

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide / BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 0604880C / <i>Land Based SM-3 (LBSM3)</i>
---	--

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	1,224.969	52.804	43.158	27.678	-	27.678	26.896	26.021	26.842	27.385	Continuing	Continuing
MD68: <i>AEGIS Ashore</i>	1,173.930	49.545	39.594	25.448	-	25.448	24.716	23.891	24.569	25.060	Continuing	Continuing
MC68: <i>Cyber Operations</i>	7.990	1.010	0.944	1.225	-	1.225	1.233	1.241	1.265	1.290	Continuing	Continuing
MD40: <i>Program-Wide Support</i>	43.049	2.249	2.620	1.005	-	1.005	0.947	0.889	1.008	1.035	Continuing	Continuing

Program MDAP/MAIS Code: 362

Note

Decrease from FY 2022 to FY 2023 reflects the following:

- Continued program maturation of Site Activation activities as Poland construction nears completion and the Integrated Electrical Security System (IESS) becomes fully operational
- Nearing completion of Aegis Combat System component upgrades and improvements at the Aegis Ashore Missile Defense Test Complex (AAMDTC)

A. Mission Description and Budget Item Justification

This program supports development of the Land-Based Standard Missile-3 (LBSM3) capability, Aegis Ashore. On 17 September 2009, the President announced an overarching plan to provide regional missile defense to U.S. deployed forces, allies, and partners in Europe called the European Phased Adaptive Approach (EPAA). The EPAA policy specifically defines a timeline to deploy a mix of afloat and land-based Ballistic Missile Defense (BMD) capabilities. Aegis Ashore represents one of these land-based capabilities. The U.S. can also build on current efforts to pursue Phased Adaptive Approaches (PAAs) in the Asia Pacific and the Middle East regions. The PAA tailors U.S. BMD capabilities to specific theater needs enhancing integrated regional missile defenses to protect defended assets against medium, intermediate, and ultimately intercontinental range ballistic missiles.

Aegis Ashore is a key component of EPAA Phases II (Romania) and III (Poland) and provides Aegis BMD capability against short to intermediate-range ballistic missiles in an ashore configuration. Aegis Ashore provides sophisticated engagement strategies and can adapt to threat updates while also being deployed/redeployed worldwide where needed to provide persistent coverage for the Geographic Combatant Commanders. Aegis Ashore re-hosts the required BMD components of a U.S. Navy Destroyer, including: SPY-1 Radio Direction and Ranging (Radar); Vertical Launch System (VLS), Computing Infrastructure; Command Control; Communications; Computers and Intelligence (C4I) Systems; and Operator Consoles.

This program element will continue to modernize, develop, and test Aegis Ashore capability improvements at the AAMDTC in Hawaii for implementation at operational sites.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Missile Defense Agency	Date: April 2022
---	-------------------------

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide / BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 0604880C / <i>Land Based SM-3 (LBSM3)</i>
---	--

B. Program Change Summary (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	56.628	43.158	0.000	-	0.000
Current President's Budget	52.804	43.158	27.678	-	27.678
Total Adjustments	-3.824	0.000	27.678	-	27.678
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	0.000			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	-1.424	0.000			
• Missile Defeat and Defense Enhancement	0.000	0.000	0.000	-	0.000
• Other Adjustment	-2.400	0.000	27.678	-	27.678

Change Summary Explanation

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

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2023 Missile Defense Agency										Date: April 2022		
Appropriation/Budget Activity 0400 / 4					R-1 Program Element (Number/Name) PE 0604880C / Land Based SM-3 (LBSM3)				Project (Number/Name) MD68 / AEGIS Ashore			
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
MD68: AEGIS Ashore	1,173.930	49.545	39.594	25.448	-	25.448	24.716	23.891	24.569	25.060	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Decrease from FY 2022 to FY 2023 reflects the following:

- Continued program maturation for Site Activation activities as Poland construction nears completion and the Integrated Electrical Security System (IESS) becomes fully operational
- Nearing completion of Aegis Combat System component upgrades and improvements at the AAMDTC

A. Mission Description and Budget Item Justification

Deployed sites, referred to as Aegis Ashore Missile Defense Systems (AAMDS), will be modified to support future computer programs and missile variants in step with the U.S. Navy's Destroyer Modernization Plan. MDA is responsible for maintaining and modernizing the test center at the Pacific Missile Range Facility (PMRF), while the U.S. Navy is responsible for maintaining and modernizing all deployed Aegis Ashore sites. The initial AAMDS deployed to Romania in 2015 employing Aegis BMD 5.0 CU (Capabilities Upgrade) and SM-3 Block IB. A second AAMDS will deploy to Poland and is scheduled to become operational in FY 2022. These sites provide an Aegis Ashore exo-atmospheric defense against short to intermediate-range ballistic missile threats in the later stages of flight. If the threat dictates, additional systems can be purchased and deployed globally.

Research and Development efforts include design of modifications to adapt the Aegis Weapon System for land-based use, modernization in pace with the U.S. Navy's Destroyer Modernization Plan, development and testing of Aegis Ashore capability improvements at the AAMDTC in Hawaii, and modifications, as required, to enhance co-existence with Broadband Wireless Access systems in the European theater.

In support of EPAA Phase III, Aegis Ashore integrates the Aegis BMD 5.1 and Standard Missile (SM-3) Block IIA capabilities into the Aegis Ashore sites. MDA will provide all upgrades to BMD capability, BMD specific mission equipment, and integration with existing Missile Defense System (MDS) nodes for all Aegis Ashore sites.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2021	FY 2022	FY 2023
Title: Aegis Weapon System Development	35.921	22.107	20.230
Articles:	-	-	-
Description: Operate, maintain and upgrade the AAMDTC at the PMRF in Hawaii. Develop and test Aegis Ballistic Missile Defense (BMD) capability improvements, and support advanced radar and combat system studies and engineering analysis to achieve compliance with the MDA's High Altitude Electromagnetic Pulse (HEMP) Technical Performance Measure requirement and subsequent Defense Threat Reduction Agency (DTRA)/ United States Strategic Command/ European Command (EUCOM) certification.			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2023 Missile Defense Agency	Date: April 2022
--	-------------------------

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604880C / Land Based SM-3 (LBSM3)	Project (Number/Name) MD68 / AEGIS Ashore
--	---	---

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023
---	----------------	----------------	----------------

<p>Recurring Accomplishments:</p> <ul style="list-style-type: none"> - Determine the minimum hardware refresh of element components and spares that are projected to be removed from the production to ensure the test capability at AAMDTC remains current with the U.S Navy's Destroyer Modernization efforts - Provide system engineering, technical, and logistics support for the AAMDS facility and tactical elements to ensure appropriate system adaptation, readiness, availability, and effectiveness - Modernize the AAMDTC Weapons System, C4I, VLS, and other equipment to align with the U.S. Navy's Destroyer Modernization Plan and ensure the test site configuration is ready to support MDS testing - Maintain Aegis Ashore Technical Data Package with modernization implementation to include drawings and installation plans for U.S. Navy use in implementation at operational sites <p>Specific and/or unique accomplishments to each FY are as follows:</p> <p>FY 2022 Plans: - SEE ABOVE</p> <p>FY 2023 Plans: -SEE ABOVE</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: N/A</p>			
---	--	--	--

<p>Title: Site Activation</p> <p>Description: Provide site design, security; temporary facilities; utilities; administrative communications equipment and services; infrastructure modifications; generator and commercial power; leased vehicles; material handling equipment; generator fuel; supplies, barriers; guard shacks; temporary lighting; transportation of materials and equipment; translators; and emerging requirements as site activation progresses and until sites are transferred to the Navy.</p> <p>Recurring Accomplishments include:</p> <ul style="list-style-type: none"> - Provide temporary site activation facilities, base operations support, utilities, administrative communications, on-site material handling equipment services, and equipment installation - Fuel for facility commissioning activities, backup generators, and on-site vehicle support - Technical support to facilitate processing facility change proposals and construction modifications - Post-award technical services (structural, mechanical, and electrical) to ensure quality standards and construction schedule is met - Provide HEMP validation and verification testing of the Aegis Ashore facilities <p>FY 2022 Plans:</p>	<p>Articles:</p> <p>13.624</p> <p>-</p>	<p>17.487</p> <p>-</p>	<p>5.218</p> <p>-</p>
--	--	------------------------	-----------------------

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2023 Missile Defense Agency		Date: April 2022
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604880C / Land Based SM-3 (LBSM3)	Project (Number/Name) MD68 / AEGIS Ashore

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023
- SEE ABOVE.			
FY 2023 Plans: -SEE ABOVE			
FY 2022 to FY 2023 Increase/Decrease Statement: Decrease from FY 2022 to FY 2023 reflects continued program maturation of Site Activation activities as Poland construction nears completion and the Integrated Electrical Security System (IESS) becomes fully operational			
Accomplishments/Planned Programs Subtotals	49.545	39.594	25.448

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

<u>Line Item</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u> <u>Base</u>	<u>FY 2023</u> <u>OCO</u>	<u>FY 2023</u> <u>Total</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• 0208866C MD09: <i>Aegis BMD O&M</i>	79.913	68.293	69.071	-	69.071	70.303	75.240	87.513	91.726	Continuing	Continuing
• 0208866C MD09: <i>Aegis BMD Procurement</i>	353.896	334.621	402.235	-	402.235	378.685	362.834	496.857	506.794	Continuing	Continuing
• 0208866C MD73: <i>Aegis Ashore Phase III Procurement</i>	34.629	25.866	30.056	-	30.056	2.390	0.976	0.000	0.000	0.000	93.917
• 0208866C MD90: <i>Aegis BMD Hardware and Software</i>	104.241	81.791	78.181	-	78.181	115.776	116.026	61.748	32.695	Continuing	Continuing
• 0603892C: <i>AEGIS BMD</i>	861.809	639.549	600.072	-	600.072	658.798	574.014	570.018	580.496	Continuing	Continuing
• 0604878C: <i>Aegis BMD Test</i>	71.481	111.206	182.776	-	182.776	173.492	159.125	203.851	187.494	Continuing	Continuing

Remarks

D. Acquisition Strategy

The Aegis Ashore Engineering Agent (AAEA) is responsible for the design, development, integration and test of the Aegis Weapons System capability into a reconstitutable deckhouse. The AAEA will also support Aegis Ashore deployment to Romania.

The Mission Support program office is utilizing Naval Facilities Engineering Command (NAVFAC) and U. S. Corps of Engineers Europe District (Core of Engineers North Atlantic Union) CENAU to award and administer contracts for base operating support, commercial power, temporary site activation facilities, and integrated electronic security systems for Romania and Poland sites.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604880C / Land Based SM-3 (LBSM3)	Project (Number/Name) MD68 / AEGIS Ashore
--	---	---

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			
Aegis Weapon System Development - AWS Development-AWS Development-SSC PAC Pearl Harbor	MIPR	Naval Warfare Systems Center (NSWC)/(SSC-PAC) : HI	4.336	0.026	Nov 2020	0.000		1.616	Nov 2022	-		1.616	Continuing	Continuing	Continuing
Aegis Weapon System Development - AWS Development-NAVFAC	MIPR	NAVFAC : HI	7.819	2.287	Nov 2020	2.978	Nov 2021	2.772	Nov 2022	-		2.772	Continuing	Continuing	Continuing
Aegis Weapon System Development - AWS Development-NAVSEA-MD68	MIPR	NAVSEA-LM/BAE, SPAWAR, NSWC CD : San Diego, CA; Baltimore, MD; Minneapolis, MN	15.020	5.279	Mar 2021	0.210	Nov 2021	0.000		-		0.000	0.000	20.509	0.000
Aegis Weapon System Development - AWS Development-NSWC DD-MD68	MIPR	NSWC Dahlgren : Dahlgren, VA	49.949	2.145	Oct 2020	1.100	Nov 2021	2.274	Nov 2022	-		2.274	Continuing	Continuing	Continuing
Aegis Weapon System Development - AWS Development-NSWC PHD-MD68	MIPR	NSWC PHD, NSWC, DOI, Aegis Techrep : CA, NJ, ID, MD, IN	45.156	2.080	Nov 2020	1.200	Nov 2021	1.808	Nov 2022	-		1.808	Continuing	Continuing	Continuing
Aegis Weapon System Development - AWS Development-PMRF - MD68	MIPR	PMRF : Hawaii	18.042	1.472	Nov 2020	1.800	Nov 2021	1.185	Nov 2022	-		1.185	Continuing	Continuing	Continuing
Aegis Weapon System Development - AWS Development-SPAWAR-MD68	MIPR	NIWC PAC : San Diego, CA	51.024	0.343	Nov 2020	1.695	Nov 2021	0.598	Nov 2022	-		0.598	Continuing	Continuing	Continuing
Aegis Weapon System Development - Aegis Weapon System Development - AWS Development-NSWC Crane	MIPR	NSWC Crane : IN	0.000	0.047	Nov 2020	0.300	Nov 2021	0.172	Nov 2022	-		0.172	Continuing	Continuing	Continuing

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604880C / Land Based SM-3 (LBSM3)	Project (Number/Name) MD68 / AEGIS Ashore
--	---	---

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			
Aegis Weapon System Development - Aegis Weapon System Development - Aegis Weapon System Development - MD68-MDA	SS/CPFF	MDA Kuponon : HI	0.000	0.000		1.734	Nov 2021	1.728	Nov 2022	-		1.728	Continuing	Continuing	Continuing
Aegis Weapon System Development - Aegis Weapon System Development - MD68-	SS/CPFF	MDA Lockheed Martin : Moorestown, NJ	37.842	20.483	Nov 2020	8.302	Nov 2021	5.313	Nov 2022	-		5.313	Continuing	Continuing	Continuing
Aegis Weapon System Development - Aegis Weapon System Development - AWS Development- NSWC-Philadelphia	MIPR	NSWC Philadelphia : PA	0.000	0.249	Mar 2021	0.382	Nov 2021	0.163	Nov 2022	-		0.163	Continuing	Continuing	Continuing
Aegis Weapon System Development - Aegis Weapon System Development - Restoration & Modernization- MD68	Various	Various : Various	0.000	0.498	Nov 2020	1.296	Nov 2021	0.464	Nov 2022	-		0.464	Continuing	Continuing	Continuing
Aegis Weapon System Development - Aegis Weapon System Development- AWS Development- Various MD68	Various	Various : CECOM/ MITRE, JHU/APL, MIT/LL, DOI	837.719	1.012	Nov 2020	1.110	Nov 2021	2.137	Nov 2022	-		2.137	Continuing	Continuing	Continuing
Aegis Weapon System Development - Aegis Weapon System Development-Aegis Weapon System Development-MD68	Allot	MDA : VA	1.076	0.000		0.000		0.000		-		0.000	0.000	1.076	0.000
Site Activation - DTRA support to construction in Romania and Poland	MIPR	DTRA : Ft. Belvoir, VA	4.726	0.840	Nov 2020	0.566	Nov 2021	0.000		-		0.000	Continuing	Continuing	Continuing

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604880C / Land Based SM-3 (LBSM3)	Project (Number/Name) MD68 / AEGIS Ashore
--	---	---

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			
Site Activation - Poland Base Operating Support	MIPR	NAVFAC : Poland	14.725	3.933	Nov 2020	7.025	Nov 2021	5.218	Nov 2022	-		5.218	Continuing	Continuing	Continuing
Site Activation - Poland Commercial and Temporary Utilities	MIPR	NAVFAC : Poland	2.768	0.433	Nov 2020	2.643	Nov 2021	0.000		-		0.000	Continuing	Continuing	Continuing
Site Activation - Poland Fuel	MIPR	DLA : Fort Belvoir, Virginia	0.336	0.887	Nov 2020	0.243	Oct 2021	0.000		-		0.000	Continuing	Continuing	Continuing
Site Activation - Romania/ Poland Security Guards / Escorts	C/FFP	Chenega Infinity : Chantilly, VA	1.081	1.697	Nov 2020	1.873	Nov 2021	0.000		-		0.000	Continuing	Continuing	Continuing
Site Activation - Site Activation – Transportation of Aegis Weapon System	MIPR	SDDC : Scotts AFB, IL	5.905	0.000		0.513	Nov 2021	0.000		-		0.000	Continuing	Continuing	Continuing
Site Activation - Site Activation- IESS Support	MIPR	USAF LCMC Wright Patterson AFB : OH	0.145	0.315	Nov 2020	0.000		0.000		-		0.000	0.000	0.460	0.000
Site Activation - Site Activation- Poland Admin Communications	MIPR	DISA : Scott AFB, IL	2.922	0.286	Nov 2020	0.640	Nov 2021	0.000		-		0.000	Continuing	Continuing	Continuing
Site Activation - Site Activation- Site Activation Poland Navy Leases/ Material Handling Services	MIPR	NAVFAC : Naples Italy	1.324	1.834	Mar 2021	0.000		0.000		-		0.000	0.000	3.158	0.000
Site Activation - Site Activation-UACE-Guam	MIPR	DOD - USA - ENGINEERING AND SUPPORT CENTER, HUNTSVILLE (HNC) : AL	0.000	0.482	May 2021	0.000		0.000		-		0.000	0.000	0.482	0.000
Site Activation - Site Activation-USACE-Guam	MIPR	DOD - USA - ENGINEERING AND SUPPORT CENTER, HUNTSVILLE (HNC) : AL	0.000	0.030	May 2021	0.000		0.000		-		0.000	0.000	0.030	0.000
Site Activation - Site Activation-Variou	Various	Various : Various	64.220	0.153	Mar 2021	2.241	Dec 2021	0.000		-		0.000	0.000	66.614	0.000

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604880C / Land Based SM-3 (LBSM3)	Project (Number/Name) MD68 / AEGIS Ashore
--	---	---

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			
Site Activation - USACE in-house support in Poland	MIPR	CEHNC : Huntsville, AL	3.738	0.550	Nov 2020	0.501	Nov 2021	0.000		-		0.000	0.000	4.789	0.000
Site Activation - USACE support in Poland	MIPR	CENAU : Poland	4.057	2.184	Nov 2020	1.242	Nov 2021	0.000		-		0.000	0.000	7.483	0.000
Subtotal			1,173.930	49.545		39.594		25.448		-		25.448	Continuing	Continuing	N/A

Remarks

N/A

Support (\$ 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			
Subtotal			-	-		-		-		-		-	-	-	N/A

Remarks

N/A

Test and Evaluation (\$ 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			
Subtotal			-	-		-		-		-		-	-	-	N/A

Remarks

N/A

Management Services (\$ 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			
Subtotal			-	-		-		-		-		-	-	-	N/A

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604880C / Land Based SM-3 (LBSM3)	Project (Number/Name) MD68 / AEGIS Ashore
--	---	---

Management Services (\$ 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
Project Cost Totals	1,173.930	49.545	39.594	25.448	-	25.448	Continuing	Continuing	N/A

Remarks
Funding in the All Prior Years column represents a summary of Prior Years Total Costs for inactive contracts and MIPRs on the R-3. Award Date reflects date of first obligation. Additional obligations may incrementally occur throughout the year.

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604880C / <i>Land Based SM-3 (LBSM3)</i>	Project (Number/Name) MD68 / <i>AEGIS Ashore</i>
--	--	--

	Significant Event Complete ▲				Milestone Decision Complete ★				Element Test Complete ◆				System Level Test Complete ●				Complete Activity ◆															
	Significant Event Planned △				Milestone Decision Planned ☆				Element Test Planned ◇				System Level Test Planned ○				Planned Activity ◇															
	FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027							
AAMDTC Upgrades	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇
Integrated Master Test Plan (IMTP)	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇
Facility Support for NAVEUR Exercise																																
Poland Beneficial Occupancy Date (BOD)												◇																				
Poland Construction Complete												◇																				
EPAA Phase III Technical Capability Declaration (TCD)												◇																				

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604880C / <i>Land Based SM-3 (LBSM3)</i>	Project (Number/Name) MD68 / <i>AEGIS Ashore</i>
--	--	--

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
AAMDTC Upgrades	1	2021	4	2027
Integrated Master Test Plan (IMTP)	1	2021	4	2027
Facility Support for NAVEUR Exercise	3	2021	3	2021
Poland Beneficial Occupancy Date (BOD)	4	2022	4	2022
Poland Construction Complete	1	2023	1	2023
EPAA Phase III Technical Capability Declaration (TCD)	2	2023	2	2023

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2023 Missile Defense Agency										Date: April 2022		
Appropriation/Budget Activity 0400 / 4					R-1 Program Element (Number/Name) PE 0604880C / Land Based SM-3 (LBSM3)				Project (Number/Name) MC68 / Cyber Operations			
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
MC68: <i>Cyber Operations</i>	7.990	1.010	0.944	1.225	-	1.225	1.233	1.241	1.265	1.290	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Increase from FY 2022 to FY 2023 provides the following:

- Surface hardening and enhanced boundary protection to include backup and Replication software acquisition and licensing
- Development and maintenance of security plans, to include all required authorization documentation per requirements for all DoD Information Systems
- Cybersecurity Compliance Testing to maintain compliance requirements and testing of applicable requirements to meet Federal Information Security Management Act (FISMA) and DoD reporting criteria

These efforts reflect current Program requirements as a result of maturation

A. Mission Description and Budget Item Justification

Sustain Missile Defense Agency (MDA) DoD Information Assurance Certification and Accreditation Program (DIACAP) and Controls Validation Testing (CVT) activities, analysis of validation results, risk assessments and reviews of proposed Program Manager/Information Assurance Manager (PM/IAM) Plans of Action and Milestones (POA&Ms) for MDA Aegis Ballistic Missile Defense (BMD) mission systems. It maintains the Certification and Accreditation (C&A) data repository, capturing the DIACAP documentation (artifacts, validation results, and Information Assurance Risk Assessment results, and Designated Approving Authority (DAA) accreditation decisions) on all MDA Information Systems.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2021	FY 2022	FY 2023
Title: Network / System Certification and Accreditation (C&A)	1.010	0.944	1.225
Articles:	-	-	-
Description: Monitor and track cybersecurity mitigation detailed in Information Technology Security Guidance. Activities include preparation of C&A documentation and accreditation recommendations to the MDA Senior Information Assurance Officer (SIAO)/ Certification Authority (CA) and DAA. Independent Verification and Validation (IV&V) team actions ensure the availability, integrity, authentication, confidentiality and non-repudiation of the MDA mission, test and administrative systems. Activities in the Project are necessary to comply with FISMA.			
Recurring Accomplishments:			
<ul style="list-style-type: none"> - Provide Cybersecurity engineering and architecture requirements planning for Aegis BMD systems - Coordinate the development and implementation of Aegis BMD Risk Management Framework (RMF) accreditation packages - Conduct regular Controls Validation Testing (CVT) of Aegis BMD systems and provide a Risk Assessment Report (RAR) to mitigate cybersecurity deficiencies 			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2023 Missile Defense Agency	Date: April 2022
--	-------------------------

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604880C / Land Based SM-3 (LBSM3)	Project (Number/Name) MC68 / Cyber Operations
--	---	---

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023
<ul style="list-style-type: none"> - Conduct annual cybersecurity reviews on the Aegis BMD systems to assess compliance in implementing and maintaining RMF controls - Implement HW/SW to conduct continuous daily monitoring - Conduct monthly reviews of systems in eMass - Provide daily management of eMass <p>Specific and/or unique accomplishments to each FY are as follows:</p> <p>FY 2022 Plans:</p> <ul style="list-style-type: none"> - SEE ABOVE <p>FY 2023 Plans:</p> <ul style="list-style-type: none"> - SEE ABOVE <p>FY 2022 to FY 2023 Increase/Decrease Statement:</p> <p>Increase from FY 2022 to FY 2023 provides the following:</p> <ul style="list-style-type: none"> - Surface hardening and enhanced boundary protection to include backup and Replication software acquisition and licensing - Development and maintenance of security plans, to include all required authorization documentation per requirements for all DoD Information Systems - Cybersecurity Compliance Testing to maintain compliance requirements and testing of applicable requirements to meet FISMA and DoD reporting criteria 			
Accomplishments/Planned Programs Subtotals	1.010	0.944	1.225

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

N/A

Remarks

D. Acquisition Strategy

The Program Management Office utilizes the U.S. Navy Centers of Excellence to administer contracts for cyber operations, assessments, and mitigations.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604880C / Land Based SM-3 (LBSM3)	Project (Number/Name) MC68 / Cyber Operations
--	---	---

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			
Network / System Certification and Accreditation (C&A) - Cyber Operations	MIPR	PMRF : HI	0.252	0.000		0.147	Nov 2021	0.150	Nov 2022	-		0.150	Continuing	Continuing	Continuing
Network / System Certification and Accreditation (C&A) - Lockheed Martin	C/CPFF	Lockheed Martin : Moorestown, NJ	0.048	0.000		0.000		0.000		-		0.000	0.000	0.048	0.000
Network / System Certification and Accreditation (C&A) - NAVSEA	MIPR	NAVSEA : Washington, DC	1.843	0.000		0.000		0.000		-		0.000	0.000	1.843	0.000
Network / System Certification and Accreditation (C&A) - NAVWAR	MIPR	DOD - USN - NAVAL INFORMATION WARFARE SYSTEMS COMMAND (NAVWAR) : CA	4.057	0.292	Nov 2020	0.674	Nov 2021	0.939	Nov 2022	-		0.939	Continuing	Continuing	Continuing
Network / System Certification and Accreditation (C&A) - NSWC Corona	MIPR	NSWC Corona : CA	0.250	0.000		0.000		0.000		-		0.000	0.000	0.250	0.000
Network / System Certification and Accreditation (C&A) - NSWC Philadelphia	MIPR	DOD - USN - NAVAL SURFACE WARFARE CENTER (NSWC) PHILADELPHIA DIVISION (NSWCPCD) : PA	1.540	0.718	Nov 2020	0.123	Nov 2021	0.136	Nov 2022	-		0.136	Continuing	Continuing	Continuing
Subtotal			7.990	1.010		0.944		1.225		-		1.225	Continuing	Continuing	N/A

Remarks
N/A

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604880C / <i>Land Based SM-3 (LBSM3)</i>	Project (Number/Name) MC68 / <i>Cyber Operations</i>
--	--	--

	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	7.990	1.010	0.944	1.225	-	1.225	Continuing	Continuing	N/A

Remarks
Award Dates reflect date of first obligation. Additional obligations may incrementally occur throughout the year.

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604880C / <i>Land Based SM-3 (LBSM3)</i>	Project (Number/Name) MC68 / <i>Cyber Operations</i>
--	--	--

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Cyber Operations	1	2021	4	2027

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2023 Missile Defense Agency										Date: April 2022		
Appropriation/Budget Activity 0400 / 4					R-1 Program Element (Number/Name) PE 0604880C / Land Based SM-3 (LBSM3)				Project (Number/Name) MD40 / Program-Wide Support			
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
MD40: <i>Program-Wide Support</i>	43.049	2.249	2.620	1.005	-	1.005	0.947	0.889	1.008	1.035	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Program Wide Support (PWS) is allocated on a pro-rata basis across multiple Agency PEs each fiscal year based on the total Agency budget, and therefore fluctuates per PE by fiscal year.

A. Mission Description and Budget Item Justification

PWS contains non-headquarters management costs in support of MDA functions and activities across the entire MDS. These functions include Government Civilians and Contract Support Services. This effort provides integrity and oversight of the MDS as well as supports MDA in the development and evaluation of technologies that will respond to the changing threat. Additionally, PWS includes personnel to support global deployments performing deployment site preparation and activation, and provides facility capabilities for MDA Executing Agent locations worldwide. Other MDA wide costs include: physical and technical security; civilian drug testing; audit readiness; the Science, Technology, Engineering, and Mathematics (STEM) program; legal services and settlements; travel and agency training; office, equipment, vehicle, and warehouse leases; utilities and base operations across multiple geographic locations; commercial and ancillary facility services; management of all facility aspects regardless of lifecycle stage; supplies and maintenance; compliance with statutory environmental requirements; data and unified communications support; materiel and readiness and central property management of equipment; Facilities Sustainment, Restoration and Modernization (FSRM) program (formerly Real Property Maintenance) to keep the Department's inventory of facilities in good working order; and similar operating expenses. PWS is allocated on a pro-rata basis across most Agency PEs and therefore fluctuates per PE by fiscal year based on the total Agency budget in that fiscal year.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2021	FY 2022	FY 2023
Title: Program Wide Support	2.249	2.620	1.005
Articles:	-	-	-
Description: PWS contains non-headquarters management costs in support of MDA functions and activities across the entire MDS. These functions include Government Civilians and Contract Support Services. This effort provides integrity and oversight of the MDS as well as supports MDA in the development and evaluation of technologies that will respond to the changing threat. Additionally, PWS includes personnel to support global deployments performing deployment site preparation and activation, and provides facility capabilities for MDA Executing Agent locations worldwide. Other MDA wide costs include: physical and technical security; civilian drug testing; audit readiness; the STEM program; legal services and settlements; travel and agency training; office, equipment, vehicle, and warehouse leases; utilities and base operations across multiple geographic locations; commercial and ancillary facility services; management of all facility aspects regardless of lifecycle stage; supplies and maintenance; compliance with statutory environmental requirements; data and unified communications support; materiel and readiness and central property management of equipment; the FSRM program (formerly Real Property Maintenance) to keep the Department's			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2023 Missile Defense Agency	Date: April 2022
--	-------------------------

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604880C / Land Based SM-3 (LBSM3)	Project (Number/Name) MD40 / Program-Wide Support
--	---	---

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023
inventory of facilities in good working order; and similar operating expenses. PWS is allocated on a pro-rata basis across most Agency PEs and therefore fluctuates per PE by fiscal year based on the total Agency budget in that fiscal year.			
FY 2022 Plans: - SEE ABOVE.			
FY 2023 Plans: - SEE ABOVE.			
FY 2022 to FY 2023 Increase/Decrease Statement: Decrease from FY 2022 to FY 2023 reflects the PWS allocation on a pro-rata basis across multiple Agency PE's each fiscal year based on the total Agency budget, and therefore fluctuates per PE by fiscal year.			
Accomplishments/Planned Programs Subtotals	2.249	2.620	1.005

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

N/A

Remarks

D. Acquisition Strategy

N/A

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604880C / Land Based SM-3 (LBSM3)	Project (Number/Name) MD40 / Program-Wide Support
--	---	---

Support (\$ 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			
Program Wide Support - Agency Operations Management	Various	Various: Multi : AL, CA, CO, VA	2.219	0.067	Jul 2021	0.055	Apr 2022	0.000		-		0.000	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations and Support Services	C/CPFF	CHENEGA : AL	24.902	2.182	Jul 2021	2.565	Nov 2021	1.005	Nov 2022	-		1.005	Continuing	Continuing	Continuing
Program Wide Support - Prior year no longer funded in the FYDP	Various	Various : Various	15.928	0.000		0.000		0.000		-		0.000	0.000	15.928	0.000
Subtotal			43.049	2.249		2.620		1.005		-		1.005	Continuing	Continuing	N/A

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
Project Cost Totals	43.049	2.249	2.620	1.005	-	1.005	Continuing	Continuing	N/A

Remarks
Award Date reflects date of first obligation. Additional obligations may incrementally occur throughout the year.

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604880C / <i>Land Based SM-3 (LBSM3)</i>	Project (Number/Name) MD40 / <i>Program-Wide Support</i>
--	--	--

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
MD40 Program-Wide Support	1	2021	4	2027