Number/Name)</b> 813 / CWMD Systems: System Development & Demonstration			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
813: CWMD Systems: System Development & Demonstration	36.358	19.817	20.132	16.048	-	16.048	18.717	17.650	17.803	18.526	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**Note**

N/A

**A. Mission Description and Budget Item Justification**

The Countering Weapons of Mass Destruction (CWMD) Systems portfolio aligns with the National Defense Strategy objective of “dissuading, preventing, or deterring state adversaries and non-state actors from acquiring, proliferating, or using weapons of mass destruction.”

The CWMD Systems portfolio enhances warfighter lethality by developing capabilities to exploit and defeat critical nodes of nuclear, chemical, and biological weapons and ballistic missile programs and proliferation networks; and developing offensively-oriented capabilities to disrupt Weapons of Mass Destruction (WMD) proliferation networks and detect, disable, or defeat WMD and delivery systems. Investments result in capabilities fielded to the Joint Force, enabling it to reduce WMD threats and create options for the United States to prevent WMD use.

The Office of the Secretary of Defense uses the CWMD Systems portfolio to invest strategically in projects across the Military Services, Combatant Commands, and Defense Agencies. Funding is prioritized for projects that close Joint Force warfighter capability gaps. An annual investment strategy is used to meet emergent operational and capability needs validated by the Joint Force, yielding new fielded capabilities within one to two years.

The CWMD Systems: Systems Development and Demonstration program invests in maturation of prototypes; integration of technologies, systems and components; developmental and operational test and evaluation; and transition to fielded capabilities that counter WMD proliferation. This program accelerates and enables transition of mature technologies to fielded capabilities by leveraging significant science and technology (S&T) investments made by the Department of Defense, other Federal agencies, and industry. Resulting fielded capabilities illuminate WMD networks; exploit vulnerabilities in networks, programs, facilities, and weapons systems; and disable or defeat WMD and their delivery systems.

This program funds labor, materials, and travel to support the requirements of this program, performed by a government agency or by private individuals or organizations under a contract with the government, for activities and acquisitions including Research, Development, Test & Evaluation ( RDT&E), assessments and analyses, research studies, education, and other activities related to capability development and fielding.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	FY 2021	FY 2022	FY 2023
<b>Title:</b> P*813 / CWMD Systems: System Development & Demonstration	19.817	20.132	16.048

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2023 Office of the Secretary Of Defense		<b>Date:</b> April 2022
<b>Appropriation/Budget Activity</b> 0400 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0305310D8Z / CWMD Systems: System Development Demonstration	<b>Project (Number/Name)</b> 813 / CWMD Systems: System Development & Demonstration

<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>
<p><b>Description:</b> The CWMD Systems: Systems Development and Demonstration program invests in maturation of prototypes; integration of technologies, systems and components; developmental and operational test and evaluation; and transition to fielded capabilities that counter Weapons of Mass Destruction (WMD) proliferation. Significant Science and Technology (S&amp;T) investments in prototype development by the Department of Defense, other Federal agencies, and industry are leveraged, capitalizing on mature technologies to accelerate and enable transition to fielded capabilities. Resulting fielded capabilities illuminate WMD networks; exploit vulnerabilities in networks, programs, facilities, and weapons systems; and disable or defeat WMD and their delivery systems.</p> <p><b>FY 2022 Plans:</b></p> <ul style="list-style-type: none"> <li>• Develop, transition, and field operational CWMD capabilities to US Special Operations Command.</li> <li>• Partner with the Military Services to mature and transition advanced prototypes to fielded CWMD capabilities.</li> <li>• Develop and deliver capabilities that enhance Air Force Technical Applications Center (AFTAC) ability to support nuclear treaty monitoring and nuclear event detection.</li> <li>• Continue maturation of prototypes, systems, and components for test and evaluation by end-users and transition to fieldable CWMD capabilities under other classified projects.</li> </ul> <p><b>FY 2023 Plans:</b></p> <ul style="list-style-type: none"> <li>• Develop, transition, and field operational CWMD capabilities to US Special Operations Command.</li> <li>• Partner with the Military Services to mature and transition advanced prototypes to fielded CWMD capabilities.</li> <li>• Develop and deliver capabilities that enhance Air Force Technical Applications Center (AFTAC) ability to support nuclear treaty monitoring and nuclear event detection.</li> <li>• Continue maturation of prototypes, systems, and components for test and evaluation by end-users and transition to fieldable CWMD capabilities under other classified projects.</li> </ul> <p><b>FY 2022 to FY 2023 Increase/Decrease Statement:</b> The FY2023 funding decrease will result in the resourcing of 3-5 fewer advanced Research &amp; Development (R&amp;D) projects, and fewer CWMD capabilities fielded to the joint force.</p>			
<b>Accomplishments/Planned Programs Subtotals</b>	19.817	20.132	16.048

<b>C. Other Program Funding Summary (\$ in Millions)</b>
N/A
<b>Remarks</b>
N/A

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2023 Office of the Secretary Of Defense		<b>Date:</b> April 2022
<b>Appropriation/Budget Activity</b> 0400 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0305310D8Z / <i>CWMD Systems: System Development Demonstration</i>	<b>Project (Number/Name)</b> 813 / <i>CWMD Systems: System Development &amp; Demonstration</i>

**D. Acquisition Strategy**

The Office of the Deputy Assistant Secretary of Defense for Threat Reduction and Arms Control (ODASD(TRAC)) establishes annual priorities based on national and the DoD strategies and senior leader guidance. Based on those priorities, TRAC solicits project proposals from Combatant Commands, Military Services, and Defense Agencies, and interagency partners. To be selected, a proposed project must have a validated requirement, an engaged requirement champion, a viable acquisition strategy, and a qualified program management office. A technology project must identify its starting and desired end-state Technology Readiness Level. Likewise, the end-user for any proposed project must demonstrate a long-term plan for acceptance and sustainment of a fieldable capability. Project period of performance is typically 12-18 months.

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**Exhibit R-3, RDT&E Project Cost Analysis:** PB 2023 Office of the Secretary Of Defense **Date:** April 2022

<b>Appropriation/Budget Activity</b> 0400 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0305310D8Z / CWMD Systems: System Development Demonstration	<b>Project (Number/Name)</b> 813 / CWMD Systems: System Development & Demonstration
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<b>Product Development (\$ in Millions)</b>				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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			
Engineering & manufacturing development of information systems & components	C/T&M	TBD : TBD	18.179	9.908	Jan 2021	-		-		-		-	-	-	-
Systems development & demonstration, and initial operational test & evaluation	C/T&M	TBD : TBD	14.543	7.927	Jan 2021	-		-		-		-	-	-	-
Program management support	C/T&M	TBD : TBD	3.636	1.982	Jan 2021	-		-		-		-	-	-	-
Develop and transition fieldable CWMD capabilities to US Special Operations Command and its components	MIPR	USSOCOM : TBD	-	-		9.157	Jan 2022	8.586	Jan 2023	-		8.586	-	-	N/A
Partner with the Services to develop advanced prototypes and fielded CWMD capabilities.	MIPR	TBD : TBD	-	-		3.257	Jan 2022	2.600	Jan 2023	-		2.600	-	-	N/A
Deliver toolkits and applications that enhance Air Force Technical Applications Center (AFTAC) capabilities to support nuclear treaty monitoring and nuclear event detection.	MIPR	AFTAC : TBD	-	-		3.444	Jan 2022	2.744	Jan 2023	-		2.744	-	-	N/A
Continue maturation of prototypes, systems, and components for test and evaluation by end-users and transition to fieldable capabilities of other classified projects.	MIPR	TBD : TBD	-	-		4.274	Jan 2022	2.118	Jan 2023	-		2.118	-	-	N/A
<b>Subtotal</b>			36.358	19.817		20.132		16.048		-		16.048	-	-	N/A

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Product Development (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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			

**Remarks**  
N/A

	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	36.358	19.817	20.132	16.048	-	16.048	-	-	N/A

**Remarks**  
NA



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**Exhibit R-4A, RDT&E Schedule Details:** PB 2023 Office of the Secretary Of Defense **Date:** April 2022

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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b><i>Develop and transition fieldable Countering Weapons of Mass Destruction (CWMD) capabilities to US Special Operations Command and its components</i></b>				
Develop and transition fieldable CWMD capabilities to US Special Operations Command and its components	2	2022	4	2026
<b><i>Partner with the Services to develop advanced prototypes and fielded CWMD capabilities.</i></b>				
Partner with the Services to develop advanced prototypes and fielded CWMD capabilities.	2	2022	4	2026
<b><i>Deliver toolkits and applications that enhance Air Force Technical Applications Center (AFTAC) capabilities to support nuclear treaty monitoring and nuclear event detection.</i></b>				
Deliver toolkits and applications that enhance Air Force Technical Applications Center (AFTAC) capabilities to support nuclear treaty monitoring and nuclear event detection.	2	2022	4	2026
<b><i>Continue maturation of prototypes, systems, and components for test and evaluation by end-users and transition to fieldable capabilities of other classified projects.</i></b>				
Continue maturation of prototypes, systems, and components for test and evaluation by end-users and transition to fieldable capabilities of other classified projects.	2	2022	4	2026
<b><i>Engineering &amp; manufacturing development of information systems &amp; components</i></b>				
Engineering & manufacturing development of information systems & components	2	2020	4	2021
<b><i>Systems development &amp; demonstration, and initial operational test &amp; evaluation</i></b>				
Systems development & demonstration, and initial operational test & evaluation	2	2020	4	2021
<b><i>Program management support</i></b>				
Program management support	2	2020	4	2021