

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Office of the Secretary Of Defense **Date:** February 2019

Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
0400: <i>Research, Development, Test & Evaluation, Defense-Wide / BA 3: Advanced Technology Development (ATD)</i>					PE 0303310D8Z / <i>CWMD Systems: Advanced Technology Development</i>							
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
Total Program Element	192.168	32.111	26.583	28.907	-	28.907	28.632	28.583	28.413	28.696	Continuing	Continuing
004: <i>Advanced Technology Demonstration</i>	192.168	32.111	26.583	28.907	-	28.907	28.632	28.583	28.413	28.696	Continuing	Continuing

Note

Reduction from FY 2018 to FY2019 the result of reallocation of resources across the portfolio to better support the full RDT&E cycle and technology insertions. Increase from FY2019 to FY2020 the result of further reallocation of resources to gain efficiencies following the elimination of BA-6 / PE#0306310D8Z and combination of O&M projects CWMD Sustainment with Threat Reduction and Arms Control.

A. Mission Description and Budget Item Justification

The Countering Weapons of Mass Destruction (CWMD) Systems program provides funding for research, development, integration, and deployment of CWMD capabilities. Funding is allocated to a portfolio of projects and activities in response to Combatant Command, joint, and Military Service capability needs and research initiatives. The CWMD Systems program supports 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 program is organized to develop, enhance, mature and transition technologies across the RDT&E continuum, from Advanced Technology Development through Operational Systems Development, as well as limited sustainment in unique cases. A focus area is investment in CWMD-related technologies that require additional development to transition to fielded capabilities, in response to validated, prioritized requirements. This effort fills a seam in which capability gaps are not being addressed adequately or sufficiently to meet warfighter needs. The CWMD Systems program closes gaps identified by specialized military units and leverages prior S&T investments to continue development and fielding of operational systems to those units.

The program’s legacy focus on CWMD situational awareness capabilities remains a significant component of the investment portfolio. U.S. Special Operations Command, which assumed CWMD mission responsibilities in January 2017 per the Unified Command Plan, is providing focus and guidance for development of CWMD situational awareness capabilities. The CWMD Systems program funds initiatives to close CWMD situational awareness gaps by leveraging mature technologies, modifying existing systems, and utilizing technology-enabled analytical cells to provide support to Combatant Commands and other joint and Service commands. These cells curate, synthesize, and contextualize CWMD information for end-users. This hybrid approach facilitates cross-organizational information sharing and collaboration, necessary for addressing the trans regional character of WMD proliferation.

During FY 2018 and FY 2019 the CWMD Systems program utilized four Research, Development, Test & Evaluation (RDT&E) program elements (BA-3 / PE#0303310D8Z, BA-5 / PE#0305310D8Z, BA-6 / PE#0306310D8Z, and BA-7 / PE#0607310D8Z), as well as an Operations and Maintenance (O&M) "CWMD Sustainment" line (PE#0901388D8Z ORC-2531). Reallocation of resources beginning in FY 2020 will eliminate the BA-6 / PE#0306310D8Z program element and address O&M requirements with the "Threat Reduction and Arms Control" line (PE#0901388D8Z ORC-3501).

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Office of the Secretary Of Defense **Date:** February 2019

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide I BA 3: Advanced Technology Development (ATD)</i>	R-1 Program Element (Number/Name) PE 0303310D8Z / <i>CWMD Systems: Advanced Technology Development</i>
---	--

This Program Element (PE) funds research, development, testing, and evaluation of materiel and non-materiel solutions to develop CWMD capabilities. Funds are used for development and integration of hardware or software technologies; contractor personnel for analytic cells at defense agencies and under Combatant Commands; research partnerships with DoD and civilian academic institutions, FFRDCs and UARCs; and interagency table-top exercises conducted on behalf of Combatant Commands.

This appropriation funds travel to support the requirements of this program, and work (including manpower) performed by a government agency or by private individuals or organizations under a contractual or grant arrangement with the government who conduct research, development and test and evaluation efforts.

B. Program Change Summary (\$ in Millions)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	33.382	26.644	25.452	-	25.452
Current President's Budget	32.111	26.583	28.907	-	28.907
Total Adjustments	-1.271	-0.061	3.455	-	3.455
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-1.207	-			
• FFRDC Reduction	-0.064	-0.061	-	-	-
• Reallocation from other CWMD Systems	-	-	4.539	-	4.539
PE's					
• Economic adjustment	-	-	-1.084	-	-1.084

Change Summary Explanation

Reduction from FY 2018 to FY2019 the result of reallocation of resources across the portfolio to better support the full RDT&E cycle and technology insertions. Increase from FY2019 to FY2020 the result of further reallocation of resources to gain efficiencies following the elimination of BA-6 / PE#0306310D8Z and combination of O&M projects CWMD Sustainment with Threat Reduction and Arms Control.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Office of the Secretary Of Defense **Date:** February 2019

Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0303310D8Z / CWMD Systems: <i>Advanced Technology Development</i>	Project (Number/Name) 004 / <i>Advanced Technology Demonstration</i>
--	---	--

COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
<i>004: Advanced Technology Demonstration</i>	192.168	32.111	26.583	28.907	-	28.907	28.632	28.583	28.413	28.696	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Countering Weapons of Mass Destruction (CWMD) Systems program provides funding for research, development, integration, and deployment of CWMD capabilities. Funding is allocated to a portfolio of projects and activities in response to Combatant Command, joint, and Military Service capability needs and research initiatives.

The CWMD Systems program is organized to develop, enhance, mature and transition technologies across the RDT&E continuum, from Advanced Technology Development through Operational Systems Development, as well as limited sustainment in unique cases. A focus area is investment in CWMD-related technologies that require additional development to transition to fielded capabilities, in response to validated, prioritized requirements. This effort fills a seam in which capability gaps are not being addressed adequately or sufficiently to meet warfighter needs. The CWMD Systems program closes gaps identified by specialized military units and leverages prior S&T investments to continue development and fielding of operational systems to those units.

The program's legacy focus on CWMD situational awareness capabilities remains a significant component of the investment portfolio. U.S. Special Operations Command, which assumed CWMD mission responsibilities in January 2017 per the Unified Command Plan, is providing focus and guidance for development of CWMD situational awareness capabilities. The CWMD Systems program funds initiatives to close CWMD situational awareness gaps by leveraging mature technologies, modifying existing systems, and utilizing technology-enabled analytical cells to provide support to Combatant Commands and other joint and Service commands. These cells curate, synthesize, and contextualize CWMD information for end-users. This hybrid approach facilitates cross-organizational information sharing and collaboration, necessary for addressing the trans regional character of WMD proliferation.

During FY 2018 and FY 2019 the CWMD Systems program utilized four Research, Development, Test & Evaluation (RDT&E) program elements (BA-3 / PE#0303310D8Z, BA-5 / PE#0305310D8Z, BA-6 / PE#0306310D8Z, and BA-7 / PE#0607310D8Z), as well as an Operations and Maintenance (O&M) "CWMD Sustainment" line (PE#0901388D8Z ORC-2531). Reallocation of resources beginning in FY 2020 will eliminate the BA-6 / PE#0306310D8Z program element and address O&M requirements with the "Threat Reduction and Arms Control" line (PE#0901388D8Z ORC-3501).

This Program Element (PE) funds research, development, testing, and evaluation of materiel and non-materiel solutions to develop CWMD capabilities. Funds are used for development and integration of hardware or software technologies; contractor personnel for analytic cells at defense agencies and under Combatant Commands; research partnerships with DoD and civilian academic institutions, FFRDCs and UARCs; and interagency table-top exercises conducted on behalf of Combatant Commands.

This appropriation funds travel to support the requirements of this program, and work (including manpower) performed by a government agency or by private individuals or organizations under a contractual or grant arrangement with the government who conduct research, development and test and evaluation efforts.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Office of the Secretary Of Defense		Date: February 2019
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0303310D8Z / CWMD Systems: Advanced Technology Development	Project (Number/Name) 004 / Advanced Technology Demonstration

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2018	FY 2019	FY 2020
<p>Title: Advanced Technology Demonstration</p> <p>Description: Research, develop, test, and evaluate materiel and non-materiel solutions to develop CWMD capabilities. Funds are used for development and integration of hardware or software technologies; contractor personnel for fusion cells at DTRA and DIA; research partnerships with DoD and civilian academic institutions, FFRDCs and UARCs; and interagency table-top exercises conducted on behalf of Combatant Commands.</p> <p>FY 2019 Plans:</p> <ul style="list-style-type: none"> • Continue/complete development, integration, and/or modification of technologies, systems, and/or applications to meet CWMD capability needs of Combatant Commands and specialized military units, building upon projects initiated in FY2017 and FY2018 • Continue analytic cells at defense agencies and under Combatant Commands • Continue support to USSOCOM for development and fielding of DoD CWMD “User Defined Operational Picture,” including use of DIA and DTRA analytical cells • Conduct table-top exercises and senior leader seminars in support of U.S. Special Operations Command or other Combatant Commands • Continue CWMD-related research studies and analyses <p>FY 2020 Plans:</p> <ul style="list-style-type: none"> • Continue/complete development, integration, and/or modification of technologies, systems, and/or applications to meet CWMD capability needs of Combatant Commands and specialized military units, building upon projects initiated in FY2018 and FY2019 • Continue analytic cells at defense agencies and under Combatant Commands • Continue CWMD-related research studies and analyses <p>FY 2019 to FY 2020 Increase/Decrease Statement: Increase from FY2019 to FY2020 the result of reallocation of resources to gain efficiencies following the elimination of BA-6 / PE#0306310D8Z and combination of O&M projects CWMD Sustainment with Threat Reduction and Arms Control.</p>	32.111	26.583	28.907
Accomplishments/Planned Programs Subtotals	32.111	26.583	28.907

<p>C. Other Program Funding Summary (\$ in Millions) N/A</p> <p>Remarks</p> <p>D. Acquisition Strategy Develop, reuse, or enhance information technologies to field initial capabilities to end-users. As technologies mature and user needs are refined, systems or applications may transition to acquisition program(s) or be sustained separately. Integration of or interoperability among systems is also an acquisition pathway.</p>
--

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Office of the Secretary Of Defense		Date: February 2019
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0303310D8Z / <i>CWMD Systems: Advanced Technology Development</i>	Project (Number/Name) 004 / <i>Advanced Technology Demonstration</i>

E. Performance Metrics

Success in this area is measured by compliance with various statutes and DoD directives that govern the conduct of the affairs within the Office of the Assistant Secretary of Defense for Nuclear, Chemical and Biological Defense Programs (OASD/NCB). Maintain cost, schedule, and performance reporting, review, and adjudication. Maintain requirements traceability matrix.